

**CEL** California Eastern Laboratories

**OPTOCOUPLER &  
SOLID STATE RELAY**

**CROSS REFERENCE**

**NEC**

# OPTOCOUPERS CROSS REFERENCE

---

## INDEX

|                                     |    |
|-------------------------------------|----|
| 1. SHARP .....                      | 1  |
| 2. TOSHIBA .....                    | 2  |
| 3. SIEMENS.....                     | 6  |
| 4. QTC .....                        | 9  |
| 5. HEWLETT-PACKARD .....            | 11 |
| 6. LITE-ON.....                     | 14 |
| 7. MOTOROLA .....                   | 16 |
| 8. Tape and Reel Availability ..... | 18 |
| 9. Safety Standards .....           | 19 |

# SOLID STATE RELAY CROSS REFERENCE

---

## INDEX

|                                     |    |
|-------------------------------------|----|
| 1. AROMAT .....                     | 20 |
| 2. CP CLARE .....                   | 26 |
| 3. SIEMENS.....                     | 31 |
| 4. HEWLITT PACKARD .....            | 33 |
| 5. INTERNATIONAL RECTIFIER .....    | 33 |
| 6. Tape and Reel Availability ..... | 35 |
| 7. Safety Standards .....           | 36 |

## Optocoupler Cross Reference

| Sharp   | Cross         | Package         | Sales Tip(s)                                       | Code | Comment(s)     |
|---------|---------------|-----------------|--|------|----------------|
| PC100   | No Cross      | 14 Pin DIP      |  | D    |                |
| PC101   | No Cross      | 14 Pin DIP      |  | D    |                |
| PC110   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC111   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC112   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC113   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC120   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC121   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC123   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC123F  | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC353T  | PS2801-1      | 4 Pin SSOP      | 4 Pin Replacement SSOP Package Lower Cost, Smaller | C    | 6 Pin vs 4 Pin |
| PC354   | PS2705-1      | 4 Pin SOP       | (Our Height is Lower at 2.3mm)                     | A    |                |
| PC355NT | PS2702-1      | 4 Pin SOP       | (Our Height is Lower at 2.3mm)                     | A    |                |
| PC356NT | PS2701-1      | 4 Pin SOP       | (Our Height is Lower at 2.3mm)                     | A    |                |
| PC357NT | PS2701-1      | 4 Pin SOP       | (Our Height is Lower at 2.3mm)                     | A    |                |
| PC3Q64  | PS2705-1 (X4) | 16 Pin SOP      | (Our Height is Lower at 2.3mm)                     | B    |                |
| PC3Q67  | PS2701-1 (X4) | 16 Pin SOP      | (Our Height is Lower at 2.3mm)                     | B    |                |
| PC400   | No Cross      | IC Type Coupler |  | D    |                |
| PC401   | No Cross      | IC Type Coupler |  | D    |                |
| PC410   | PS9701        | 5 Pin SOP       | (Our Height is Lower at 2.3mm)                     | A    |                |
| PC417   | PS8701        | 5 Pin DIP       | (Our Height is Lower at 2.3mm)                     | A    |                |
| PC419   | No Cross      |                 |  | D    |                |
| PC450T  | No Cross      |                 |  | D    |                |
| PC452   | PS2732-1      | 4 Pin SOP       | (Our Height is Lower at 2.3mm)                     | B    |                |
| PC702V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC703V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC713V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC714V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC715V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC716V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC723V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC724V  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC725   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC727   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC729   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC733   | No Cross      | 6 Pin DIP       |  | D    |                |
| PC733H  | No Cross      | 6 Pin DIP       |  | D    |                |
| PC810   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC812   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC813   | PS2705-1      | 4 Pin DIP       |  | C    |                |
| PC814   | PS2705-1      | 4 Pin DIP       |  | C    |                |
| PC815   | PS2702-1      | 4 Pin DIP       |  | C    |                |
| PC816   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC817   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC818   | PS2701-1      | 4 Pin DIP       |  | C    |                |
| PC824   | PS2705-1      | 8 Pin DIP       |  | C    |                |
| PC825   | PS2702-1 (X2) | 8 Pin DIP       |  | C    |                |
| PC826   | PS2702-1 (X2) | 8 Pin DIP       |  | C    |                |
| PC827   | PS2702-1 (X2) | 8 Pin DIP       |  | C    |                |
| PC829   | No Cross      | 8 Pin DIP       |  | D    |                |
| PC844   | PS2705-1 (X4) | 16 Pin DIP      |  | C    |                |
| PC845   | PS2702-1 (X4) | 16 Pin DIP      |  | C    |                |
| PC846   | PS2701-1 (X4) | 16 Pin DIP      |  | C    |                |
| PC847   | PS2701-1 (X4) | 16 Pin DIP      |  | C    |                |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| <b>Sharp</b>   | <b>Cross</b>  | <b>Package</b> | <b>Sales Tip(s)</b>         | <b>Code</b> | <b>Comment(s)</b> |
|----------------|---------------|----------------|-----------------------------|-------------|-------------------|
| PC851          | PS2732-1      | 4 Pin DIP      | 300V Vceo Type With Low CTR | C           |                   |
| PC852          | PS2732-1      | 4 Pin DIP      |                             | C           |                   |
| PC853          | PS2732-1      | 4 Pin DIP      |                             | C           |                   |
| PC853H         | PS2733-1      | 4 Pin DIP      |                             | C           |                   |
| PC8D52         | PS2732-1 (X2) | 8 Pin DIP      |                             | C           |                   |
| PC8Q52         | PS2732-1 (X4) | 8 Pin DIP      |                             | C           |                   |
| PC865          | PS2732-1      | 4 Pin DIP      |                             | C           |                   |
| PC875          | PS2732-1      | 4 Pin DIP      |                             | C           |                   |
| PC895          | PS2732-1      | 4 Pin DIP      |                             | C           |                   |
| PC866          | PS2701-1      | 4 Pin DIP      |                             | C           |                   |
| PC8D66         | PS2701-1 (X2) | 8 Pin DIP      |                             | C           |                   |
| PC8Q66         | PS2701-1 (X4) | 16 Pin DIP     |                             | C           |                   |
| PC900V         | No Cross      | 6 Pin DIP      |                             | D           |                   |
| PC900VQ        | No Cross      | 6 Pin DIP      |                             | D           |                   |
| PC901V         | No Cross      | 6 Pin DIP      |                             | D           |                   |
| PC902          | No Cross      | 8 Pin DIP      |                             | D           |                   |
| PC904          | No Cross      | 8 Pin DIP      |                             | D           |                   |
| PC905          | No Cross      | 8 Pin DIP      |                             | D           |                   |
| PC906          | No Cross      | 16 Pin DIP     |                             | D           |                   |
| PC910X         | PS9601        | 8 Pin DIP      |                             | A           |                   |
| PC91D10        | No Cross      | 8 Pin DIP      |                             | D           |                   |
| PC911          | PS9611        | 8 Pin DIP      |                             | A           |                   |
| PC912X         | PS9611        | 8 Pin DIP      |                             | A           |                   |
| PC915          | No Cross      | 8 Pin DIP      |                             | D           |                   |
| PC917X         | PS8602        | 8 Pin DIP      |                             | A           |                   |
| PC918X         | PS8602        | 8 Pin DIP      |                             | A           |                   |
| PC922          | PS9634        | 8 Pin DIP      |                             | A           |                   |
| PC923          | PS9636        | 8 Pin DIP      |                             | A           |                   |
| PC924          | PS9636        | 8 Pin DIP      |                             | A           |                   |
| PC928          | No Cross      |                |                             | D           |                   |
| PC929          | No Cross      |                |                             | D           |                   |
| PC930          | No Cross      |                |                             | D           |                   |
| PC931          | No Cross      |                |                             | D           |                   |
| PC932          | No Cross      |                | D                           |             |                   |
| PC933          | No Cross      |                | D                           |             |                   |
| PC934          | No Cross      |                | D                           |             |                   |
| PC935          | No Cross      |                | D                           |             |                   |
| PC9D10         | No Cross      |                | D                           |             |                   |
| PC9D17         | No Cross      |                | D                           |             |                   |
| 6N135          | PS8601        | 8 Pin DIP      | A                           |             |                   |
| 6N136          | PS8601        | 8 Pin DIP      | A                           |             |                   |
| 6N137          | PS9601        | 8 Pin DIP      | A                           |             |                   |
| 6N138          | No Cross      |                | D                           |             |                   |
| 6N139          | No Cross      |                | D                           |             |                   |
| <b>Toshiba</b> | <b>Cross</b>  | <b>Package</b> | <b>Sales Tip(s)</b>         | <b>Code</b> | <b>Comment(s)</b> |
| 4N25           | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N25A          | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N26           | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N27           | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N28           | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N29           | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N29A          | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N30           | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N31           | No Cross      | 6 Pin DIP      |                             | D           |                   |
| 4N32           | No Cross      | 6 Pin DIP      |                             | D           |                   |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Toshiba   | Cross         | Package     | Sales Tip(s) | Code | Comment(s)      |
|-----------|---------------|-------------|--------------|------|-----------------|
| 4N32A     | No Cross      | 6 Pin DIP   |              | D    |                 |
| 4N33      | No Cross      | 6 Pin DIP   |              | D    |                 |
| 4N35      | No Cross      | 6 Pin DIP   |              | D    |                 |
| 4N36      | No Cross      | 6 Pin DIP   |              | D    |                 |
| 4N37      | No Cross      | 6 Pin DIP   |              | D    |                 |
| 4N38      | No Cross      | 6 Pin DIP   |              | D    |                 |
| 4N38A     | No Cross      | 6 Pin DIP   |              | D    |                 |
| 6N135     | PS8601        | 8 Pin DIP   |              | A    |                 |
| 6N136     | PS8601        | 8 Pin DIP   |              | A    |                 |
| 6N137     | PS9601        | 8 Pin DIP   |              | A    |                 |
| 6N138     | No Cross      |             |              | D    |                 |
| 6N139     | No Cross      |             |              | D    |                 |
| CNY17-2   | No Cross      | 6 Pin DIP   |              | D    |                 |
| CNY17-3   | No Cross      | 6 Pin DIP   |              | D    |                 |
| CNY17-4   | No Cross      | 6 Pin DIP   |              | D    |                 |
| TLP112    | PS8701        | 5 Pin SOP   |              | B    |                 |
| TLP112A   | PS8701        | 5 Pin SOP   |              | B    |                 |
| TLP113    | No Cross      |             |              | D    |                 |
| TLP114A   | PS8701        | 5 Pin SOP   |              | B    |                 |
| TLP115    | PS9701        | 5 Pin SOP   |              | B    |                 |
| TLP115A   | PS9701        | 5 Pin SOP   |              | B    |                 |
| TLP120    | PS2705-1      | 4 Pin SOP   |              | A    |                 |
| TLP120-4  | PS2705-1 (X4) | 16 Pin SOP  |              | B    |                 |
| TLP121    | PS2701-1      | 4 Pin SOP   |              | A    |                 |
| TLP121-4  | PS2701-1 (X4) | 16 Pin SOP  |              | B    |                 |
| TLP124    | PS2701-1      | 4 Pin SOP   |              | A    |                 |
| TLP124-4  | PS2701-1 (X4) | 16 Pin SOP  |              | B    |                 |
| TLP126    | PS2705-1      | 4 Pin SOP   |              | A    |                 |
| TLP126-4  | PS2705-1 (X4) | 16 Pin SOP  |              | B    |                 |
| TLP127    | PS2732-1      | 4 Pin SOP   |              | A    |                 |
| TLP127-4  | PS2732-1 (X4) | 16 Pin SOP  |              | B    |                 |
| TLP130    | PS2705-1      | 4 Pin SOP   |              | C    |                 |
| TLP131    | PS2701-1      | 4 Pin SOP   |              | C    |                 |
| TLP137    | PS2701-1      | 4 Pin SOP   |              | C    |                 |
| TLP141G   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP160G   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP160J   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP16GJ   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP161J   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP168G   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP168J   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP181    | PS2701-1      | 4 Pin SOP   |              | A    |                 |
| TLP190B   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP191B   | No Cross      | 4 Pin SOP   |              | D    |                 |
| TLP215    | No Cross      | 6 Pin DIP   |              | D    |                 |
| TLP216    | No Cross      | 6 Pin DIP   |              | D    |                 |
| TLP227G   | PS7141-1A     | 6 Pin DIP   |              | C    | 6 Pin vs. 4 Pin |
| TLP227G-2 | PS7141-2A     | 8 Pin DIP   |              | B    |                 |
| TLP250    | No Cross      | 8 Pin DIP   |              | D    |                 |
| TLP251    | No Cross      | 8 Pin DIP   |              | D    |                 |
| TLP280    | PS2805-1      | 4 Pin SSOP  |              | A    |                 |
| TLP280-4  | PS2805-4      | 16 Pin SSOP |              | A    |                 |
| TLP296G   | PS7141-2A     | 8 Pin DIP   |              | B    |                 |
| TLP320    | PS2707-1      | 4 Pin DIP   |              | C    |                 |
| TLP320-2  | PS2707-1 (X2) | 8 Pin DIP   |              | A    |                 |
| TLP320-4  | PS2707-1 (X4) | 16 Pin DIP  |              | A    |                 |
| TLP321    | PS2701-1      | 4 Pin DIP   |              | C    |                 |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| <b>Toshiba</b> | <b>Cross</b>  | <b>Package</b> | <b>Sales Tip(s)</b>   | <b>Code</b> | <b>Comment(s)</b> |
|----------------|---------------|----------------|---|-------------|-------------------|
| TLP321-2       | PS2701-1 (X2) | 8 Pin DIP      |   | C           |                   |
| TLP321-4       | PS2701-1 (X4) | 16 Pin DIP     |   | C           |                   |
| TLP330         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP331         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP332         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP371         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP372         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP504A        | PS2705-1 (X2) | 8 Pin DIP      | Old Telecom Pinout PS2505-2 is closest cross and lower Cost | C           |                   |
| TLP504-2       | PS2705-1 (X4) | 16 Pin DIP     | Old Telecom Pinout PS2505-4 is closest cross and lower Cost | C           |                   |
| TLP512         | PS8602        | 8 Pin DIP      |   | C           |                   |
| TLP513         | PS9601        | 8 Pin DIP      |   | C           |                   |
| TLP521-1       | PS2701-1      | 4 Pin DIP      |   | C           |                   |
| TLP521-2       | PS2701-1 (X2) | 8 Pin DIP      |   | C           |                   |
| TLP521-4       | PS2701-1 (X4) | 16 Pin DIP     |   | C           |                   |
| TLP523         | PS2732-1      | 4 Pin DIP      |   | C           |                   |
| TLP523-2       | PS2732-1 (X2) | 8 Pin DIP      |   | C           |                   |
| TLP523-4       | PS2732-1 (X4) | 16 Pin DIP     |   | C           |                   |
| TLP525G        | No Cross      | 4 Pin DIP      |   | D           |                   |
| TLP525G-2      | No Cross      | 8 Pin DIP      |   | D           |                   |
| TLP525G-4      | No Cross      | 16 Pin DIP     |   | D           |                   |
| TLP531         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP532         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP535         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP541G        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP542G        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP550         | PS8602        | 8 Pin DIP      |   | A           |                   |
| TLP552         | PS9601        | 8 Pin DIP      |   | A           |                   |
| TLP553         | No Cross      |                |   | D           |                   |
| TLP555         | No Cross      |                |   | D           |                   |
| TLP557         | PS9634        | 8 Pin DIP      |   | C           |                   |
| TLP558         | PS9601        | 8 Pin DIP      |   | C           |                   |
| TLP559         | PS8601        | 8 Pin DIP      |   | B           |                   |
| TLP560G        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP560J        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP561G        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP561J        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP570         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP571         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP572         | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP582         | No Cross      |                |   | D           |                   |
| TLP590B        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP591B        | No Cross      | 6 Pin DIP      |   | D           |                   |
| TLP620         | PS2705-1      | 4 Pin DIP      |   | C           |                   |
| TLP620-2       | PS2705-1 (X2) | 4 Pin DIP      |   | C           |                   |
| TLP620-4       | PS2705-1 (X4) | 4 Pin DIP      |   | C           |                   |
| TLP621         | PS2701-1      | 4 Pin DIP      |   | C           |                   |
| TLP621-2       | PS2701-1 (X2) | 8 Pin DIP      |   | C           |                   |
| TLP621-4       | PS2701-1 (X4) | 16 Pin DIP     |   | C           |                   |
| TLP624         | PS2703-1      | 4 Pin DIP      |   | C           |                   |
| TLP624-2       | PS2703-1(X2)  | 8 Pin DIP      |   | C           |                   |
| TLP624-4       | PS2703-1(X4)  | 16 Pin DIP     |   | C           |                   |
| TLP626         | PS2705-1      | 4 Pin DIP      |   | C           |                   |
| TLP626-2       | PS2705-1 (X2) | 8 Pin DIP      |   | C           |                   |
| TLP626-4       | PS2705-1 (X4) | 16 Pin DIP     |   | C           |                   |
| TLP627         | PS2732-1      | 4 Pin DIP      |   | C           |                   |
| TLP627-2       | PS2732-1 (X2) | 8 Pin DIP      |   | C           |                   |
| TLP627-4       | PS2732-1 (X4) | 16 Pin DIP     |   | C           |                   |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| <b>Toshiba</b> | <b>Cross</b>  | <b>Package</b> | <b>Sales Tip(s)</b> | <b>Code</b> | <b>Comment(s)</b> |
|----------------|---------------|----------------|---------------------|-------------|-------------------|
| TLP628         | PS2733-1      | 4 Pin DIP      |                     | C           |                   |
| TLP628-2       | PS2733-1 (X2) | 8 Pin DIP      |                     | C           |                   |
| TLP628-4       | PS2733-1 (X4) | 16 Pin DIP     |                     | C           |                   |
| TLP629         | PS2703-1      | 4 Pin DIP      |                     | C           |                   |
| TLP629-2       | PS2703-1 (X2) | 8 Pin DIP      |                     | C           |                   |
| TLP629-4       | PS2703-1 (X4) | 16 Pin DIP     |                     | C           |                   |
| TLP630         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP631         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP632         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP633         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP634         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP641G        | No Cross      |                |                     | D           |                   |
| TLP647G        | No Cross      |                |                     | D           |                   |
| TLP647J        | No Cross      |                |                     | D           |                   |
| TLP651         | PS8601        | 8 Pin DIP      |                     | A           |                   |
| TLP665G        | No Cross      |                |                     | D           |                   |
| TLP665GF       | No Cross      |                |                     | D           |                   |
| TLP665J        | No Cross      |                |                     | D           |                   |
| TLP665JF       | No Cross      |                |                     | D           |                   |
| TLP666G        | No Cross      |                |                     | D           |                   |
| TLP666GF       | No Cross      |                |                     | D           |                   |
| TLP666J        | No Cross      |                |                     | D           |                   |
| TLP666JF       | No Cross      |                |                     | D           |                   |
| TLP668         | No Cross      |                |                     | D           |                   |
| TLP721         | PS2705-1      | 4 Pin DIP      |                     | C           |                   |
| TLP721F        | No Cross      | 4 Pin DIP      |                     | D           |                   |
| TLP731         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP731(LF2)    | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP733         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP733F        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP734         | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP734F        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP741G        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP741J        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP747G        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP747J        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP750         | PS8602        | 8 Pin DIP      |                     | A           |                   |
| TLP751         | PS8601        | 8 Pin DIP      |                     | A           |                   |
| TLP759         | PS8602        | 8 Pin DIP      |                     | B           |                   |
| TLP762J        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP763J        | No Cross      | 6 Pin DIP      |                     | D           |                   |
| TLP2200        | No Cross      |                |                     | D           |                   |
| TLP2530        | No Cross      |                |                     | D           |                   |
| TLP2531        | No Cross      |                |                     | D           |                   |
| TLP2601        | PS9601        | 8 Pin DIP      |                     | C           |                   |
| TLP2630        | No Cross      |                |                     | D           |                   |
| TLP3502        | No Cross      |                |                     | D           |                   |
| TLP3502A       | No Cross      |                |                     | D           |                   |
| TLP3503        | No Cross      |                |                     | D           |                   |
| TLP3503A       | No Cross      |                |                     | D           |                   |
| TLP3506        | No Cross      |                |                     | D           |                   |
| TLP3507        | No Cross      |                |                     | D           |                   |
| TLP3520        | No Cross      |                |                     | D           |                   |
| TLP3520A       | No Cross      |                |                     | D           |                   |
| TLP3521        | No Cross      |                |                     | D           |                   |
| TLP3526        | No Cross      |                |                     | D           |                   |
| TLP3527        | No Cross      |                |                     | D           |                   |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross



| Toshiba | Cross    | Package | Sales Tip(s) | Code | Comment(s) |
|---------|----------|---------|--------------|------|------------|
| TLP3530 | No Cross |         |              | D    |            |

Note:

LF1 / LF4 / LF5 = Surface Mount Lead Bends Different Types  
 LF2 = Special 10.16 mm Lead Bend (NEC "L1" option)  
 TPL / TPR = Tape and Reel Specification  
 TP1 / TP4 / TP5 = Tape and Reel Specification

| Siemens | Cross         | Package    | Sales Tip(s) | Code | Comment(s)      |
|---------|---------------|------------|--------------|------|-----------------|
| 4N32    | No Cross      | 6 Pin DIP  |              | D    |                 |
| 4N33    | No Cross      | 6 Pin DIP  |              | D    |                 |
| 4N39    | No Cross      |            |              | D    |                 |
| 6N135   | PS8601        | 8 Pin DIP  |              | A    |                 |
| 6N136   | PS8601        | 8 Pin DIP  |              | A    |                 |
| 6N138   | No Cross      |            |              | D    |                 |
| 6N139   | No Cross      |            |              | D    |                 |
| CNY17F  | No Cross      | 6 Pin DIP  |              | D    |                 |
| H11AA1  | No Cross      | 6 Pin DIP  |              | D    |                 |
| H11B1   | No Cross      | 6 Pin DIP  |              | D    |                 |
| H11B2   | No Cross      | 6 Pin DIP  |              | D    |                 |
| H11B3   | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL1     | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL30    | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL31    | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL55    | No Cross      | 6 Pin DIP  |              | D    |                 |
| ILD30   | No Cross      | 8 Pin DIP  |              | D    |                 |
| ILD31   | No Cross      | 8 Pin DIP  |              | D    |                 |
| ILD55   | No Cross      | 8 Pin DIP  |              | D    |                 |
| ILQ30   | No Cross      | 16 Pin DIP |              | D    |                 |
| ILQ31   | No Cross      | 16 Pin DIP |              | D    |                 |
| ILQ55   | No Cross      | 16 Pin DIP |              | D    |                 |
| IL55B   | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL66    | No Cross      | 6 Pin DIP  |              | D    |                 |
| ILD66   | PS2702-1 (X2) | 8 Pin DIP  |              | C    |                 |
| ILQ66   | PS2702-1 (X4) | 16 Pin DIP |              | C    |                 |
| IL66B   | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL74    | No Cross      | 6 Pin DIP  |              | D    |                 |
| ILD74   | PS2701-1 (X2) | 8 Pin DIP  |              | C    |                 |
| ILQ74   | PS2701-1 (X4) | 16 Pin DIP |              | C    |                 |
| IL201   | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL202   | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL203   | No Cross      | 6 Pin DIP  |              | D    |                 |
| IL205A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL206A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL207A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL208   | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL211A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| L212A   | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL213A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL215A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL216A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL217A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL221A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IIL222A | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL223A  | PS2801-1      | 8 Pin SSOP |              | D    | 8 Pin vs. 4 Pin |
| IL250   | No Cross      | 6 Pin DIP  |              | D    |                 |

A = Direct Electrical/Mechanical Replacement  
 B = Direct Electrical Drop-In Replacement Likely Insignificant Difference  
 C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
 D = No Cross

| Siemens  | Cross         | Package       | Sales Tip(s)                                      | Code | Comment(s) |
|----------|---------------|---------------|---|------|------------|
| IL251    | No Cross      | 6 Pin DIP     |   | D    |            |
| IL252    | No Cross      | 6 Pin DIP     |   | D    |            |
| ILD250   | No Cross      | 8 Pin DIP     |   | D    |            |
| ILD251   | No Cross      | 8 Pin DIP     |   | D    |            |
| ILD252   | No Cross      | 8 Pin DIP     |   | D    |            |
| IL255    | No Cross      | 6 Pin DIP     |   | D    |            |
| IL256    | PS2805-1      | 8 Pin 1/2 SOP | 8 Pin 1/2 SOP vs. 8 Pin SSOP                      | D    |            |
| IL300    | No Cross      |               |   | D    |            |
| IL329    | See Comment   | 8 Pin SOP     | PS7241-AT5 is Lower Cost Standard Industry Pinout | D    |            |
| IL350    | No Cross      |               |   | D    |            |
| IL352    | No Cross      |               |   | D    |            |
| IL388    | No Cross      |               |   | D    |            |
| IL410    | No Cross      |               |   | D    |            |
| IL420    | No Cross      |               |   | D    |            |
| IL440    | No Cross      |               |   | D    |            |
| IL755    | No Cross      | 6 Pin DIP     |   | D    |            |
| IL755-2  | No Cross      | 8 Pin DIP     |   | D    |            |
| IL755B   | No Cross      | 6 Pin DIP     |   | D    |            |
| IL766    | No Cross      | 6 Pin DIP     |   | D    |            |
| IL766-2  | No Cross      | 8 Pin DIP     |   | D    |            |
| ILD766   | No Cross      | 8 Pin DIP     |   | D    |            |
| IL766B   | No Cross      | 6 Pin DIP     |   | D    |            |
| IL4108   | No Cross      | 6 Pin DIP     |   | D    |            |
| IL4116   | No Cross      | 6 Pin DIP     |   | D    |            |
| IL4117   | No Cross      | 6 Pin DIP     |   | D    |            |
| IL4118   | No Cross      | 6 Pin DIP     |   | D    |            |
| IL4216   | No Cross      | 6 Pin DIP     |   | A    |            |
| IL4217   | No Cross      | 6 Pin DIP     |   | D    |            |
| IL4218   | No Cross      | 6 Pin DIP     |   | D    |            |
| ILCT6    | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD1     | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD2     | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD5     | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILQ1     | PS2701-1 (X4) | 16 Pin DIP    |   | C    |            |
| ILQ2     | PS2701-1 (X4) | 16 Pin DIP    |   | C    |            |
| ILQ5     | PS2701-1 (X4) | 16 Pin DIP    |   | C    |            |
| ILD3     | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILQ3     | PS2701-1 (X4) | 16 Pin DIP    |   | C    |            |
| ILD32    | PS2702-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILQ32    | PS2702-1 (X4) | 16 Pin DIP    |   | C    |            |
| ILD205   | PS2801-1 x 2  | 8 Pin SSOP    | Please call for CTR Rank Information              | C    |            |
| ILD206   | PS2801-1 x 2  | 8 Pin SSOP    | Please call for CTR Rank Information              | C    |            |
| ILD207   | PS2801-1 x 2  | 8 Pin SSOP    | Please call for CTR Rank Information              | C    |            |
| ILD211   | PS2801-1 x 2  | 8 Pin SSOP    | Please call for CTR Rank Information              | C    |            |
| ILD213   | PS2801-1 x 2  | 8 Pin SSOP    | Please call for CTR Rank Information              | C    |            |
| ILD217   | PS2801-1 x 2  | 8 Pin SSOP    | Please call for CTR Rank Information              | C    |            |
| ILD223   | PS2802-1 x 2  | 8 Pin SSOP    |   | A    |            |
| ILD255   | PS2805-2      | 8 Pin SSOP    |   | C    |            |
| ILD256   | PS2805-1 x 2  | 8 Pin SSOP    |   | A    |            |
| ILD610   | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD610-1 | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD610-2 | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD610-3 | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD610-4 | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD615   | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD615-1 | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |
| ILD615-2 | PS2701-1 (X2) | 8 Pin DIP     |   | C    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Siemens   | Cross         | Package    | Sales Tip(s)              | Code | Comment(s)      |
|-----------|---------------|------------|---------------------------|------|-----------------|
| ILD615-3  | PS2701-1 (X2) | 8 Pin DIP  |                           | C    |                 |
| ILD615-4  | PS2701-1 (X2) | 8 Pin DIP  |                           | C    |                 |
| ILQ615    | PS2701-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILQ615    | PS2701-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILQ615    | PS2701-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILQ615    | PS2701-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILQ615    | PS2701-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILD620    | PS2701-1 (X2) | 8 Pin DIP  |                           | C    |                 |
| ILD620GB  | PS2701-1 (X2) | 8 Pin DIP  |                           | C    |                 |
| ILQ620    | PS2701-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILQ620GB  | PS2701-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILD621    | PS2705-1 (X2) | 8 Pin DIP  |                           | C    |                 |
| ILD621GB  | PS2705-1 (X2) | 8 Pin DIP  |                           | C    |                 |
| ILQ621    | PS2705-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILQ621GB  | PS2705-1 (X4) | 16 Pin DIP |                           | C    |                 |
| ILH100    | No Cross      |            |                           | D    |                 |
| ILH200    | No Cross      |            |                           | D    |                 |
| MCA230    | No Cross      | 6 Pin DIP  |                           | D    |                 |
| MCA231    | No Cross      | 6 Pin DIP  |                           | D    |                 |
| MCA255    | No Cross      | 6 Pin DIP  |                           | D    |                 |
| MCT6      | No Cross      | 8 Pin DIP  |                           | D    |                 |
| MCT5210   | No Cross      | 6 Pin DIP  |                           | D    |                 |
| MCT5211   | No Cross      | 6 Pin DIP  |                           | D    |                 |
| MOC8050   | No Cross      | 6 Pin DIP  |                           | D    |                 |
| MOC8111   | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH600    | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH601    | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH601-1  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH601-2  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH601-3  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH601-3  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH608    | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH608-2  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH608-3  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH608-4  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH608-5  | No Cross      | 6 Pin DIP  |                           | D    |                 |
| SFH610A   | PS2701-1      | 4 Pin DIP  |                           | C    |                 |
| SFH610A-1 | PS2701-1      | 4 Pin DIP  | Siemen's CTR = 40-80 %    | C    |                 |
| SFH610A-2 | PS2701-1      | 4 Pin DIP  | Siemen's CTR = 63-125 %   | C    |                 |
| SFH610A-3 | PS2701-1      | 4 Pin DIP  | Siemen's CTR = 100-200 %  | C    |                 |
| SFH610A-4 | PS2701-1      | 4 Pin DIP  | Siemen's CTR = 160-320 %  | C    |                 |
| SFH611A   | PS2701-1      | 4 Pin DIP  |                           | C    |                 |
| SFH615A   | PS2701-1      | 4 Pin DIP  |                           | C    |                 |
| SFH617A   | PS2701-1      | 4 Pin DIP  |                           | C    |                 |
| SFH618A   | PS2701-1      | 4 Pin DIP  |                           | C    |                 |
| SFH620A   | PS2705-1      | 4 Pin DIP  |                           | C    |                 |
| SFH620AA  | PS2705-1      | 4 Pin DIP  |                           | C    |                 |
| SFH628A   | PS2701-1      | 4 Pin DIP  |                           | C    |                 |
| SFH636    | PS8701-1      | 5 Pin SOP  | SOP Version of the SFH636 | C    |                 |
| SFH640    | No Cross      | 6 Pin DIP  | 300 V Vceo                | C    |                 |
| SFH640-1  | No Cross      | 6 Pin DIP  | 300 V Vceo                | C    |                 |
| SFH640-2  | No Cross      | 6 Pin DIP  | 300 V Vceo                | C    |                 |
| SFH640-3  | No Cross      | 6 Pin DIP  | 300 V Vceo                | C    |                 |
| SFH6135   | PS8601        | 6 Pin DIP  |                           | A    | 6 Pin vs. 8 Pin |
| SFH6136   | PS8601        | 6 Pin DIP  |                           | A    | 6 Pin vs. 8 Pin |
| SFH6138   | No Cross      | 8 Pin DIP  |                           | D    |                 |
| SFH6139   | No Cross      | 8 Pin DIP  |                           | D    |                 |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Siemens | Cross    | Package    | Sales Tip(s) | Code | Comment(s) |
|---------|----------|------------|--------------|------|------------|
| SFH6315 | No Cross | 8 Pin SSOP |              | D    |            |
| SFH6316 | No Cross | 8 Pin SSOP |              | D    |            |
| SFH6318 | No Cross | 8 Pin SSOP |              | D    |            |
| SFH6319 | No Cross | 8 Pin SSOP |              | D    |            |
| SFH6325 | No Cross | 8 Pin SSOP |              | D    |            |
| SFH6326 | No Cross | 8 Pin SSOP |              | D    |            |
| SFH6343 | No Cross | 8 Pin SSOP |              | D    |            |
| SFH6345 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6700 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6701 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6702 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6705 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6711 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6712 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6719 | No Cross | 8 Pin DIP  |              | D    |            |
| SFH6943 | No Cross | 8 Pin DIP  |              | D    |            |

| QTC      | Cross    | Package   | Sales Tip(s) | Code | Comment(s) |
|----------|----------|-----------|--------------|------|------------|
| 4N25     | No Cross | 6 Pin DIP |              | D    |            |
| 4N26     | No Cross | 6 Pin DIP |              | D    |            |
| 4N27     | No Cross | 6 Pin DIP |              | D    |            |
| 4N28     | No Cross | 6 Pin DIP |              | D    |            |
| 4N29     | No Cross | 6 Pin DIP |              | D    |            |
| 4N30     | No Cross | 6 Pin DIP |              | D    |            |
| 4N31     | No Cross | 6 Pin DIP |              | D    |            |
| 4N32     | No Cross | 6 Pin DIP |              | D    |            |
| 4N33     | No Cross | 6 Pin DIP |              | D    |            |
| 4N35     | No Cross | 6 Pin DIP |              | D    |            |
| 4N36     | No Cross | 6 Pin DIP |              | D    |            |
| 4N37     | No Cross | 6 Pin DIP |              | D    |            |
| 4N39     | No Cross |           |              | D    |            |
| 4N40     | No Cross |           |              | D    |            |
| HCPL2503 | PS8601   | 8 Pin DIP |              | A    |            |
| HCPL4502 | PS8601   | 8 Pin DIP |              | B    |            |
| 6N135    | PS8601   | 8 Pin DIP |              | A    |            |
| 6N136    | PS8601   | 8 Pin DIP |              | B    |            |
| 6N137    | PS9601   | 8 Pin DIP |              | A    |            |
| HCPL2601 | PS9701   | 5 Pin SOP |              | A    |            |
| HCPL2611 | PS9601   | 8 Pin DIP |              | B    |            |
| 6N138    | No Cross | 8 Pin DIP |              | D    |            |
| 6N139    | No Cross | 8 Pin DIP |              | D    |            |
| 74OL6000 | No Cross | 6 Pin DIP |              | D    |            |
| 74OL6001 | No Cross | 6 Pin DIP |              | D    |            |
| 74OL6010 | No Cross | 6 Pin DIP |              | D    |            |
| 74OL6011 | No Cross | 6 Pin DIP |              | D    |            |
| CNY17-1  | No Cross | 6 Pin DIP |              | D    |            |
| CNY17-2  | No Cross | 6 Pin DIP |              | D    |            |
| CNY17-3  | No Cross | 6 Pin DIP |              | D    |            |
| CNY17-4  | No Cross | 6 Pin DIP |              | D    |            |
| CNY17F-1 | No Cross | 6 Pin DIP |              | D    |            |
| CNY17F-2 | No Cross | 6 Pin DIP |              | D    |            |
| CNY17F-3 | No Cross | 6 Pin DIP |              | D    |            |
| H11A1    | No Cross | 6 Pin DIP |              | D    |            |
| H11AA1   | No Cross | 6 Pin DIP |              | D    |            |
| H11AA2   | No Cross | 6 Pin DIP |              | D    |            |
| H11AA3   | No Cross | 6 Pin DIP |              | D    |            |
| H11AA4   | No Cross | 6 Pin DIP |              | D    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| QTC      | Cross         | Package   | Sales Tip(s) | Code | Comment(s) |
|----------|---------------|-----------|--------------|------|------------|
| H11D1    | No Cross      | 6 Pin DIP |              | D    |            |
| H11D2    | No Cross      | 6 Pin DIP |              | D    |            |
| H11D3    | No Cross      | 6 Pin DIP |              | D    |            |
| H11G1    | No Cross      | 6 Pin DIP |              | D    |            |
| H11G2    | No Cross      | 6 Pin DIP |              | D    |            |
| HCPL2530 | No Cross      | 8 Pin DIP |              | D    |            |
| HCPL2531 | No Cross      | 8 Pin DIP |              | D    |            |
| HCPL2630 | No Cross      | 8 Pin DIP |              | D    |            |
| HCPL2631 | No Cross      | 8 Pin DIP |              | D    |            |
| HCPL2730 | No Cross      | 8 Pin DIP |              | D    |            |
| HCPL2731 | No Cross      | 8 Pin DIP |              | D    |            |
| MCP3009  | No Cross      | 6 Pin DIP |              | D    |            |
| MCP3010  | No Cross      | 6 Pin DIP |              | D    |            |
| MCP3011  | No Cross      | 6 Pin DIP |              | D    |            |
| MCP3020  | No Cross      | 6 Pin DIP |              | D    |            |
| MCP3021  | No Cross      | 6 Pin DIP |              | D    |            |
| MCP3022  | No Cross      | 6 Pin DIP |              | D    |            |
| MCT2     | No Cross      | 6 Pin DIP |              | D    |            |
| MCT2E    | No Cross      | 6 Pin DIP |              | D    |            |
| MCT210   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT-2200 | No Cross      | 6 Pin DIP |              | D    |            |
| MCT-2201 | No Cross      | 6 Pin DIP |              | D    |            |
| MCT-2202 | No Cross      | 6 Pin DIP |              | D    |            |
| MCT-26   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT270   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT-271  | No Cross      | 6 Pin DIP |              | D    |            |
| MCT272   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT274   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT275   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT276   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT277   | No Cross      | 6 Pin DIP |              | D    |            |
| MCT5200  | No Cross      | 6 Pin DIP |              | D    |            |
| MCT5201  | No Cross      | 6 Pin DIP |              | D    |            |
| MCT5210  | No Cross      | 6 Pin DIP |              | D    |            |
| MCT5211  | No Cross      | 6 Pin DIP |              | D    |            |
| MCT6     | PS2701-1 (X2) | 8 Pin DIP |              | C    |            |
| MCT61    | PS2701-1 (X2) | 8 Pin DIP |              | C    |            |
| MCT62    | PS2701-1 (X2) | 8 Pin DIP |              | C    |            |
| MCT9001  | PS2701-1 (X2) | 8 Pin DIP |              | C    |            |
| MID400   | No Cross      | 8 Pin DIP |              | D    |            |
| MOC8111  | No Cross      | 6 Pin DIP |              | D    |            |
| MOC8112  | No Cross      | 6 Pin DIP |              | D    |            |
| MOC8113  | No Cross      | 6 Pin DIP |              | D    |            |
| TIL111   | No Cross      | 6 Pin DIP |              | D    |            |
| H11A1    | No Cross      | 6 Pin DIP |              | D    |            |
| H11A2    | No Cross      | 6 Pin DIP |              | D    |            |
| H11A3    | No Cross      | 6 Pin DIP |              | D    |            |
| H11A4    | No Cross      | 6 Pin DIP |              | D    |            |
| H11A5    | No Cross      | 6 Pin DIP |              | D    |            |
| H11A1Z   | No Cross      | 6 Pin DIP |              | D    |            |
| H11AG1   | No Cross      | 6 Pin DIP |              | D    |            |
| H11AG2   | No Cross      | 6 Pin DIP |              | D    |            |
| H11AG3   | No Cross      | 6 Pin DIP |              | D    |            |
| H11B1    | No Cross      | 6 Pin DIP |              | D    |            |
| H11B2    | No Cross      | 6 Pin DIP |              | D    |            |
| H11B3    | No Cross      | 6 Pin DIP |              | D    |            |
| H11C1    | No Cross      |           |              | D    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| QTC     | Cross    | Package   | Sales Tip(s) | Code | Comment(s) |
|---------|----------|-----------|--------------|------|------------|
| H11C2   | No Cross |           |              | D    |            |
| H11C3   | No Cross |           |              | D    |            |
| H11C4   | No Cross |           |              | D    |            |
| H11C5   | No Cross |           |              | D    |            |
| H11C6   | No Cross |           |              | D    |            |
| H11D1   | No Cross | 6 Pin DIP |              | D    |            |
| H11D2   | No Cross | 6 Pin DIP |              | D    |            |
| H11D3   | No Cross | 6 Pin DIP |              | D    |            |
| H11F1   | No Cross |           |              | D    |            |
| H11F2   | No Cross |           |              | D    |            |
| H11F3   | No Cross |           |              | D    |            |
| H11L1   | No Cross | 6 Pin DIP |              | D    |            |
| H11L2   | No Cross | 6 Pin DIP |              | D    |            |
| H11L3   | No Cross | 6 Pin DIP |              | D    |            |
| H11N1   | No Cross | 6 Pin DIP |              | D    |            |
| H11N2   | No Cross | 6 Pin DIP |              | D    |            |
| H11N3   | No Cross | 6 Pin DIP |              | D    |            |
| H24A1   | PS2702-1 | 4 Pin DIP |              | C    |            |
| H24A2   | PS2702-1 | 4 Pin DIP |              | C    |            |
| H24B1   | PS2702-1 | 4 Pin DIP |              | C    |            |
| H24B2   | PS2702-1 | 4 Pin DIP |              | C    |            |
| MCT4    | No Cross | LED       |              | D    |            |
| MOC3009 | No Cross | 6 Pin DIP |              | D    |            |
| MOC3010 | No Cross | 6 Pin DIP |              | D    |            |
| MOC3011 | No Cross | 6 Pin DIP |              | D    |            |
| MOC3012 | No Cross | 6 Pin DIP |              | D    |            |
| MOC3020 | No Cross | 6 Pin DIP |              | D    |            |
| MOC3021 | No Cross | 6 Pin DIP |              | D    |            |
| MOC3022 | No Cross | 6 Pin DIP |              | D    |            |
| MOC3023 | No Cross | 6 Pin DIP |              | D    |            |

Note:

-S = Surface Mount Option

-SD = Surface Mount Tape and Reel Option

-200D = Surface Mount Tape and Reel Option

| Hewlett<br>Packard | Cross    | Package   | Sales Tip(s) | Code | Comment(s) |
|--------------------|----------|-----------|--------------|------|------------|
| 6N135              | PS8601   | 8 Pin DIP |              | A    |            |
| 6N136              | PS8601   | 8 Pin DIP |              | B    |            |
| HCNR200            | No Cross | 8 Pin DIP |              | D    |            |
| HCNR201            | No Cross | 8 Pin DIP |              | D    |            |
| HCNW135            | PS8601   | 8 Pin DIP |              | B    |            |
| HCNW136            | PS8601   | 8 Pin DIP |              | B    |            |
| HCNW137            | PS9601   | 8 Pin DIP |              | B    |            |
| HCNW138            | No Cross | 8 Pin DIP |              | D    |            |
| HCNW139            | No Cross | 8 Pin DIP |              | D    |            |
| HCNW2201           | No Cross | 8 Pin DIP |              | D    |            |
| HCNW2211           | No Cross | 8 Pin DIP |              | D    |            |
| HCNW2601           | PS9601   | 8 Pin DIP |              | B    |            |
| HCNW2611           | PS9601   | 8 Pin DIP |              | B    |            |
| HCNW4502           | PS8601   | 8 Pin DIP |              | B    |            |
| HCNW4503           | PS8601   | 8 Pin DIP |              | B    |            |
| HCNW4504           | PS8601   | 8 Pin DIP |              | A    |            |
| HCNW4506           | No Cross | 8 Pin DIP |              | D    |            |
| HCNW4562           | PS8601   | 8 Pin DIP |              | B    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Hewlett Packard | Cross    | Package       | Sales Tip(s)                           | Code | Comment(s) |
|-----------------|----------|---------------|--|------|------------|
| HCPL-0201       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0211       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0452       | PS8601   | 8 Pin DIP     |  | B    |            |
| HCPL-0453       | PS8601   | 8 Pin DIP     |  | B    |            |
| HCPL-0454       | PS8601   | 8 Pin DIP     |  | A    |            |
| HCPL-0466       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0500       | PS8601   | 8 Pin DIP     |  | B    |            |
| HCPL-0501       | PS8601   | 8 Pin DIP     |  | B    |            |
| HCPL-0530       | No Cross | 8 Pin DIP     | 2 of the PS8701 NEC Lower Cost Smaller | D    |            |
| HCPL-0531       | No Cross | 8 Pin DIP     | 2 of the PS8701 NEC Lower Cost Smaller | D    |            |
| HCPL-0534       | No Cross | 8 Pin DIP     | 2 of the PS8701 NEC Lower Cost Smaller | D    |            |
| HCPL-0560       | No Cross | 8 Pin DIP     | 2 of the PS8701 NEC Lower Cost Smaller | D    |            |
| HCPL-0561       | No Cross | 8 Pin DIP     | 2 of the PS8701 NEC Lower Cost Smaller | D    |            |
| HCPL-0600       | PS9601   | 8 Pin DIP     |  | B    |            |
| HCPL-0601       | PS9601   | 8 Pin DIP     |  | B    |            |
| HCPL-0611       | PS9601   | 8 Pin DIP     |  | B    |            |
| HCPL-061A       | PS9601   | 8 Pin DIP     |  | B    |            |
| HCPL-0630       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0631       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-063A       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-063N       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0661       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0700       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0701       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-070A       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-0730       | No Cross | 8 Pin SOIC    | PS2732-2 closest cross                 | D    |            |
| HCPL-0731       | No Cross | 8 Pin SOIC    | PS2732-2 closest cross                 | D    |            |
| HCPL-073A       | No Cross | 8 Pin SOIC    |  | D    |            |
| HCPL-0870       | No Cross | A/D Converter |  | D    |            |
| HCPL-177K       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-1930       | No Cross | 16 Pin DIP    |  | D    |            |
| HCPL-1931       | No Cross | 16 Pin DIP    |  | D    |            |
| HCPL-193K       | No Cross | 16 Pin DIP    |  | D    |            |
| HCPL-2200       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2201       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2202       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2211       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2212       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2219       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2231       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2232       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2300       | No Cross | 8 Pin SOIC    |  | D    |            |
| HCPL-2400       | PS9634   | 8 Pin DIP     |  | B    |            |
| HCPL-2430       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2502       | PS8601   | 8 Pin DIP     |  | B    |            |
| HCPL-2530       | No Cross |               |  | D    |            |
| HCPL-2531       | No Cross |               |  | D    |            |
| HCPL-257K       | PS8601   | 8 Pin DIP     | Hermetically Sealed HP Package         | B    |            |
| HCPL-2601       | No Cross | 8 Pin DIP     |  | D    |            |
| HCPL-2602       | No Cross |               |  | D    |            |
| HCPL-2611       | No Cross |               |  | D    |            |
| HCPL-2612       | No Cross |               |  | D    |            |
| HCPL-261A       | No Cross |               |  | D    |            |
| HCPL-261N       | No Cross |               |  | D    |            |
| HCPL-2630       | No Cross |               |  | D    |            |
| HCPL-2631       | No Cross |               |  | D    |            |
| HCPL-263A       | PS9701   | 5 Pin SOP     |  | B    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Hewlett Packard | Cross         | Package   | Sales Tip(s)              | Code | Comment(s) |
|-----------------|---------------|-----------|---------------------------|------|------------|
| HCPL-263N       | PS9701        | 5 Pin SOP |                           | B    |            |
| HCPL-2730       | No Cross      |           |                           | D    |            |
| HCPL-2731       | No Cross      |           |                           | D    |            |
| HCPL-3000       | No Cross      |           |                           | D    |            |
| HCPL-3100       | PS9634        | 8 Pin DIP |                           | B    |            |
| HCPL-3101       | PS9634        | 8 Pin DIP |                           | B    |            |
| HCPL-3120       | No Cross      |           |                           | D    |            |
| HCPL-3150       | No Cross      |           |                           | D    |            |
| HCPL-3160       | No Cross      |           |                           | D    |            |
| HCPL-3700       | No Cross      |           |                           | D    |            |
| HCPL-3760       | No Cross      |           |                           | D    |            |
| HCPL-4100       | No Cross      |           |                           | D    |            |
| HCPL-4200       | No Cross      |           |                           | D    |            |
| HCPL-4502       | PS8602        | 8 Pin DIP |                           | B    |            |
| HCPL-4503       | PS8602        | 8 Pin DIP |                           | B    |            |
| HCPL-4504       | PS8602        | 8 Pin DIP |                           | B    |            |
| HCPL-4506       | No Cross      |           |                           | D    |            |
| HCPL-4534       | PS8701        |           |                           | C    |            |
| HCPL-4562       | PS8602        | 8 Pin DIP |                           | C    |            |
| HCPL-4661       | No Cross      |           |                           | D    |            |
| HCPL-4701       | No Cross      |           |                           | D    |            |
| HCPL-4731       | No Cross      |           |                           | D    |            |
| HCPL-5200       | No Cross      |           |                           | D    |            |
| HCPL-5201       | No Cross      |           |                           | D    |            |
| HCPL-520K       | No Cross      |           |                           | D    |            |
| HCPL-5230       | No Cross      |           |                           | D    |            |
| HCPL-5231       | No Cross      |           |                           | D    |            |
| HCPL-523K       | No Cross      |           |                           | D    |            |
| HCPL-5300       | No Cross      |           |                           | D    |            |
| HCPL-5301       | No Cross      |           |                           | D    |            |
| HCPL-530K       | No Cross      |           |                           | D    |            |
| HCPL-5400       | No Cross      |           |                           | D    |            |
| HCPL-5401       | No Cross      |           |                           | D    |            |
| HCPL-540K       | No Cross      |           |                           | D    |            |
| HCPL-5430       | No Cross      |           |                           | D    |            |
| HCPL-5431       | No Cross      |           |                           | D    |            |
| HCPL-543K       | No Cross      |           |                           | D    |            |
| HCPL-5500       | No Cross      |           |                           | D    |            |
| HCPL-5501       | No Cross      |           |                           | D    |            |
| HCPL-550K       | No Cross      |           |                           | D    |            |
| HCPL-5530       | No Cross      |           |                           | D    |            |
| HCPL-553K       | No Cross      |           |                           | D    |            |
| HCPL-5600       | PS9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-5601       | PS9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-560K       | PS9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-5630       | PS9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-5631       | PS9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-563K       | PS9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-5700       | No Cross      |           |                           | D    |            |
| HCPL-5701       | No Cross      |           |                           | D    |            |
| HCPL-570K       | No Cross      |           |                           | D    |            |
| HCPL-5730       | No Cross      |           |                           | D    |            |
| HCPL-5731       | No Cross      |           |                           | D    |            |
| HCPL-573K       | No Cross      |           |                           | D    |            |
| HCPL-5760       | No Cross      |           |                           | D    |            |
| HCPL-5761       | No Cross      |           |                           | D    |            |
| HCPL-576K       | No Cross      |           |                           | D    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross



| Hewlett Packard | Cross         | Package   | Sales Tip(s)              | Code | Comment(s) |
|-----------------|---------------|-----------|---------------------------|------|------------|
| HCPL-6230       | No Cross      |           |                           | D    |            |
| HCPL-6231       | No Cross      |           |                           | D    |            |
| HCPL-623K       | No Cross      |           |                           | D    |            |
| HCPL-6250       | No Cross      |           |                           | D    |            |
| HCPL-6251       | No Cross      |           |                           | D    |            |
| HCPL-625K       | No Cross      |           |                           | D    |            |
| HCPL-6430       | No Cross      |           |                           | D    |            |
| HCPL-6431       | No Cross      |           |                           | D    |            |
| HCPL-643K       | No Cross      |           |                           | D    |            |
| HCPL-6530       | PC8601        | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6531       | PC8601        | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-653K       | PC8601        | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6550       | PC8601        | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6551       | PC8601        | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-655K       | PC8601        | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6630       | PC9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6631       | PC9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-663K       | PC9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6650       | PC9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6651       | PC9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-665K       | PC9601/PS9611 | 8 Pin DIP | HP is Hermetically Sealed | B    |            |
| HCPL-6730       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-6731       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-673K       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-6750       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-6751       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-675K       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7100       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7101       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7800       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7800A      | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7800B      | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7820       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7825       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7840       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7860       | No Cross      | 8 Pin DIP |                           | D    |            |
| HCPL-7870       | No Cross      | 8 Pin DIP |                           | D    |            |

Note:

-300 = Gull Wing

-500 = Tape and Reel

- HP may be hermetically sealed

| Lite-On    | Cross    | Package   | Sales Tip(s) | Code | Comment(s) |
|------------|----------|-----------|--------------|------|------------|
| LRV-4N26S  | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N25   | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N25SA | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N25M  | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N26   | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N26S  | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N26M  | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N27   | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N26M  | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N28   | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N28S  | No Cross | 6 Pin DIP |              | D    |            |
| LTV-4N28M  | No Cross | 6 Pin DIP |              | D    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Lite-On    | Cross         | Package    | Sales Tip(s) | Code | Comment(s) |
|------------|---------------|------------|--------------|------|------------|
| LTV-4N32   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N32S  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N32M  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N33   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N33S  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N33M  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N35   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N35S  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N35M  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N37   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N37S  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-4N37M  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-702V   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-702VS  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-702VM  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-702F   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-702FS  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-702FM  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-703V   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-703VS  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-703VM  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-703F   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-703FS  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-703FM  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-713V   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-713VS  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-713VM  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-713F   | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-713FS  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-713FM  | No Cross      | 6 Pin DIP  |              | D    |            |
| LTV-814    | PS2705-1      | 4 Pin DIP  |              | C    |            |
| LTV-814S   | PS2705-1      | 4 Pin DIP  |              | C    |            |
| LTV-814M   | PS2705-1      | 4 Pin DIP  |              | C    |            |
| LTV-824    | PS2705-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-824S   | PS2705-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-824M   | PS2705-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-844    | PS2705-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-844S   | PS2705-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-844M   | PS2705-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-8141   | PS2706-1      | 4 Pin DIP  |              | C    |            |
| LTV-8141S  | PS2706-1      | 4 Pin DIP  |              | C    |            |
| LTV-8141 M | PS2706-1      | 4 Pin DIP  |              | C    |            |
| LTV-8241   | PS2706-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-8241S  | PS2706-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-8241 M | PS2706-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-8441   | PS2706-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-8441S  | PS2706-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-8441 M | PS2706-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-815    | PS2702-1      | 4 Pin DIP  |              | C    |            |
| LTV-815S   | PS2702-1      | 4 Pin DIP  |              | C    |            |
| LTV-815M   | PS2701-1      | 4 Pin DIP  |              | C    |            |
| LTV-825    | PS2702-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-825S   | PS2702-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-825M   | PS2701-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-845    | PS2702-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-845S   | PS2702-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-845M   | PS2701-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-817    | PS2701-1      | 4 Pin DIP  |              | C    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Lite-On  | Cross         | Package    | Sales Tip(s) | Code | Comment(s) |
|----------|---------------|------------|--------------|------|------------|
| LTV-817S | PS2701-1      | 4 Pin DIP  |              | C    |            |
| LTV-817M | PS2701-1      | 4 Pin DIP  |              | C    |            |
| LTV-827  | PS2701-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-827S | PS2701-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-827M | PS2701-1 (X2) | 8 Pin DIP  |              | C    |            |
| LTV-847  | PS2701-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-847S | PS2701-1 (X4) | 16 Pin DIP |              | C    |            |
| LTV-847M | PS2701-1 (X4) | 16 Pin DIP |              | C    |            |

Note:

-TA = Tape and Reel

-TB = Tape and Reel

| Motorola | Cross    | Package    | Sales Tip(s)   | Code | Comment(s) |
|----------|----------|------------|--|------|------------|
| 4N25     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N26     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N27     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N28     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N29     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N30     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N31     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N32     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N33     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N35     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N36     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N37     | No Cross | 6 Pin DIP  |  | D    |            |
| 4N38A    | No Cross | 6 Pin DIP  |  | D    |            |
| 4N38     | No Cross | 6 Pin DIP  |  | D    |            |
| CNY17-1  | No Cross | 6 Pin DIP  |  | D    |            |
| CNY17-2  | No Cross | 6 Pin DIP  |  | D    |            |
| CNY17-3  | No Cross | 6 Pin DIP  |  | D    |            |
| H11A1    | No Cross | 6 Pin DIP  |  | D    |            |
| H11AA1   | No Cross | 6 Pin DIP  |  | D    |            |
| H11AA2   | No Cross | 6 Pin DIP  |  | D    |            |
| H11AA3   | No Cross | 6 Pin DIP  |  | D    |            |
| H11AA4   | No Cross | 6 Pin DIP  |  | D    |            |
| H11AV1   | No Cross | 6 Pin DIP  |  | D    |            |
| H11AV2   | No Cross | 6 Pin DIP  |  | D    |            |
| H11B1    | No Cross | 6 Pin DIP  |  | D    |            |
| H11B3    | No Cross | 6 Pin DIP  |  | D    |            |
| H11D1    | No Cross | 6 Pin DIP  |  | D    |            |
| H11D2    | No Cross | 6 Pin DIP  |  | D    |            |
| H11G1    | No Cross | 6 Pin DIP  |  | D    |            |
| H11G2    | No Cross | 6 Pin DIP  |  | D    |            |
| H11G3    | No Cross | 6 Pin DIP  |  | D    |            |
| H11L1    | No Cross | 6 Pin DIP  |  | D    |            |
| H11L2    | No Cross | 6 Pin DIP  |  | D    |            |
| MCT2     | No Cross | 6 Pin DIP  |  | D    |            |
| MCT2E    | No Cross | 6 Pin DIP  |  | D    |            |
| MOC119   | No Cross | 6 Pin DIP  |  | D    |            |
| MOC205   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC206   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC207   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC208   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC211   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC212   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC213   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC215   | PS2801-1 | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Motorola   | Cross        | Package    | Sales Tip(s)   | Code | Comment(s) |
|------------|--------------|------------|--|------|------------|
| MOC216     | PS2801-1     | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC217     | PS2801-1     | 4 Pin SSOP | PS2801-1/PS2561-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC223     | PS2802-1     | 4 Pin SSOP | PS2802-1/PS2562-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC256     | PS2805-1     | 4 Pin SSOP | PS2805-1/PS2565-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOC263     | PS2802-1     | 4 Pin SSOP | PS2802-1/PS2562-1 Lower Cost Smaller 4 Pin Replacement | C    |            |
| MOCD207    | PS2801-1 x 2 | 8 Pin SSOP | PS2801-1 x 2 Lower Cost 4 Pin Replacement              | C    |            |
| MOCD208    | PS2801-1 x 2 | 8 Pin SSOP | PS2801-1 x 2 Lower Cost 4 Pin Replacement              | C    |            |
| MOCD211    | PS2801-1 x 2 | 8 Pin SSOP | PS2801-1 x 2 Lower Cost 4 Pin Replacement              | C    |            |
| MOCD213    | PS2801-1 x 2 | 8 Pin SSOP | PS2801-1 x 2 Lower Cost 4 Pin Replacement              | C    |            |
| MOCD217    | PS2801-1 x 2 | 8 Pin SSOP | PS2801-1 x 2 Lower Cost 4 Pin Replacement              | C    |            |
| MOCD223    | PS2802-1 x 2 | 8 Pin SSOP | PS2802-1 x 2 Lower Cost 4 Pin Replacement              | C    |            |
| MOC2A40-10 | No Cross     |            |  | D    |            |
| MOC2A40-5  | No Cross     |            |  | D    |            |
| MOC2A60-10 | No Cross     |            |  | D    |            |
| MOC2A60-5  | No Cross     |            |  | D    |            |
| MOC2R60-10 | No Cross     |            |  | D    |            |
| MOC2R60-15 | No Cross     |            |  | D    |            |
| MOC3010    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3011    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3012    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3021    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3022    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3023    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3031    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3032    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3033    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3041    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3042    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3043    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3051    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3052    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3061    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3062    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3063    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3081    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3082    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3083    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3162    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC3163    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC5007    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC5008    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC5009    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8020    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8021    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8030    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8050    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8080    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8100    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8101    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8102    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8103    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8104    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8105    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8111    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8112    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8113    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8204    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8205    | No Cross     | 6 Pin DIP  |  | D    |            |
| MOC8206    | No Cross     | 6 Pin DIP  |  | D    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

# TAPE AND REEL AVAILABILITY BY SERIES

## OPTOCOUPERS

| PART NUMBER | PACKAGE QUANTITY | PART NUMBER | PACKAGE QUANTITY |
|-------------|------------------|-------------|------------------|
|-------------|------------------|-------------|------------------|

| <b>PS27XX SERIES</b> |      |
|----------------------|------|
| PS27XX-1-F3          | 3500 |

| <b>PS28XX SERIES</b> |      |
|----------------------|------|
| PS28XX-1-F3          | 3500 |
| PS28XX-4-F3          | 2500 |

| <b>PS8XXX SERIES</b> |      |
|----------------------|------|
| PS86XXL-E3           | 1000 |
| PS87XX-E3            | 900  |
| PS87XX-F3            | 3500 |

| <b>PS9XXX SERIES</b> |      |
|----------------------|------|
| PS96XXL-E3           | 1000 |
| PS97XX-E3            | 900  |
| PS97XX-F3            | 3500 |

# INTERNATIONAL SAFETY STANDARDS

| NEC OPTOCOUPLER PARTS NUMBER                |                         |              |                  | PS2701<br>to<br>PS2707<br>PS2732<br>PS2733 | PS2801<br>PS2805 | PS8601<br>PS8602 | PS8701 | PS9601<br>PS9611 | PS9634 | PS9701<br>PS9711 |
|---|-------------------------|--------------|------------------|--|------------------|------------------|--------|------------------|--------|------------------|
| PARAMETER<br>(Units: mm)<br>(Minimum Dist.) | Outer Creepage Distance |              |                  | 5.0  | 5.0              | 7.0              | 5.0    | 7.0              | 7.0    | 5.0              |
|   | Clearance Distance      |              |                  | 5.0  | 5.0              | 7.5              | 5.0    | 7.5              | 7.5    | 5.0              |
|   | Isolation Distance      |              |                  | 0.3/0.4                                    | 0.3/0.4          | 0.3              | 0.2    | 0.4              | 0.4    | 0.2              |
|   | Inner Creepage Distance |              |                  | 2.5  | 2.5              | 4.0              | 2.5    | 4.0              | 4.0    | 2.5              |
|   | Breakdown Voltage       |              |                  | 2.5 KV                                     | 2.5 KV           | 5 kV             | 2.5 kV | 5 kV             | 5 kV   | 2.5 kV           |
| Organization                                | Country                 | Standard No. | NEC Approval No. |  |                  |                  |        |                  |        |                  |
| UL  | USA                     | UL1577       | E72422(S)        | ●  | ●                | ●                | ●      | ●                | ●      | ●                |
| CSA   | Canada                  | CSA-C22.2    | CA101391         | ●  | -                | —                | —      | —                | —      | —                |
| VDE   | Germany                 | VDE0884      |                  | ●  | ●                | ●                | ●      | —                | ●      | ●                |
|   |                         |              |                  | 5903UG                                     | 101378           | 91877            | 5939UG |                  | 76840  | 590UG            |
| BSI   | UK                      | BS415        | 7112 (4 pin)     | ●  | ●                | —                | —      | —                | —      | —                |
|   |                         | EN-60-950    | 7250 (6 pin)     | 8219                                       | 8315             | 8188             |        |                  |        |                  |
|   |                         | BS7002       | 7240 (4 pin)     | ●  | ●                | ●                | —      | ●                | —      | ●                |
|   |                         | EN-60-950    | 7615 (6 pin)     | 8220                                       | 8189             | 8004             |        | 8389             |        | 8387             |

● Approved    — N/A

## Solid State Relay Cross Reference

---

### Solid State Relay Cross Reference

| Aromat    | Cross          | Package         | Sales Tip(s)        | Code | Comment(s) |
|-----------|----------------|-----------------|---------------------|------|------------|
| AQ1       | No Cross       |                 |                     | D    |            |
| AQ8       | No Cross       |                 |                     | D    |            |
| AQBX      | No Cross       |                 |                     | D    |            |
| AQC       | No Cross       |                 |                     | D    |            |
| AQF       | No Cross       |                 |                     | D    |            |
| AQR       | No Cross       |                 |                     | D    |            |
| AQS210PS  | PS7841-A15     | 16 Pin SSOP     |                     | A    |            |
| AQS210PSX | PS7841-A15-F3  | 16 Pin SSOP     |                     | A    |            |
| AQS210PSZ | PS7841-A15-F4  | 16 Pin SSOP     |                     | A    |            |
| AQS210TS  | No Cross       |                 |                     | D    |            |
| AQS210TSX | No Cross       |                 |                     | D    |            |
| AQS210TSZ | No Cross       |                 |                     | D    |            |
| AQS5225S  | No Cross       |                 |                     | D    |            |
| AQS5225SX | No Cross       |                 |                     | D    |            |
| AQS5225SZ | No Cross       |                 |                     | D    |            |
| AQS610TS  | No Cross       |                 |                     | D    |            |
| AQS610TSX | No Cross       |                 |                     | D    |            |
| AQS610TSZ | No Cross       |                 |                     | D    |            |
| AQV101    | PS710A-1A      |                 |                     | B    |            |
| AQV101A   | PS710AL-1A     |                 |                     | B    |            |
| AQV101AX  | PS710AL-1A-E3  |                 |                     | B    |            |
| AQV101AZ  | PS710AL-1A-E4  |                 |                     | B    |            |
| AQV104    | PS7342-1A      |                 |                     | B    |            |
| AQV104A   | PS7342L-1A     |                 |                     | B    |            |
| AQV104AX  | PS7342L-1A-E3  |                 |                     | B    |            |
| AQV104AZ  | PS7342L-1A-E4  |                 |                     | B    |            |
| AQV201    | PS710A-1A      |                 |                     | B    |            |
| AQV201A   | PS710AL-1A     |                 |                     | B    |            |
| AQV201AX  | PS710AL-1A-E3  |                 |                     | B    |            |
| AQV201AZ  | PS710AL-1A-E4  |                 |                     | B    |            |
| AQV202    | PS710A-1A      |                 |                     | B    |            |
| AQV202A   | PS710AL-1A     |                 |                     | B    |            |
| AQV202AX  | PS710AL-1A-E3  |                 |                     | B    |            |
| AQV202AZ  | PS710AL-1A-E4  |                 |                     | B    |            |
| AQV203    | PS7122A-1A     |                 |                     | B    |            |
| AQV203A   | PS7122AL-1A    |                 |                     | B    |            |
| AQV203AX  | PS7122AL-1A-E3 |                 |                     | B    |            |
| AQV203AZ  | PS7122AL-1A-E4 |                 |                     | B    |            |
| AQV204    | PS7122A-1A     |                 |                     | B    |            |
| AQV204A   | PS7122AL-1A    |                 |                     | B    |            |
| AQV204AX  | PS7122AL-1A-E3 |                 |                     | B    |            |
| AQV204AZ  | PS7122AL-1A-E4 |                 |                     | B    |            |
| AQV210    | PS7142A-1A     | 6 Pin DIP       |                     | A    |            |
| AQV210A   | PS7142AL-1A    | 6 Pin Gull Wing |                     | A    |            |
| AQV210AX  | PS7142AL-1A-E3 | 6 Pin Gull Wing |                     | A    |            |
| AQV210AZ  | PS7142AL-1A-E4 | 6 Pin Gull Wing |                     | A    |            |
| AQV212    | PS710A-1A      | 6 Pin DIP       |                     | B    |            |
| AQV212A   | PS710AL-1A     | 6 Pin Gull Wing |                     | B    |            |
| AQV212AX  | PS710AL-1A-E3  | 6 Pin Gull Wing |                     | B    |            |
| AQV212AZ  | PS710AL-1A-E4  | 6 Pin Gull Wing |                     | B    |            |
| AQV212S   | PS7206-1A      | 4 Pin SOP       |                     | C    |            |
| AQV212SX  | PS7206-1A-F3   | 4 Pin SOP       |                     | C    |            |
| AQV212SZ  | PS7206-1A-F4   | 4 Pin SOP       |                     | C    |            |
| AQV214    | PS7141-1A      | 6 Pin DIP       | PS7341-1A will work | A    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| Aromat    | Cross          | Package         | Sales Tip(s)            | Code | Comment(s) |
|-----------|----------------|-----------------|-------------------------|------|------------|
| AQV214A   | PS7141L-1A     | 6 Pin Gull Wing | PS7341L-1A will work    | A    |            |
| AQV214AX  | PS7141L-1A-E3  | 6 Pin Gull Wing | PS7341L-1A-E3 will work | A    |            |
| AQV214AZ  | PS7141L-1A-E4  | 6 Pin Gull Wing | PS7341L-1A-E4 will work | A    |            |
| AQV215    | No Cross       | 6 Pin DIP       |                         | D    |            |
| AQV215A   | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV215AX  | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV215AZ  | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV215S   | No Cross       | 6 Pin SOP       |                         | D    |            |
| AQV215SX  | No Cross       | 6 Pin SOP       |                         | D    |            |
| AQV215SZ  | No Cross       | 6 Pin SOP       |                         | D    |            |
| AQV216    | PS7160-1A      | 6 Pin DIP       | PS7360-1A will work     | A    |            |
| AQV216A   | PS7160L-1A     | 6 Pin Gull Wing | PS7360L-1A will work    | A    |            |
| AQV216AX  | PS7160L-1A-E3  | 6 Pin Gull Wing | PS7360L-1A-E3 will work | A    |            |
| AQV216AZ  | PS7160L-1A-E4  | 6 Pin Gull Wing | PS7360L-1A-E4 will work | A    |            |
| AQV217    | PS7122A-1A     | 6 Pin DIP       |                         | A    |            |
| AQV217A   | PS7122AL-1A    | 6 Pin Gull Wing |                         | A    |            |
| AQV217AX  | PS7122AL-1A-E3 | 6 Pin Gull Wing |                         | A    |            |
| AQV217AZ  | PS7122AL-1A-E4 | 6 Pin Gull Wing |                         | A    |            |
| AQV221    | No Cross       | 6 Pin DIP       |                         | D    |            |
| AQV221A   | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV221AX  | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV221AZ  | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV224N   | PS7341B-1A     | 6 Pin DIP       | Under Development       | B    |            |
| AQV224NA  | PS7341BL-1A    | 6 Pin Gull Wing | Under Development       | B    |            |
| AQV224NAX | PS7341BL-1A-E3 | 6 Pin Gull Wing | Under Development       | B    |            |
| AQV224NAZ | PS7341BL-1A-E4 | 6 Pin Gull Wing | Under Development       | B    |            |
| AQV224NS  | No Cross       |                 |                         | D    |            |
| AQV224NSX | No Cross       |                 |                         | D    |            |
| AQV224NSZ | No Cross       |                 |                         | D    |            |
| AQV225    | No Cross       | 6 Pin DIP       |                         | D    |            |
| AQV225A   | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV225AX  | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV225AZ  | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV225N   | No Cross       | 6 Pin DIP       |                         | D    |            |
| AQV225NA  | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV225NAX | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV225NAZ | No Cross       | 6 Pin Gull Wing |                         | D    |            |
| AQV225NS  | No Cross       |                 |                         | D    |            |
| AQV225NSX | No Cross       |                 |                         | D    |            |
| AQV225NSZ | No Cross       |                 |                         | D    |            |
| AQV227N   | No Cross       |                 |                         | D    |            |
| AQV227NA  | No Cross       |                 |                         | D    |            |
| AQV227NAX | No Cross       |                 |                         | D    |            |
| AQV227NAZ | No Cross       |                 |                         | D    |            |
| AQV227NS  | No Cross       |                 |                         | D    |            |
| AQV227NSX | No Cross       |                 |                         | D    |            |
| AQV227NSZ | No Cross       |                 |                         | D    |            |
| AQV234    | PS7141-1A      | 6 Pin DIP       |                         | B    |            |
| AQV234A   | PS7141L-1A     | 6 Pin Gull Wing |                         | B    |            |
| AQV234AX  | PS7141L-1A-E3  | 6 Pin Gull Wing |                         | B    |            |
| AQV234AZ  | PS7141L-1A-E3  | 6 Pin Gull Wing |                         | B    |            |
| AQV251    | PS710A-1A      | 6 Pin DIP       |                         | B    |            |
| AQV251A   | PS710AL-1A     | 6 Pin Gull Wing |                         | B    |            |
| AQV251AX  | PS710AL-1A-E3  | 6 Pin Gull Wing |                         | B    |            |
| AQV251AZ  | PS710AL-1A-E3  | 6 Pin Gull Wing |                         | B    |            |
| AQV252    | PS710A-1A      | 6 Pin DIP       |                         | B    |            |
| AQV252A   | PS710AL-1A     | 6 Pin Gull Wing |                         | B    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross



| Aromat     | Cross          | Package         | Sales Tip(s) | Code | Comment(s) |
|------------|----------------|-----------------|--------------|------|------------|
| AQV252AX   | PS710AL-1A-E3  | 6 Pin Gull Wing |              | B    |            |
| AQV252AZ   | PS710AL-1A-E3  | 6 Pin Gull Wing |              | B    |            |
| AQV253     | PS7122-1A      | 6 Pin DIP       |              | A    |            |
| AQV253A    | PS7122L-1A     | 6 Pin Gull Wing |              | A    |            |
| AQV253AX   | PS7122L-1A-E3  | 6 Pin Gull Wing |              | A    |            |
| AQV253AZ   | PS7122L-1A-E4  | 6 Pin Gull Wing |              | A    |            |
| AQV253H    | PS7122-1A      | 6 Pin DIP       |              | A    |            |
| AQV253HA   | PS7122L-1A     | 6 Pin Gull Wing |              | A    |            |
| AQV253HAX  | PS7122L-1A-E3  | 6 Pin Gull Wing |              | A    |            |
| AQV253HAZ  | PS7122L-1A-E4  | 6 Pin Gull Wing |              | A    |            |
| AQV254     | PS7341-1A      | 6 Pin DIP       |              | A    |            |
| AQV254A    | PS7341L-1A     | 6 Pin Gull Wing |              | A    |            |
| AQV254AX   | PS7341L-1A-E3  | 6 Pin Gull Wing |              | A    |            |
| AQV254AZ   | PS7341L-1A-E4  | 6 Pin Gull Wing |              | A    |            |
| AQV254H    | PS7341-1A      | 6 Pin DIP       |              | A    |            |
| AQV254HA   | PS7341L-1A     | 6 Pin Gull Wing |              | A    |            |
| AQV254HAX  | PS7341L-1A-E3  | 6 Pin Gull Wing |              | A    |            |
| AQV254HAZ  | PS7341L-1A-E4  | 6 Pin Gull Wing |              | A    |            |
| AQV254R    | PS7141-1A      | 6 Pin DIP       | NEC No LED   | B    |            |
| AQV254RA   | PS7141L-1A     | 6 Pin Gull Wing | NEC No LED   | B    |            |
| AQV254RAX  | PS7141L-1A-E3  | 6 Pin Gull Wing | NEC No LED   | B    |            |
| AQV254RAZ  | PS7141L-1A-E4  | 6 Pin Gull Wing | NEC No LED   | B    |            |
| AQV255     | PS7142-1A      | 6 Pin DIP       |              | B    |            |
| AQV255A    | PS7142L-1A     | 6 Pin Gull Wing |              | B    |            |
| AQV255AX   | PS7142L-1A-E3  | 6 Pin Gull Wing |              | B    |            |
| AQV255AZ   | PS7142L-1A-E4  | 6 Pin Gull Wing |              | B    |            |
| AQV257     | PS7122A-1A     | 6 Pin DIP       |              | A    |            |
| AQV257A    | PS7122AL-1A    | 6 Pin Gull Wing |              | A    |            |
| AQV257AX   | PS7122AL-1A-E3 | 6 Pin Gull Wing |              | A    |            |
| AQV257AZ   | PS7122AL-1A-E4 | 6 Pin Gull Wing |              | A    |            |
| AQV257M    | PS7522-1A      | 6 Pin DIP       |              | B    |            |
| AQV257MA   | PS7522L-1A     | 6 Pin Gull Wing |              | B    |            |
| AQV257MAX  | PS7522L-1A-E3  | 6 Pin Gull Wing |              | B    |            |
| AQV257MAZ  | PS7522L-1A-E4  | 6 Pin Gull Wing |              | B    |            |
| AQV258     | No Cross       | 6 Pin DIP       |              | D    |            |
| AQV258A    | No Cross       | 6 Pin Gull Wing |              | D    |            |
| AQV258AX   | No Cross       | 6 Pin Gull Wing |              | D    |            |
| AQV258AZ   | No Cross       | 6 Pin Gull Wing |              | D    |            |
| AQV259     | No Cross       | 6 Pin DIP       |              | D    |            |
| AQV259A    | No Cross       | 6 Pin Gull Wing |              | D    |            |
| AQV259AX   | No Cross       | 6 Pin Gull Wing |              | D    |            |
| AQV259AZ   | No Cross       | 6 Pin Gull Wing |              | D    |            |
| AQV410E    | PS7141-1B      | 6 Pin DIP       |              | A    |            |
| AQV410EA   | PS7141L-1B     | 6 Pin Gull Wing |              | A    |            |
| AQV410EAX  | PS7141L-1B-E3  | 6 Pin Gull Wing |              | A    |            |
| AQV410EAZ  | PS7141L-1B-E4  | 6 Pin Gull Wing |              | A    |            |
| AQV414     | PS7141-1B      | 6 Pin DIP       |              | A    |            |
| AQV414A    | PS7141L-1B     | 6 Pin Gull Wing |              | A    |            |
| AQV414AX   | PS7141L-1B-E3  | 6 Pin Gull Wing |              | A    |            |
| AQV414AZ   | PS7141L-1B-E4  | 6 Pin Gull Wing |              | A    |            |
| AQV414E    | PS7141-1B      | 6 Pin DIP       |              | A    |            |
| AQV414EA   | PS7141L-1B     | 6 Pin Gull Wing |              | A    |            |
| AQV414EAX  | PS7141L-1B-E3  | 6 Pin Gull Wing |              | A    |            |
| AQV414EAZ  | PS7141L-1B-E4  | 6 Pin Gull Wing |              | A    |            |
| AQV414EH   | PS7341-1B      | 6 Pin DIP       |              | A    |            |
| AQV414EHA  | PS7341L-1B     | 6 Pin Gull Wing |              | A    |            |
| AQV414EHAX | PS7341L-1B-E3  | 6 Pin Gull Wing |              | A    |            |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| Aromat     | Cross          | Package         | Sales Tip(s)      | Code | Comment(s)          |
|------------|----------------|-----------------|-------------------|------|---------------------|
| AQV414EHAZ | PS7341L-1B-E4  | 6 Pin Gull Wing |                   | A    |                     |
| AQV453     | PS7122A-1B     | 6 Pin DIP       | Under Development | A    |                     |
| AQV453A    | PS7122AL-1B    | 6 Pin Gull Wing | Under Development | A    |                     |
| AQV453AX   | PS7122AL-1B-E3 | 6 Pin Gull Wing | Under Development | A    |                     |
| AQV453AZ   | PS7122AL-1B-E4 | 6 Pin Gull Wing | Under Development | A    |                     |
| AQV454     | PS7141-1B      | 6 Pin DIP       |                   | A    |                     |
| AQV454A    | PS7141L-1B     | 6 Pin Gull Wing |                   | A    |                     |
| AQV454AX   | PS7141L-1B-E3  | 6 Pin Gull Wing |                   | A    |                     |
| AQV454AZ   | PS7141L-1B-E3  | 6 Pin Gull Wing |                   | A    |                     |
| AQV454H    | PS7341-1B      | 6 Pin DIP       |                   | A    |                     |
| AQV454HA   | PS7341L-1B     | 6 Pin Gull Wing |                   | A    |                     |
| AQV454HAX  | PS7341L-1B-E3  | 6 Pin Gull Wing |                   | A    |                     |
| AQV454HAZ  | PS7341L-1B-E3  | 6 Pin Gull Wing |                   | A    |                     |
| AQW210     | PS7141-2A      | 8 Pin DIP       |                   | A    |                     |
| AQW210A    | PS7141L-2A     | 8 Pin Gull Wing |                   | A    |                     |
| AQW210AX   | PS7141L-2A-E3  | 8 Pin Gull Wing |                   | A    |                     |
| AQW210AZ   | PS7141L-2A-E4  | 8 Pin Gull Wing |                   | A    |                     |
| AQW210EH   | PS7341-2A      | 8 Pin DIP       | Under Development | A    | PS7141-2A will work |
| AQW210EHA  | PS7341L-2A     | 8 Pin Gull Wing | Under Development | A    | PS7141-2A will work |
| AQW210EHAX | PS7341L-2A-E3  | 8 Pin Gull Wing | Under Development | A    | PS7141-2A will work |
| AQW210EHAZ | PS7341L-2A-E4  | 8 Pin Gull Wing | Under Development | A    | PS7141-2A will work |
| AQW210HL   | PS7341C-2A     | 8 Pin DIP       | Under Development | A    |                     |
| AQW210HLA  | PS7341CL-2A    | 8 Pin Gull Wing | Under Development | A    |                     |
| AQW210HLAX | PS7341CL-2A-E3 | 8 Pin Gull Wing | Under Development | A    |                     |
| AQW210HLAZ | PS7341CL-2A-E4 | 8 Pin Gull Wing | Under Development | A    |                     |
| AQW210S    | PS7241-2A      | 8 Pin SOP       |                   | A    |                     |
| AQW210SX   | PS7241-2A-F3   | 8 Pin SOP       |                   | A    |                     |
| AQW210SZ   | PS7241-2A-F4   | 8 Pin SOP       |                   | A    |                     |
| AQW210T2S  | No Cross       |                 |                   | D    |                     |
| AQW210T2SX | No Cross       |                 |                   | D    |                     |
| AQW210T2SZ | No Cross       |                 |                   | D    |                     |
| AQW210TS   | PS7241-AT5     | 8 Pin SOP       |                   | A    |                     |
| AQW210TSX  | PS7241-AT5-F3  | 8 Pin SOP       |                   | A    |                     |
| AQW210TSZ  | PS7241-AT5-F4  | 8 Pin SOP       |                   | A    |                     |
| AQW212     | PS7113-1A      | 6 Pin DIP       |                   | B    |                     |
| AQW212A    | PS7113L-1A     | 6 Pin Gull Wing |                   | B    |                     |
| AQW212AX   | PS7113L-1A-E3  | 6 Pin Gull Wing |                   | B    |                     |
| AQW212AZ   | PS7113L-1A-E4  | 6 Pin Gull Wing |                   | B    |                     |
| AQW214     | PS7141-2A      | 8 Pin DIP       |                   | A    |                     |
| AQW214A    | PS7141L-2A     | 8 Pin Gull Wing |                   | A    |                     |
| AQW214AX   | PS7141L-2A-E3  | 8 Pin Gull Wing |                   | A    |                     |
| AQW214AZ   | PS7141L-2A-E4  | 8 Pin Gull Wing |                   | A    |                     |
| AQW214EH   | PS7341-2A      | 8 Pin DIP       | Under Development | A    | PS7141-2A will work |
| AQW214EHA  | PS7341L-2A     | 8 Pin Gull Wing | Under Development | A    | PS7141-2A will work |
| AQW214EHAX | PS7341L-2A-E3  | 8 Pin Gull Wing | Under Development | A    | PS7141-2A will work |
| AQW214EHAZ | PS7341L-2A-E4  | 8 Pin Gull Wing | Under Development | A    | PS7141-2A will work |
| AQW214S    | PS7241-2A      | 8 Pin SOP       |                   | A    |                     |
| AQW214SX   | PS7241-2A-F3   | 8 Pin SOP       |                   | A    |                     |
| AQW214SZ   | PS7241-2A-F4   | 8 Pin SOP       |                   | A    |                     |
| AQW215     | PS7113-2A      | 8 Pin DIP       |                   | A    |                     |
| AQW215A    | PS7113L-2A     | 8 Pin Gull Wing |                   | A    |                     |
| AQW215AX   | PS7113L-2A-E3  | 8 Pin Gull Wing |                   | A    |                     |
| AQW215AZ   | PS7113L-2A-E4  | 8 Pin Gull Wing |                   | A    |                     |
| AQW216     | PS7160-2A      | 8 Pin DIP       |                   | A    |                     |
| AQW216A    | PS7160L-2A     | 8 Pin Gull Wing |                   | A    |                     |
| AQW216AX   | PS7160L-2A-E3  | 8 Pin Gull Wing |                   | A    |                     |
| AQW216AZ   | PS7160L-2A-E3  | 8 Pin Gull Wing |                   | A    |                     |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| Aromat     | Cross         | Package         | Sales Tip(s)      | Code | Comment(s)          |
|------------|---------------|-----------------|-------------------|------|---------------------|
| AQW217     | PS7122-2A     | 8 Pin DIP       |                   | A    |                     |
| AQW217A    | PS7122L-2A    | 8 Pin Gull Wing |                   | A    |                     |
| AQW217AX   | PS7122L-2A-E3 | 8 Pin Gull Wing |                   | A    |                     |
| AQW217AZ   | PS7122L-2A-E4 | 8 Pin Gull Wing |                   | A    |                     |
| AQW224N    | No Cross      | 8 Pin DIP       |                   | D    |                     |
| AQW224NA   | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW224NAX  | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW224NAZ  | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW225N    | No Cross      | 8 Pin DIP       |                   | D    |                     |
| AQW225NA   | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW225NAX  | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW225NAZ  | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW227N    | No Cross      | 8 Pin DIP       |                   | D    |                     |
| AQW227NA   | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW227NAX  | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW227NAZ  | No Cross      | 8 Pin Gull Wing |                   | D    |                     |
| AQW254     | PS7141-2A     | 8 Pin DIP       |                   | A    |                     |
| AQW254A    | PS7141L-2A    | 8 Pin Gull Wing |                   | A    |                     |
| AQW254AX   | PS7141L-2A-E3 | 8 Pin Gull Wing |                   | A    |                     |
| AQW254AZ   | PS7141L-2A-E4 | 8 Pin Gull Wing |                   | A    |                     |
| AQW272     | PS710A-1A     |                 |                   | C    |                     |
| AQW272A    | PS710AL-1A    |                 |                   | C    |                     |
| AQW272AX   | PS710A-1A-E3  |                 |                   | C    |                     |
| AQW272AZ   | PS710A-1A-E4  |                 |                   | C    |                     |
| AQW274     | No Cross      |                 |                   | D    |                     |
| AQW274A    | No Cross      |                 |                   | D    |                     |
| AQW274AX   | No Cross      |                 |                   | D    |                     |
| AQW274AZ   | No Cross      |                 |                   | D    |                     |
| AQW275     | No Cross      |                 |                   | D    |                     |
| AQW275A    | No Cross      |                 |                   | D    |                     |
| AQW275AX   | No Cross      |                 |                   | D    |                     |
| AQW275AZ   | No Cross      |                 |                   | D    |                     |
| AQW277     | No Cross      |                 |                   | D    |                     |
| AQW277A    | No Cross      |                 |                   | D    |                     |
| AQW277AX   | No Cross      |                 |                   | D    |                     |
| AQW277AZ   | No Cross      |                 |                   | D    |                     |
| AQW414     | PS7141-2B     | 8 Pin DIP       |                   | A    |                     |
| AQW414A    | PS7141L-2B    | 8 Pin Gull Wing |                   | A    |                     |
| AQW414AX   | PS7141L-2B-E3 | 8 Pin Gull Wing |                   | A    |                     |
| AQW414AZ   | PS7141L-2B-E4 | 8 Pin Gull Wing |                   | A    |                     |
| AQW414EH   | PS7341-2B     | 8 Pin DIP       | Under Development | A    | PS7141-2B will work |
| AQW414EHA  | PS7341L-2B    | 8 Pin Gull Wing | Under Development | A    | PS7141-2B will work |
| AQW414EHAX | PS7341L-2B-E3 | 8 Pin Gull Wing | Under Development | A    | PS7141-2B will work |
| AQW414EHAZ | PS7341L-2B-E4 | 8 Pin Gull Wing | Under Development | A    | PS7141-2B will work |
| AQW610EH   | PS7341-1C     | 8 Pin DIP       | Under Development | A    | PS7141-1C will work |
| AQW610EHA  | PS7341L-1C    | 8 Pin Gull Wing | Under Development | A    | PS7141-1C will work |
| AQW610EHAX | PS7341L-1C-E3 | 8 Pin Gull Wing | Under Development | A    | PS7141-1C will work |
| AQW610EHAZ | PS7341L-1C-E3 | 8 Pin Gull Wing | Under Development | A    | PS7141-1C will work |
| AQW610S    | PS7241-2A     | 8 Pin SOP       |                   | A    |                     |
| AQW610SX   | PS7241-2A-F3  | 8 Pin SOP       |                   | A    |                     |
| AQW610SZ   | PS7241-2A-F4  | 8 Pin SOP       |                   | A    |                     |
| AQW614     | PS7141-1C     | 8 Pin DIP       |                   | A    |                     |
| AQW614A    | PS7141L-1C    | 8 Pin Gull Wing |                   | A    |                     |
| AQW614AX   | PS7141L-1C-E3 | 8 Pin Gull Wing |                   | A    |                     |
| AQW614AZ   | PS7141L-1C-E4 | 8 Pin Gull Wing |                   | A    |                     |
| AQW614EH   | PS7341-1C     | 8 Pin DIP       | Under Development | A    | PS7141-1C will work |
| AQW614EHA  | PS7341L-1C    | 8 Pin Gull Wing | Under Development | A    | PS7141-1C will work |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| Aromat     | Cross         | Package         | Sales Tip(s)             | Code | Comment(s)          |
|------------|---------------|-----------------|--------------------------|------|---------------------|
| AQW614EHAX | PS7341L-1C-E3 | 8 Pin Gull Wing | Under Development        | A    | PS7141-1C will work |
| AQW614EHAZ | PS7341L-1C-E3 | 8 Pin Gull Wing | Under Development        | A    | PS7141-1C will work |
| AQX21444   | No Cross      |                 |                          | D    |                     |
| AQY210EH   | PS7441-1A     | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY210EHA  | PS7441-1A     | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY210EHAX | PS7441-1A-F3  | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY210EHAZ | PS7441-1A-F3  | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY210HL   | PS7241C-1A    | 4 Pin DIP       | NEC is smaller 4 Pin SOP | A    |                     |
| AQY210HLA  | PS7241C-1A    | 4 Pin DIP       | NEC is smaller 4 Pin SOP | A    |                     |
| AQY210HLAX | PS7241C-1A-F3 | 4 Pin DIP       | NEC is smaller 4 Pin SOP | A    |                     |
| AQY210HLAZ | PS7241C-1A-F4 | 4 Pin DIP       | NEC is smaller 4 Pin SOP | A    |                     |
| AQY210LS   | PS7241C-1A    | 4 Pin SOP       |                          | A    |                     |
| AQY210LSX  | PS7241C-1A-F3 | 4 Pin SOP       |                          | A    |                     |
| AQY210LSZ  | PS7241C-1A-F4 | 4 Pin SOP       |                          | A    |                     |
| AQY210S    | PS7241-1A     | 4 Pin SOP       |                          | A    |                     |
| AQY210SX   | PS7241-1A-F3  | 4 Pin SOP       |                          | A    |                     |
| AQY210SZ   | PS7241-1A-F4  | 4 Pin SOP       |                          | A    |                     |
| AQY214EH   | PS7441-1A     | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY214EHA  | PS7441-1A     | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY214EHAX | PS7441-1A-F3  | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY214EHAZ | PS7441-1A-F3  | 4 Pin DIP       | Under Development        | A    | PS7241-1A will work |
| AQY214S    | PS7241-1A     | 4 Pin SOP       |                          | A    |                     |
| AQY214SX   | PS7241-1A-F3  | 4 Pin SOP       |                          | A    |                     |
| AQY214SZ   | PS7241-1A-F4  | 4 Pin SOP       |                          | A    |                     |
| AQY221N1S  | PS7200A-1A    |                 | NEC is lower C/R/C*R     | B    |                     |
| AQY221N1SX | PS7200A-1A-E3 |                 | NEC is lower C/R/C*R     | B    |                     |
| AQY221N1SZ | PS7200A-1A-E4 |                 | NEC is lower C/R/C*R     | B    |                     |
| AQY221N2S  | PS7200J-1A    |                 | NEC is lower C/R/C*R     | B    |                     |
| AQY221N2SX | PS7200J-1A-F3 |                 | NEC is lower C/R/C*R     | B    |                     |
| AQY221N2SZ | PS7200J-1A-F4 |                 | NEC is lower C/R/C*R     | B    |                     |
| AQY272A    | PS710A-1A     |                 | NEC is 30% Smaller       | C    |                     |
| AQY272AX   | PS710A-1A-E3  |                 | NEC is 30% Smaller       | C    |                     |
| AQY272AZ   | PS710A-1A-E4  |                 | NEC is 30% Smaller       | C    |                     |
| AQY274A    | PS7342-1A     |                 | NEC is 30% Smaller       | C    |                     |
| AQY274AX   | PS7342-1A-E3  |                 | NEC is 30% Smaller       | C    |                     |
| AQY274AZ   | PS7342-1A-E4  |                 | NEC is 30% Smaller       | C    |                     |
| AQY275A    | No Cross      |                 |                          | D    |                     |
| AQY275AX   | No Cross      |                 |                          | D    |                     |
| AQY275AZ   | No Cross      |                 |                          | D    |                     |
| AQY277A    | No Cross      |                 |                          | D    |                     |
| AQY277AX   | No Cross      |                 |                          | D    |                     |
| AQY277AZ   | No Cross      |                 |                          | D    |                     |
| AQY410EH   | PS7441-1B     | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY410EHA  | PS7441-1B     | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY410EHAX | PS7441-1B-F3  | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY410EHAZ | PS7441-1B-F4  | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY410S    | PS7241-1B     | 4 Pin SOP       |                          | A    |                     |
| AQY410SX   | PS7241-1B-F3  | 4 Pin SOP       |                          | A    |                     |
| AQY410SZ   | PS7241-1B-F4  | 4 Pin SOP       |                          | A    |                     |
| AQY414EH   | PS7441-1B     | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY414EHA  | PS7441-1B     | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY414EHAX | PS7441-1B-F3  | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY414EHAZ | PS7441-1B-F4  | 4 Pin DIP       | Under Development        | A    | PS7241-1B will work |
| AQY414S    | PS7241-1B     | 4 Pin SOP       |                          | A    |                     |
| AQY414SX   | PS7241-1B-F3  | 4 Pin SOP       |                          | A    |                     |
| AQY414SZ   | PS7241-1B-F4  | 4 Pin SOP       |                          | A    |                     |
| AQZ202     | PS710A-1A     | SIPP            |                          | C    |                     |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| <b>Aromat</b> | <b>Cross</b> | <b>Package</b> | <b>Sales Tip(s)</b> | <b>Code</b> | <b>Comment(s)</b> |
|---------------|--------------|----------------|---------------------|-------------|-------------------|
| AQZ202D       | PS710A-1A    | SIPP           |                     | D           |                   |
| AQZ202V       | PS710A-1A    | SIPP           |                     | C           |                   |
| AQZ204        | No Cross     | SIPP           |                     | D           |                   |
| AQZ204D       | No Cross     | SIPP           |                     | D           |                   |
| AQZ204V       | No Cross     | SIPP           |                     | D           |                   |
| AQZ205        | PS710A-1A    | SIPP           |                     | C           |                   |
| AQZ205D       | No Cross     | SIPP           |                     | D           |                   |
| AQZ205V       | PS710A-1A    | SIPP           |                     | C           |                   |
| AQZ207        | No Cross     | SIPP           |                     | D           |                   |
| AQZ207D       | No Cross     | SIPP           |                     | D           |                   |
| AQZ207V       | PS710A-1A    | SIPP           |                     | C           |                   |
| AQZ262        | No Cross     | SIPP           |                     | D           |                   |
| AQZ264        | No Cross     | SIPP           |                     | D           |                   |
| AQZ404        | No Cross     | SIPP           |                     | D           |                   |
| I/O Relays    | No Cross     |                |                     | D           |                   |

| <b>CP Clare</b> | <b>Cross</b> | <b>Package</b>  | <b>Sales Tip(s)</b>           | <b>Code</b> | <b>Comment(s)</b> |
|-----------------|--------------|-----------------|-------------------------------|-------------|-------------------|
| CPC1030N        | PS7241-1A    |                 | NEC = Ron 30ohms              | B           |                   |
| CPC1030NS       | PS7241-1A    |                 | NEC = Ron 30ohms              | B           |                   |
| CPC1030NSTR     | PS7241-1A-F3 |                 | NEC = Ron 30ohms              | B           |                   |
| CPC1035N        | PS7241-1A    |                 | NEC = Ron 30ohms              | B           |                   |
| CPC1035NS       | PS7241-1A    |                 | NEC = Ron 30ohms              | B           |                   |
| CPC1035NSTR     | PS7241-1A-F3 |                 | NEC = Ron 30ohms              | B           |                   |
| CPC1050NS       | PS7241-1B    |                 | NEC = Ron 30ohms              | B           |                   |
| CPC1150N        | PS7241-1B    |                 | NEC = Ron 30ohms              | B           |                   |
| CPC5600A        | No Cross     |                 |                               | D           |                   |
| CPC5601         | No Cross     |                 |                               | D           |                   |
| CPC5602C        | No Cross     |                 |                               | D           |                   |
| CPC5604         | No Cross     |                 |                               | D           |                   |
| CPC5610         | No Cross     |                 |                               | D           |                   |
| IAA110P         | No Cross     |                 |                               | D           |                   |
| IAA110P         | No Cross     |                 |                               | D           |                   |
| IAA110PS        | No Cross     |                 |                               | D           |                   |
| IAA110PS        | No Cross     |                 |                               | D           |                   |
| IAA110PSTR      | No Cross     |                 |                               | D           |                   |
| IAA110PSTR      | No Cross     |                 |                               | D           |                   |
| IAB110P         | No Cross     |                 |                               | D           |                   |
| IAB110P         | No Cross     |                 |                               | D           |                   |
| IAB110PS        | No Cross     |                 |                               | D           |                   |
| IAB110PS        | No Cross     |                 |                               | D           |                   |
| IAB110PSTR      | No Cross     |                 |                               | D           |                   |
| IAB110PSTR      | No Cross     |                 |                               | D           |                   |
| IAD110P         | No Cross     |                 |                               | D           |                   |
| IAD110PS        | No Cross     |                 |                               | D           |                   |
| IAD110PSTR      | No Cross     |                 |                               | D           |                   |
| IAD170P         | No Cross     |                 |                               | D           |                   |
| IAD170PS        | No Cross     |                 |                               | D           |                   |
| IAD170PSTR      | No Cross     |                 |                               | D           |                   |
| IBB110P         | No Cross     |                 |                               | D           |                   |
| IBB110PS        | No Cross     |                 |                               | D           |                   |
| IBB110PSTR      | No Cross     |                 |                               | D           |                   |
| IBB170          | No Cross     |                 |                               | D           |                   |
| IBB170S         | No Cross     |                 |                               | D           |                   |
| IBB170STR       | No Cross     |                 |                               | D           |                   |
| ITC117          | PS7241-AT5   | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C           |                   |
| ITC117S         | PS7241-AT5   | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C           |                   |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference  
C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| CP Clare  | Cross          | Package         | Sales Tip(s)                  | Code | Comment(s) |
|-----------|----------------|-----------------|-------------------------------|------|------------|
| ITC117STR | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| ITC135    | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| ITC135S   | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| ITC135STR | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| ITC137    | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| ITC137S   | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| ITC137STR | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| LAA110    | PS7141-2A      | 8 Pin DIP       |                               | A    |            |
| LAA110S   | PS7141L-2A     | 8 Pin Gull Wing |                               | A    |            |
| LAA110STR | PS7141L-2A-E3  | 8 Pin Gull Wing |                               | A    |            |
| LAA120    | PS7122A-2A     | 8 Pin DIP       |                               | A    |            |
| LAA120S   | PS7122AL-2A    | 8 Pin Gull Wing |                               | A    |            |
| LAA120STR | PS7122AL-2A-E3 | 8 Pin Gull Wing |                               | A    |            |
| LAA125    | PS7142-2A      | 8 Pin DIP       | NEC Ron = 12max/VL = 400      | B    |            |
| LAA125S   | PS7142L-2A     | 8 Pin Gull Wing | NEC Ron = 12max/VL = 400      | B    |            |
| LAA125STR | PS7142L-2A-E3  | 8 Pin Gull Wing | NEC Ron = 12max/VL = 400      | B    |            |
| LAA126    | PS7122A-2A     | 8 Pin DIP       | NEC Ron = 8ohms max           | B    |            |
| LAA126S   | PS7122AL-2A    | 8 Pin Gull Wing | NEC Ron = 8ohms max           | B    |            |
| LAA126STR | PS7122AL-2A-E3 | 8 Pin Gull Wing | NEC Ron = 8ohms max           | B    |            |
| LAA127    | PS7122A-2A     | 8 Pin DIP       | NEC Ron = 8ohms max           | B    |            |
| LAA127S   | PS7122AL-2A    | 8 Pin Gull Wing | NEC Ron = 8ohms max           | B    |            |
| LAA127STR | PS7122AL-2A-E3 | 8 Pin Gull Wing | NEC Ron = 8ohms max           | B    |            |
| LBA110    | PS7141-1C      | 8 Pin DIP       |                               | A    |            |
| LBA110S   | PS7141L-1C     | 8 Pin Gull Wing |                               | A    |            |
| LBA110STR | PS7141L-1C-E3  | 8 Pin Gull Wing |                               | A    |            |
| LBA120    | PS7141-1C      | 8 Pin DIP       | NEC VL = 400V                 | B    |            |
| LBA120S   | PS7141L-1C     | 8 Pin Gull Wing | NEC VL = 400V                 | B    |            |
| LBA120STR | PS7141L-1C-E3  | 8 Pin Gull Wing | NEC VL = 400V                 | B    |            |
| LBA126    | PS7122A-1C     | 8 Pin DIP       | NEC Ron=4.5ohms IF = 250mA    | B    |            |
| LBA126S   | PS7122AL-1C    | 8 Pin Gull Wing | NEC Ron=4.5ohms IF = 250mA    | B    |            |
| LBA126STR | PS7122AL-1C-E3 | 8 Pin Gull Wing | NEC Ron=4.5ohms IF = 250mA    | B    |            |
| LBA127    | PS7122-1C      | 8 Pin DIP       | NEC Ron=4.5ohms IF = 250mA    | B    |            |
| LBA127S   | PS7122AL-1C    | 8 Pin Gull Wing | NEC Ron=4.5ohms IF = 250mA    | B    |            |
| LBA127STR | PS7122AL-1C-E3 | 8 Pin Gull Wing | NEC Ron=4.5ohms IF = 250mA    | B    |            |
| LBB110    | PS7141-2B      | 8 Pin DIP       |                               | A    |            |
| LBB110S   | PS7141L-2B     | 8 Pin Gull Wing |                               | A    |            |
| LBB110STR | PS7141L-2B-E3  | 8 Pin Gull Wing |                               | A    |            |
| LBB120    | PS7122A-2B     | 8 Pin DIP       | NEC Ron = 4.5ohms             | A    |            |
| LBB120S   | PS7122AL-2B    | 8 Pin Gull Wing | NEC Ron = 4.5ohms             | A    |            |
| LBB120STR | PS7122AL-2B-E3 | 8 Pin Gull Wing | NEC Ron = 4.5ohms             | A    |            |
| LBB126    | PS7122A-2B     | 8 Pin DIP       | NEC Ron = 4.5ohms             | A    |            |
| LBB126S   | PS7122AL-2B    | 8 Pin Gull Wing | NEC Ron = 4.5ohms             | A    |            |
| LBB126STR | PS7122AL-2B-E3 | 8 Pin Gull Wing | NEC Ron = 4.5ohms             | A    |            |
| LBB127    | PS7122A-2B     | 8 Pin DIP       | NEC Ron = 4.5ohms             | A    |            |
| LBB127S   | PS7122AL-2B    | 8 Pin DIP       | NEC Ron = 4.5ohms             | A    |            |
| LBB127STR | PS7122AL-2B-E3 | 8 Pin DIP       | NEC Ron = 4.5ohms             | A    |            |
| LCA100    | PS7341-1A      |                 |                               | A    |            |
| LCA100S   | PS7341L-1A     |                 |                               | A    |            |
| LCA100STR | PS7341L-1A-E3  |                 |                               | A    |            |
| LCA110    | PS7341-1A      |                 |                               | A    |            |
| LCA110S   | PS7341L-1A     |                 |                               | A    |            |
| LCA111STR | PS7341L-1A-E3  |                 |                               | A    |            |
| LCA120    | PS7122A-1A     |                 | NEC Ron = 4.5ohms             | A    |            |
| LCA120S   | PS7122AL-1A    |                 | NEC Ron = 4.5ohms             | A    |            |
| LCA120STR | PS7122AL-1A-E3 |                 | NEC Ron = 4.5ohms             | A    |            |
| LCA125    | PS7122A-1A     |                 | NEC Ron = 4.5ohms             | A    |            |
| LCA125S   | PS7122AL-1A    |                 | NEC Ron = 4.5ohms             | A    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross

| CP Clare  | Cross          | Package         | Sales Tip(s)      | Code | Comment(s) |
|-----------|----------------|-----------------|-------------------|------|------------|
| LCA125STR | PS7122AL-1A-E3 |                 | NEC Ron = 4.5ohms | A    |            |
| LCA126    | PS7342-1A      |                 | NEC VL = 400V     | B    |            |
| LCA126S   | PS7342L-1A     |                 | NEC VL = 400V     | B    |            |
| LCA126STR | PS7342L-1A-E3  |                 | NEC VL = 400V     | B    |            |
| LCA127    | PS7122A-1A     |                 | NEC Ron = 4.5ohms | A    |            |
| LCA127S   | PS7122AL-1A    |                 | NEC Ron = 4.5ohms | A    |            |
| LCA127STR | PS7122AL-1A-E3 |                 | NEC Ron = 4.5ohms | A    |            |
| LCA710    | PS710A-1A      |                 | NEC Ron = .1ohms  | B    |            |
| LCA710S   | PS710AL-1A     |                 | NEC Ron = .1ohms  | B    |            |
| LCA710STR | PS710AL-1A-E3  |                 | NEC Ron = .1ohms  | B    |            |
| LCB110    | PS7341-1B      |                 |                   | A    |            |
| LCB110S   | PS7341L-1B     |                 |                   | A    |            |
| LCB110STR | PS7341L-1B-E3  |                 |                   | A    |            |
| LCB120    | PS7122A-1B     |                 | NEC Ron = 4.5ohms | B    |            |
| LCB120S   | PS7122AL-1B    |                 | NEC Ron = 4.5ohms | B    |            |
| LCB120STR | PS7122AL-1B-E3 |                 | NEC Ron = 4.5ohms | B    |            |
| LCB126    | PS7122A-1B     |                 | NEC Ron = 4.5ohms | B    |            |
| LCB126S   | PS7122AL-1B    |                 | NEC Ron = 4.5ohms | B    |            |
| LCB126STR | PS7122AL-1B-E3 |                 | NEC Ron = 4.5ohms | B    |            |
| LCB127    | PS7122A-1B     |                 | NEC Ron = 4.5ohms | B    |            |
| LCB127S   | PS7122AL-1B    |                 | NEC Ron = 4.5ohms | B    |            |
| LCB127STR | PS7122AL-1B-E3 |                 | NEC Ron = 4.5ohms | B    |            |
| LCC110    | PS7141-1C      | 8 Pin DIP       | NEC VL = 400V     | A    |            |
| LCC110S   | PS7141L-1C     | 8 Pin Gull Wing | NEC VL = 400V     | A    |            |
| LCC110STR | PS7141L-1C-E3  | 8 Pin Gull Wing | NEC VL = 400V     | A    |            |
| LCC120    | PS7122A-1C     | 8 Pin DIP       | NEC Ron = 4.5ohms | A    |            |
| LCC120S   | PS7122AL-1C    | 8 Pin Gull Wing | NEC Ron = 4.5ohms | A    |            |
| LCC120STR | PS7122AL-1C-E3 | 8 Pin Gull Wing | NEC Ron = 4.5ohms | A    |            |
| LDA100    | PS2605         |                 |                   | A    |            |
| LDA100S   | PS2605L        |                 |                   | A    |            |
| LDA100STR | PS2605L-E3     |                 |                   | A    |            |
| LDA101    | PS2601         |                 |                   | A    |            |
| LDA101S   | PS2601L        |                 |                   | A    |            |
| LDA101STR | PS2601L-E3     |                 |                   | A    |            |
| LDA110    | PS2603         |                 |                   | A    |            |
| LDA110S   | PS2603L        |                 |                   | A    |            |
| LDA110STR | PS2603L-E3     |                 |                   | A    |            |
| LDA111    | PS2607         |                 |                   | A    |            |
| LDA111S   | PS2607L        |                 |                   | A    |            |
| LDA111STR | PS2607L-E3     |                 |                   | A    |            |
| LDA200    | PS2505-2       |                 |                   | A    |            |
| LDA200S   | PS2505L-2      |                 |                   | A    |            |
| LDA200STR | PS2505L-2-E3   |                 |                   | A    |            |
| LDA201    | PS2501-2       |                 |                   | A    |            |
| LDA201S   | PS2501L-2      |                 |                   | A    |            |
| LDA201STR | PS2501L-2-E3   |                 |                   | A    |            |
| LDA210    | PS2506-2       |                 |                   | A    |            |
| LDA210S   | PS2506L-2      |                 |                   | A    |            |
| LDA210STR | PS2506L-2-E3   |                 |                   | A    |            |
| LDA211    | PS2502-2       |                 |                   | A    |            |
| LDA211S   | PS2502L-2      |                 |                   | A    |            |
| LDA211STR | PS2502L-2-E3   |                 |                   | A    |            |
| LIA100    | No Cross       |                 |                   | D    |            |
| LIA101    | No Cross       |                 |                   | D    |            |
| LOC110    | No Cross       |                 |                   | D    |            |
| LOC110S   | No Cross       |                 |                   | D    |            |
| LOC110STR | No Cross       |                 |                   | D    |            |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| CP Clare    | Cross          | Package         | Sales Tip(s)                  | Code | Comment(s) |
|-------------|----------------|-----------------|-------------------------------|------|------------|
| LOC111      | No Cross       |                 |                               | D    |            |
| LOC111S     | No Cross       |                 |                               | D    |            |
| LOC111STR   | No Cross       |                 |                               | D    |            |
| LOC112      | No Cross       |                 |                               | D    |            |
| LOC112S     | No Cross       |                 |                               | D    |            |
| LOC112STR   | No Cross       |                 |                               | D    |            |
| LOC210      | PS8741         |                 | NEC is SOP16                  | C    |            |
| LOC210S     | PS8741         |                 | NEC is SOP16                  | C    |            |
| LOC210STR   | PS8741-F3      |                 | NEC is SOP16                  | C    |            |
| OAA160      | PS7122A-2A     | 8 Pin DIP       | NEC Ron = 4.5ohms             | B    |            |
| OAA160S     | PS7122AL-2A    | 8 Pin Gull Wing | NEC Ron = 4.5ohms             | B    |            |
| OAA160STR   | PS7122AL-2A-E3 | 8 Pin Gull Wing | NEC Ron = 4.5ohms             | B    |            |
| OMA160      | PS7122A-1B     |                 | NEC Ron = 4.5ohms             | B    |            |
| OMA160S     | PS7122AL-1B    |                 | NEC Ron = 4.5ohms             | B    |            |
| OMA160STR   | PS7122AL-1B-E3 |                 | NEC Ron = 4.5ohms             | B    |            |
| PAA110      | PS7141-2A      | 8 Pin DIP       |                               | A    |            |
| PAA110L     | PS7341C-2A     | 8 Pin DIP       | Under Development             | A    |            |
| PAA110LS    | PS7341CL-2A    | 8 Pin Gull Wing | Under Development             | A    |            |
| PAA110LSTR  | PS7341CL-2A    | 8 Pin Gull Wing | Under Development             | A    |            |
| PAA110S     | PS7141L-2A     | 8 Pin Gull Wing |                               | A    |            |
| PAA110STR   | PS7141L-2A-E3  | 8 Pin Gull Wing |                               | A    |            |
| PAA140      | PS7142A-2A     | 8 Pin DIP       |                               | A    |            |
| PAA140S     | PS7142AL-2A    | 8 Pin Gull Wing |                               | A    |            |
| PAA140STR   | PS7142AL-2A-E3 | 8 Pin Gull Wing |                               | A    |            |
| PCS1050NSTR | PS7241-1B-F3   |                 | NEC = Ron 30ohms              | B    |            |
| PLA110      | PS7341-1A      |                 |                               | A    |            |
| PLA110S     | PS7341L-1A     |                 |                               | A    |            |
| PLA110STR   | PS7341L-1A-E3  |                 |                               | A    |            |
| PLA140      | PS7142-1A      |                 |                               | A    |            |
| PLA140S     | PS7142L-1A     |                 |                               | A    |            |
| PLA140STR   | PS7142L-1A     |                 |                               | A    |            |
| PLA160      | PS7360-1A      |                 | NEC VL = 600V                 | B    |            |
| PLA160S     | PS7360L-1A     |                 | NEC VL = 600V                 | B    |            |
| PLA160STR   | PS7360L-1A-E3  |                 | NEC VL = 600V                 | B    |            |
| PLCA110     | No Cross       |                 |                               | D    |            |
| PLCA110S    | No Cross       |                 |                               | D    |            |
| PLCA110STR  | No Cross       |                 |                               | D    |            |
| TS112       | PS7241-AT5     | 8 Pin SOP       |                               | A    |            |
| TS112S      | PS7241-AT5     | 8 Pin SOP       |                               | A    |            |
| TS112STR    | PS7241-AT5-F3  | 8 Pin SOP       |                               | A    |            |
| TS117       | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117L      | PS7241C-AT5    | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117LS     | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117LSTR   | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117P      | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117PLS    | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117PLSTR  | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117PS     | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117PSTR   | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117S      | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS117STR    | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118       | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118L      | PS7241C-AT5    | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118LS     | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118LSTR   | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118P      | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118PLS    | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |

A = Direct Electrical/Mechanical Replacement

B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement

D = No Cross



| CP Clare   | Cross          | Package         | Sales Tip(s)                  | Code | Comment(s) |
|------------|----------------|-----------------|-------------------------------|------|------------|
| TS118PLSTR | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118PS    | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118PSTR  | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118S     | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS118STR   | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120      | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120L     | PS7241C-AT5    | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120LS    | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120LSTR  | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120P     | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120PLS   | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120PLSTR | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120PS    | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120PSTR  | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120S     | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS120STR   | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122      | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122L     | PS7241C-AT5    | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122LS    | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122LSTR  | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122P     | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122PLS   | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122PLSTR | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122PS    | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122PSTR  | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122S     | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS122STR   | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190      | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190L     | PS7241C-AT5    | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190LS    | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190LSTR  | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190P     | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190PLS   | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190PLSTR | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190PS    | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190PSTR  | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190S     | PS7241-AT5     | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| TS190STR   | PS7241-AT5-F3  | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XAA170     | PS7141-2A      |                 | NEC Ron = 25ohms              | B    |            |
| XAA170S    | PS7141L-2A     |                 | NEC Ron = 25ohms              | B    |            |
| XAA170STR  | PS7141L-2A-E3  |                 | NEC Ron = 25ohms              | B    |            |
| XBA170     | PS7141-1C      |                 | NEC Ron = 25ohms              | B    |            |
| XBA170S    | PS7141L-1C     |                 | NEC Ron = 25ohms              | B    |            |
| XBA170STR  | PS7141L-1C-E3  |                 | NEC Ron = 25ohms              | B    |            |
| XCA170     | PS7341-1A      |                 | NEC Ron = 20ohms              | A    |            |
| XCA170S    | PS7341L-1A     |                 | NEC Ron = 20ohms              | A    |            |
| XCA170STR  | PS7341L-1A-E3  |                 | NEC Ron = 20ohms              | A    |            |
| XCB170     | PS7341-1B      |                 | NEC Ron = 20ohms              | B    |            |
| XCB170S    | PS7341L-1B     |                 | NEC Ron = 20ohms              | B    |            |
| XCB170STR  | PS7341L-1B-E3  |                 | NEC Ron = 20ohms              | B    |            |
| XS170      | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170L     | PS7241C-AT5    | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170LS    | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170LSTR  | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170P     | PS7241-AT5     | 8 Pin DIP       | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170PLS   | PS7241C-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170PLSTR | PS7241C-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| CP Clare  | Cross         | Package         | Sales Tip(s)                  | Code | Comment(s) |
|-----------|---------------|-----------------|-------------------------------|------|------------|
| XS170PS   | PS7241-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170PSTR | PS7241-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170S    | PS7241-AT5    | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |
| XS170STR  | PS7241-AT5-F3 | 8 Pin Gull Wing | NEC 8 Pin SOP(Dual Footprint) | C    |            |

| Siemens      | Cross           | Package         | Sales Tip(s)              | Code | Comment(s) |
|--------------|-----------------|-----------------|---------------------------|------|------------|
| LH1500AT     | PS7341C-1A      | 6 Pin DIP       |                           | B    |            |
| LH1500AAB    | PS7341CL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1500AAB-TR | PS7341CL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1504AT     | PS7341T-1A      | 6 Pin DIP       |                           | B    |            |
| LH1504AAB    | PS7341TL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1504AAB-TR | PS73411TL-1A-E3 | 6 Pin Gull Wing |                           | B    |            |
| LH1510AT     | PS7122A-1A      | 6 Pin DIP       |                           | B    |            |
| LH1510AAB    | PS7122AL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1510AAB-TR | PS7122AL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1516AT     | PS7341C-1A      | 6 Pin DIP       |                           | B    |            |
| LH1516AAB    | PS7341CL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1516AAB-TR | PS7341CL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1517AT     | PS7113-1A       | 6 Pin DIP       |                           | B    |            |
| LH1517AAB    | PS7113L-1A      | 6 Pin Gull Wing |                           | B    |            |
| LH1517AAB-TR | PS7113L-1A-E3   | 6 Pin Gull Wing |                           | B    |            |
| LH1518AT     | PS7341C-1A      | 6 Pin DIP       |                           | B    |            |
| LH1518AAB    | PS7341CL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1518AAB-TR | PS7341CL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1519AT     | PS7341C-1A      | 6 Pin DIP       |                           | B    |            |
| LH1519AAB    | PS7341CL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1519AAB-TR | PS7341CL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1530AT     | PS7341-1A       | 6 Pin DIP       |                           | B    |            |
| LH1530AAB    | PS7341L-1A      | 6 Pin Gull Wing |                           | B    |            |
| LH1530AAB-TR | PS7341L-1A-E3   | 6 Pin Gull Wing |                           | B    |            |
| LH1535AT     | PS7341C-1A      | 6 Pin DIP       |                           | B    |            |
| LH1535AAB    | PS7341CL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1535AAB-TR | PS7341CL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1540AT     | PS7341C-1A      | 6 Pin DIP       |                           | B    |            |
| LH1540AAB    | PS7341CL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1540AAB-TR | PS7341CL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1541AT     | PS7122A-1A      | 6 Pin DIP       |                           | B    |            |
| LH1541AAB    | PS7122AL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1541AAB-TR | PS7122AL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1550AT     | PS7341-1A       | 6 Pin DIP       |                           | B    |            |
| LH1550AAB    | PS7341L-1A      | 6 Pin Gull Wing |                           | B    |            |
| LH1550AAB-TR | PS7341L-1A-E3   | 6 Pin Gull Wing |                           | B    |            |
| LH1546AT     | PS7341C-1A      | 6 Pin DIP       |                           | B    |            |
| LH1546AAB    | PS7341CL-1A     | 6 Pin Gull Wing |                           | B    |            |
| LH1546AAB-TR | PS7341CL-1A-E3  | 6 Pin Gull Wing |                           | B    |            |
| LH1546AD     | PS7241-1A       | 4 Pin DIP       | NEC is 4 Pin SOP          | C    |            |
| LH1546ADF    | PS7241-1A       | 4 Pin Gull Wing | NEC is 4 Pin SOP          | C    |            |
| LH1546ADF-TR | PS7241-1A-F3    | 4 Pin Gull Wing | NEC is 4 Pin SOP          | C    |            |
| LH1503AB     | PS7341C-2A      | 6 Pin DIP       | In Development(PS7141-2A) | B    |            |
| LH1503AAB    | PS7341CL-2A     | 6 Pin Gull Wing | In Development(PS7141-2A) | B    |            |
| LH1503AAB-TR | PS7341CL-2A-E3  | 6 Pin Gull Wing | In Development(PS7141-2A) | B    |            |
| LH1513AB     | PS7122A-2A      | 8 Pin DiP       |                           | B    |            |
| LH1513AAC    | PS7122AL-2A     | 8 Pin Gull Wing |                           | B    |            |
| LH1513AAC-TR | PS7122AL-2A-E3  | 8 Pin Gull Wing |                           | B    |            |
| LH1505AB     | PS7122A-2A      | 8 Pin DiP       |                           | B    |            |
| LH1505AAC    | PS7122AL-2A     | 8 Pin Gull Wing |                           | B    |            |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| Siemens      | Cross          | Package         | Sales Tip(s)                 | Code | Comment(s) |
|--------------|----------------|-----------------|------------------------------|------|------------|
| LH1505AAC-TR | PS7122AL-2A-E3 | 8 Pin Gull Wing |                              | B    |            |
| LH1520AB     | PS7341C-2A     | 6 Pin DIP       | In Development(PS7141-2A)    | B    |            |
| LH1520AAC    | PS7341CL-2A    | 6 Pin Gull Wing | In Development(PS7141-2A)    | B    |            |
| LH1520AAC-TR | PS7341CL-2A-E3 | 6 Pin Gull Wing | In Development(PS7141-2A)    | B    |            |
| LH1522AB     | PS7122A-2A     | 8 Pin DiP       |                              | B    |            |
| LH1522AAC    | PS7122AL-2A    | 8 Pin Gull Wing |                              | B    |            |
| LH1522AAC-TR | PS7122AL-2A-E3 | 8 Pin Gull Wing |                              | B    |            |
| LH1524AB     | PS7341C-2A     | 8 Pin DiP       | In Development(PS7141-2A)    | B    |            |
| LH1524AAC    | PS7341CL-2A    | 8 Pin Gull Wing | In Development(PS7141-2A)    | B    |            |
| LH1524AAC-TR | PS7341CL-2A-E3 | 8 Pin Gull Wing | In Development(PS7141-2A)    | B    |            |
| LH1529FP     | PS7241-AT5     | 8 Pin SOP       |                              | A    |            |
| LH1529FP-TR  | PS7241-AT5-F3  | 8 Pin SOP       |                              | A    |            |
| LH1529GP     | PS7241-AT5     | 8 Pin SOP       |                              | A    |            |
| LH1529GP-TR  | PS7241-AT5-F3  | 8 Pin SOP       |                              | A    |            |
| LH1531AB     | PS7141-2A      | 8 Pin DIP       |                              | A    |            |
| LH1531AAC    | PS7141L-2A     | 8 Pin Gull Wing |                              | A    |            |
| LH1531AAC-TR | PS7141L-2A-E3  | 8 Pin Gull Wing |                              | A    |            |
| LH1532AB     | PS7141-2A      | 8 Pin DIP       |                              | A    |            |
| LH1532AAC    | PS7141L-2A     | 8 Pin Gull Wing |                              | A    |            |
| LH1532AAC-TR | PS7141L-2A-E3  | 8 Pin Gull Wing |                              | A    |            |
| LH1544AB     | PS7122A-2A     | 8 Pin DIP       |                              | B    |            |
| LH1544AAC    | PS7122AL-2A    | 8 Pin Gull Wing |                              | B    |            |
| LH1544AAC-TR | PS7122AL-2A-E3 | 8 Pin Gull Wing |                              | B    |            |
| LH1501AT     | PS7341-1B      | 6 Pin DIP       |                              | A    |            |
| LH1501AAB    | PS7341L-1B     | 6 Pin Gull Wing |                              | A    |            |
| LH1501AAB-TR | PS7341L-1B-E3  | 6 Pin Gull Wing |                              | A    |            |
| LH1511AT     | PS7122A-1B     | 6 Pin DIP       |                              | B    |            |
| LH1511AAB    | PS7122AL-1B    | 6 Pin Gull Wing |                              | B    |            |
| LH1511AAB-TR | PS7122AL-1B-E3 | 6 Pin Gull Wing |                              | B    |            |
| LH1521AB     | PS7141-2B      | 8 Pin DIP       |                              | B    |            |
| LH1521AAC    | PS7141L-2B     | 8 Pin Gull Wing |                              | B    |            |
| LH1521AAC-TR | PS7141L-2B-E3  | 8 Pin Gull Wing |                              | B    |            |
| LH1523AB     | PS7122A-2B     | 8 Pin DIP       |                              | B    |            |
| LH1523AAC    | PS7122AL-2B    | 8 Pin Gull Wing |                              | B    |            |
| LH1523AAC-TR | PS7122AL-2B-E3 | 8 Pin Gull Wing |                              | B    |            |
| LH1502AB     | PS7141-1C      | 8 Pin DIP       |                              | B    |            |
| LH1502AAC    | PS7141L-1C     | 8 Pin Gull Wing |                              | B    |            |
| LH1502AAC-TR | PS7141L-1C-E3  | 8 Pin Gull Wing |                              | B    |            |
| LH1512AB     | PS7122A-1C     | 8 Pin DIP       |                              | B    |            |
| LH1512AAC    | PS7122AL-1C    | 8 Pin Gull Wing |                              | B    |            |
| LH1512AAC-TR | PS7122AL-1C-E3 | 8 Pin Gull Wing |                              | B    |            |
| LH1527AB     | No Cross       | 8 Pin DIP       |                              | D    |            |
| LH1527AAC    | No Cross       | 8 Pin Gull Wing |                              | D    |            |
| LH1527AAC-TR | No Cross       | 8 Pin Gull Wing |                              | D    |            |
| LH1537AB     | No Cross       | 6 Pin DIP       |                              | D    |            |
| LH1537AAC    | No Cross       | 6 Pin Gull Wing |                              | D    |            |
| LH1537AAC-TR | No Cross       | 6 Pin Gull Wing |                              | D    |            |
| LH1525ACD    | No Cross       | 8 Pin SOP       |                              | D    |            |
| LH1533AB     | PS7341-2A      | 8 Pin DIP       | Under Development(PS7141-2A) | B    |            |
| LH1533AAC    | PS7341L-2A     | 8 Pin Gull Wing | Under Development(PS7141-2A) | B    |            |
| LH1533AAC-TR | PS7341L-2A-E3  | 8 Pin Gull Wing | Under Development(PS7141-2A) | B    |            |
| LH1525AT     | PS7141-1A      | 6 Pin DIP       |                              | B    |            |
| LH1525AAB    | PS7141L-1A     | 6 Pin Gull Wing |                              | B    |            |
| LH1525AAB-TR | PS7141L-1A-E3  | 6 Pin Gull Wing |                              | B    |            |
| LH1526AB     | PS7141-2A      | 8 Pin DIP       |                              | B    |            |
| LH1526AAB    | PS7141L-2A     | 8 Pin Gull Wing |                              | B    |            |
| LH1526AAB-TR | PS7141L-2A-E3  | 8 Pin Gull Wing |                              | B    |            |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| <b>Siemens</b> | <b>Cross</b>  | <b>Package</b>  | <b>Sales Tip(s)</b> | <b>Code</b> | <b>Comment(s)</b> |
|----------------|---------------|-----------------|---------------------|-------------|-------------------|
| LH1547AT1      | PS7341-1A     | 6 Pin DIP       |                     | B           |                   |
| LH1547AAB1     | PS7341L-1A    | 6 Pin Gull Wing |                     | B           |                   |
| LH1547AAB1-TR  | PS7341L-1A-E3 | 6 Pin Gull Wing |                     | B           |                   |
| LH1191AT1      | PS7341-1A     | 6 Pin DIP       |                     | B           |                   |
| LH1191AAB1     | PS7341L-1A    | 6 Pin Gull Wing |                     | B           |                   |
| LH1191AAB1-TR  | PS7341L-1A-E3 | 6 Pin Gull Wing |                     | B           |                   |
| LH1085AT1      | PS7341-1A     | 6 Pin DIP       |                     | B           |                   |
| LH1085AAB1     | PS7341L-1A    | 6 Pin Gull Wing |                     | B           |                   |
| LH1085AAB1-TR  | PS7341L-1A-E3 | 6 Pin Gull Wing |                     | B           |                   |
| LH1529AB       | No Cross      |                 |                     | D           |                   |
| LH1529AAC      | No Cross      |                 |                     | D           |                   |
| LH1529AAC-TR   | No Cross      |                 |                     | D           |                   |
| LH1528AB       | No Cross      |                 |                     | D           |                   |
| LH1528AAC      | No Cross      |                 |                     | D           |                   |
| LH1528AAC-TR   | No Cross      |                 |                     | D           |                   |
| LH1539AB       | No Cross      |                 |                     | D           |                   |
| LH1539AAC      | No Cross      |                 |                     | D           |                   |
| LH1539AAC-TR   | No Cross      |                 |                     | D           |                   |
| LH1514AB       | PS7141-2A     | 8 Pin DIP       |                     | B           |                   |
| LH1514AAC      | PS7141L-2A    | 8 Pin Gull Wing |                     | B           |                   |
| LH1514AAC-TR   | PS7141L-2A-E3 | 8 Pin Gull Wing |                     | B           |                   |
| LH1262CB       | No Cross      |                 |                     | D           |                   |
| LH1262CAC      | No Cross      |                 |                     | D           |                   |
| LH1262CAC-TR   | No Cross      |                 |                     | D           |                   |
| LH1485AT       | No Cross      |                 |                     | D           |                   |
| LH1485AAB      | No Cross      |                 |                     | D           |                   |
| LH1485AAB-TR   | No Cross      |                 |                     | D           |                   |

| <b>Hewlett Packard</b> | <b>Cross</b>   | <b>Package</b>  | <b>Sales Tip(s)</b>       | <b>Code</b> | <b>Comment(s)</b> |
|------------------------|----------------|-----------------|---------------------------|-------------|-------------------|
| 5.96293E+10            | PS7113L-1A-E3  | 6 Pin Gull Wing |                           | B           |                   |
| HSSR7110               | PS7113-1A      | 6 Pin DIP       |                           | B           |                   |
| HSSR7110-100           | No Cross       | Non Standard    |                           | D           |                   |
| HSSR7110-200           | PS7113-1A      | 6 Pin DIP       |                           | B           |                   |
| HSSR7110-300           | PS7113L-1A-E3  | 6 Pin Gull Wing |                           | B           |                   |
| HSSR7110-600           | No Cross       | Non Standard    |                           | D           |                   |
| HSSR7111               | PS7113-1A      | 6 Pin DIP       |                           | B           |                   |
| HSSR7111-100           | No Cross       | Non Standard    |                           | D           |                   |
| HSSR7111-200           | PS7113-1A      | 6 Pin DIP       |                           | B           |                   |
| HSSR7111-300           | PS7113L-1A-E3  | 6 Pin Gull Wing |                           | B           |                   |
| HSSR7111-600           | No Cross       | Non Standard    |                           | D           |                   |
| HSSR8060               | PS710A-1A      | 6 Pin DIP       | NEC is lower Ron 0.1 ohms | B           |                   |
| HSSR8060-300           | PS710AL-1A     | 6 Pin Gull Wing | NEC is lower Ron 0.1 ohms | B           |                   |
| HSSR8060-500           | PS710AL-1A-E3  | 6 Pin Gull Wing | NEC is lower Ron 0.1 ohms | B           |                   |
| HSSR8200               | PS7122A-1A     | Non Standard    | NEC is 6 Pin DIP          | C           |                   |
| HSSR8200-300           | PS7122AL-1A    | Non Standard    | NEC is 6 Pin DIP          | C           |                   |
| HSSR8200-500           | PS7122AL-1A-E3 | Non Standard    | NEC is 6 Pin DIP          | C           |                   |
| HSSR8400               | PS7142-1A      | 6 Pin DIP       |                           | A           |                   |
| HSSR8400-300           | PS7142L-1A     | 6 Pin DIP       |                           | A           |                   |
| HSSR8400-500           | PS7142L-1A-E3  | 6 Pin DIP       |                           | A           |                   |

| <b>Internation Rectifier</b> | <b>Cross</b> | <b>Package</b> | <b>Sales Tip(s)</b>     | <b>Code</b> | <b>Comment(s)</b> |
|------------------------------|--------------|----------------|-------------------------|-------------|-------------------|
| PVA1052                      | PS7113-1A    | Non Standard   | NEC is standard package | C           |                   |
| PVA1054                      | PS7113-1A    | Non Standard   | NEC is standard package | C           |                   |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

| Internation Rectifier | Cross      | Package      | Sales Tip(s)            | Code | Comment(s) |
|-----------------------|------------|--------------|-------------------------|------|------------|
| PVA1352               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVA1354               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVA2352               | PS7122A-1A | Non Standard | NEC is standard package | C    |            |
| PVA3054               | PS7341-1A  | Non Standard | NEC is standard package | C    |            |
| PVA3055               | PS7341-1A  | Non Standard | NEC is standard package | C    |            |
| PVA3324               | PS7341-1A  | Non Standard | NEC is standard package | C    |            |
| PVA3354               | PS7341-1A  | Non Standard | NEC is standard package | C    |            |
| PVAZ172N              | PS710A-1A  | Non Standard | NEC is standard package | C    |            |
| PVD1052               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVD1054               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVD1352               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVD2352               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVD3354               | PS7122A-1A | Non Standard | NEC is standard package | C    |            |
| PVDZ172N              | PS710A-1A  | Non Standard | NEC is standard package | C    |            |
| PVG612                | PS710A-1A  | 6 Pin DIP    | NEC Ron = 0.1 ohms      | B    |            |
| PVI1050               | No Cross   | Non Standard |                         | D    |            |
| PVI5013               | No Cross   | Non Standard |                         | D    |            |
| PVI5050               | No Cross   | Non Standard |                         | D    |            |
| PVI5100               | No Cross   | Non Standard |                         | D    |            |
| PVN012                | PS710A-1A  | 6 Pin DIP    | NEC Ron = 0.1 ohms      | B    |            |
| PVO402                | PS7241-2A  | Non Standard | NEC is 1/2 size of IR   | C    |            |
| PVR1300               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVR1301               | PS7113-1A  | Non Standard | NEC is standard package | C    |            |
| PVR2300               | PS7142-1A  | Non Standard | NEC is standard package | C    |            |
| PVR3301               | PS7142-1A  | Non Standard | NEC is standard package | C    |            |
| PVT312                | PS7122A-1A | 6 Pin DIP    |                         | B    |            |
| PVT312L               | PS7122A-1A | 6 Pin DIP    |                         | B    |            |
| PVT322                | PS7122A-2A | 8 Pin DIP    |                         | A    |            |
| PVT412                | PS7341-1A  | 6 Pin DIP    |                         | A    |            |
| PVT412L               | PS7341-1A  | 6 Pin DIP    |                         | A    |            |
| PVT422                | PS7141-2A  | 8 Pin DIP    |                         | B    |            |
| PVU414                | PS7341-1A  | 6 Pin DIP    |                         | A    |            |

A = Direct Electrical/Mechanical Replacement  
B = Direct Electrical Drop-In Replacement Likely Insignificant Difference

C = Same Electrical Function / Not Drop in Electrical/Mechanical Replacement  
D = No Cross

# TAPE AND REEL AVAILABILITY BY SERIES

## SOLID STATE RELAYS

| PART NUMBER | PACKAGE QUANTITY | PART NUMBER | PACKAGE QUANTITY |
|-------------|------------------|-------------|------------------|
|-------------|------------------|-------------|------------------|

| PS71XX SERIES |      |
|---------------|------|
| PS71XXL-1A-E3 | 1000 |
| PS71XXL-1B-E3 | 1000 |
| PS71XXL-1C-E3 | 1000 |
| PS71XXL-2A-E3 | 1000 |
| PS71XXL-2B-E3 | 1000 |

| PS73XX SERIES  |      |
|----------------|------|
| PS73XXL-1A-E3  | 1000 |
| PS73XXCL-1A-E3 | 1000 |
| PS7341L-1B-E3  | 1000 |

| PS72XX SERIES |      |
|---------------|------|
| PS72XX-1A-E3  | 900  |
| PS72XX-1A-F3  | 3500 |
| PS72XX-1B-E3  | 1000 |
| PS72XX-1B-F3  | 3500 |
| PS72XX-1C-F3  | 1500 |
| PS72XX-2A-F3  | 1500 |
| PS72XX-2B-F3  | 1500 |
| PS72XX-AT5-F3 | 1500 |
| PS72XX-AT1-F3 | 1500 |

| PS75XX SERIES |      |
|---------------|------|
| PS75XXL-1A-E3 | 1000 |
| PS75XXL-2A-E3 | 1000 |

# INTERNATIONAL SAFETY STANDARDS

| SOLID STATE RELAYS PARTS NUMBER             |                         |               |                              | PS71XX-1A<br>PS71XX-2A | PS71XX-1B<br>PS71XX-2B<br>PS71XX-1C | PS72XX-1A | PS72XX-2A | PS7241-AT1<br>PS7241-AT5 | PS73XX-1A<br>PS73XXC-1A<br>PS73XXC-1B | PS75XX-1A<br>PS75XX-2A |
|---|-------------------------|---------------|------------------------------|------------------------|-------------------------------------|-----------|-----------|--------------------------|---------------------------------------|------------------------|
| PARAMETER<br>(Units: mm)<br>(Minimum Dist.) | Outer Creepage Distance |               |                              | 7.0                    | 7.0                                 | 7.0       | 7.0       | 7.0                      | 7.0                                   | 7.0                    |
|   | Clearance Distance      |               |                              | 7.0                    | 7.0                                 | 7.0       | 7.0       | 7.0                      | 7.0                                   | 7.0                    |
|   | Isolation Distance      |               |                              | 0.4                    | 0.4                                 | 0.4       | 0.4       | 0.4                      | 0.4                                   | 0.4                    |
|   | Inner Creepage Distance |               |                              | 4.0                    | 4.0                                 | 4.0       | 4.0       | 4.0                      | 4.0                                   | 4.0                    |
|   | Breakdown Voltage       |               |                              | 1.5k                   | 1.5k                                | 1.5k      | 1.5k      | 1.5k                     | 3.75k                                 | 1.5k                   |
| Organization                                | Country                 | Standard No.  | NEC Approval No.             |                        |                                     |           |           |                          |                                       |                        |
| UL  | USA                     | UL1577        | E72422(S)                    | ●                      | ●                                   | ⊙         | ●         | ●                        | ●                                     | ●                      |
| CSA   | Canada                  | CL9073X0030   | CA101391                     | ⊙                      | ⊙                                   | ⊙         | ⊙         | ⊙                        | ⊙                                     | ⊙                      |
| VDE   | Germany                 | VDE0884       | See Right Table              | ⊙                      | ⊙                                   | ⊙         | ⊙         | ⊙                        | ⊙                                     | ⊙                      |
| BSI   | UK                      | BS415 /EC55   | 7112 (4 pin)<br>7250 (6 pin) | ●                      | ●                                   | ●         | ●         | ●                        | ●                                     | ●                      |
|   |                         | BS7002 /EC950 | 7240 (4 pin)<br>7615 (6 pin) | ●                      | ⊙                                   | ⊙         | ⊙         | ●                        | ●                                     | ●                      |
| SEMKO                                       | Sweden                  | SS-441-01-55  | 9317144                      | —                      | —                                   | —         | —         | —                        | —                                     | —                      |
|   |                         | SS-EN-60-950  | 9317144                      | —                      | —                                   | —         | —         | —                        | —                                     | —                      |
| SETI  | Finland                 | E 65-89       | 167265-08                    | —                      | —                                   | —         | —         | —                        | —                                     | —                      |
|   |                         | SFS-EN-60-950 | 167265-08                    | —                      | —                                   | —         | —         | —                        | —                                     | —                      |
| NEMKO                                       | Norway                  | NEK-HD 195 S6 | A21409                       | —                      | —                                   | —         | —         | —                        | —                                     | —                      |
|   |                         | NEK-EN-60-950 | A21409                       | —                      | —                                   | —         | —         | —                        | —                                     | —                      |
| DEMKO                                       | Denmark                 | Section 101   | 300535                       | —                      | —                                   | —         | —         | —                        | —                                     | —                      |
|   |                         | Section 137   | 300535                       | —                      | —                                   | —         | —         | —                        | —                                     | —                      |

● Approved

⊙ Under Application

○ Under Planning

— N/A

## Field Sales Offices

### Headquarters

4590 Patrick Henry Drive  
Santa Clara, CA 95054-1817  
Tel: **408-988-3500**  
Fax: **408-988-0279**

### Central California

4040 Moorpark Avenue, Suite 221  
San Jose, CA 95117  
Tel: **408-243-2111**  
Fax: **408-243-2410**

### Southern California

6033 W. Century Blvd., Suite 840  
Los Angeles, CA 90045  
Tel: **310-645-0985**  
Fax: **310-645-3149**

### Southwest

6540 Lusk Blvd., Suite C-155  
San Diego, CA 92121  
Tel: **858-450-4395**  
Fax: **858-450-0353**

### Pacific Northwest and Western Canada

18000 Pacific Highway South  
Suite 602  
Seattle, WA 98188  
Tel: **206-246-2211**  
Fax: **206-246-3669**

### South Central

11498 Luna Road, Suite 108  
Dallas, TX 75234  
Tel: **972-402-9551**  
Fax: **972-402-9449**

### Mid Central

2013-B East Prairie Circle  
Olathe, KS 66062  
Tel: **913-780-1380**  
Fax: **913-780-1382**

### North Central

801 Warrenville Road, Suite 65  
Lisle, IL 60532  
Tel: **630-241-3040**  
Fax: **630-241-3057**

### East Central

617-A Stemmers Run Road  
Baltimore, MD 21221  
Tel: **410-682-4111**  
Fax: **410-682-4128**

### Northeast

Two Central Street, Suite 204  
Middleton, MA 01949  
Tel: **978-762-7400**  
Fax: **978-762-7444**

### Metro New York

475 Market Street, 3rd Floor  
Elmwood Park, NJ 07407  
Tel: **201-796-7779**  
Fax: **201-796-3633**

### Southeast

2386 Clower Street, Bldg. F, Suite 201  
Snellville, GA 30078  
Tel: **770-978-4443**  
Fax: **770-978-4262**

### Florida

445 Douglas Avenue  
Suite 2005-19  
Altamonte Springs, FL 32714  
Tel: **407-774-7682**  
Fax: **407-774-6982**

### Mexico Representative

Pan-American Technical Sales  
Zapopan, Jalisco, Mexico  
Tel: **011-523-642-6687**  
Fax: **011-523-641-2264**

EXCLUSIVE NORTH AMERICAN AGENT FOR **NEC** RF, MICROWAVE & OPTOELECTRONIC SEMICONDUCTORS

**CEL** CALIFORNIA EASTERN LABORATORIES • Headquarters • 4590 Patrick Henry Drive • Santa Clara, CA 95054-1817 • (408) 988-3500 • Telex 34-6393 • FAX (408) 988-0279

24-Hour Fax-On-Demand: 800-390-3232 (U.S. and Canada only) • Internet: <http://WWW.CEL.COM>

DATA SUBJECT TO CHANGE WITHOUT NOTICE

12/11/00