

# SCHOTTKY BARRIER RECTIFIERS

DIODES INCORPORATED

OPERATING TEMPERATURE RANGE  
20 to 45V -65°C to +125°C  
50 and 60V -65°C to +150°C  
STORAGE TEMPERATURE RANGE -65°C to +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz: |    | Maximum Forward Peak Surge Current @ 8.3ms Superimposed | Maximum Reverse Current @ PRV   |    | Maximum Forward Voltage @ 25°C TA |                 |
|------|------------------------------|--|----|---|---------------------------------|----|-----------------------------------|-----------------|
|      | PRV                          | I <sub>o</sub> @ T <sub>C</sub>                                    |    | I <sub>FM</sub> (Surge)                                 | I <sub>R</sub> @ T <sub>C</sub> |    | I <sub>FM</sub>                   | V <sub>FM</sub> |
|      | V <sub>PK</sub>              | A <sub>AV</sub>  | °C | A <sub>PK</sub>   | mA <sub>dc</sub>                | °C | A <sub>PK</sub>                   | V <sub>PK</sub> |



## 20/30 AMPERS SCHOTTKY/TO-3P

|        |    |    |     |     |      |     |    |      |
|--------|----|----|-----|-----|------|-----|----|------|
| SR2020 | 20 | 20 | 95  | 120 | 15   | 25  | 10 | 0.55 |
| SR2030 | 30 | 20 | 95  | 120 | 15   | 25  | 10 | 0.55 |
| SR2045 | 45 | 20 | 95  | 120 | 15   | 25  | 10 | 0.55 |
| SR3030 | 30 | 30 | 75  | 300 | 10   | 25  | 15 | 0.65 |
| SR3040 | 40 | 30 | 75  | 300 | 10   | 25  | 15 | 0.65 |
| SR3045 | 45 | 30 | 75  | 300 | 10   | 25  | 15 | 0.65 |
| SR3050 | 50 | 30 | 100 | 300 | 10   | 25  | 15 | 0.75 |
| SP3060 | 60 | 30 | 100 | 300 | 10   | 25  | 15 | 0.75 |
| SD241P | 45 | 30 | 95  | 400 | *100 | 125 | 20 | 0.60 |

NOTE: 1. Standard type = common cathode, Common Anode = Suffix "A", Doubler Connection = Suffix "D".  
2. \* @ 125°C, V<sub>R</sub> = 35V



## 30 AMPERES SCHOTTKY/TO-220

|         |    |    |     |     |     |    |    |      |
|---------|----|----|-----|-----|-----|----|----|------|
| NST2525 | 25 | 30 | 125 | 150 | 2.0 | 25 | 30 | 0.82 |
| NST2535 | 35 | 30 | 125 | 150 | 2.0 | 25 | 30 | 0.82 |
| NST2545 | 45 | 30 | 125 | 150 | 2.0 | 25 | 30 | 0.82 |

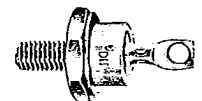
NOTE: Standard type = Common Cathode, Common Anode = Suffix "A", Doubler Connection = Suffix "D".



## 30 AMPERES SCHOTTKY/TO-3

|         |    |    |     |     |       |    |     |      |
|---------|----|----|-----|-----|-------|----|-----|------|
| NSM3020 | 20 | 30 | 100 | 300 | 10    | 25 | 15  | 0.65 |
| NSM3030 | 30 | 30 | 100 | 300 | 10    | 25 | 15  | 0.65 |
| NSM3035 | 35 | 30 | 100 | 300 | 10    | 25 | 15  | 0.65 |
| NSM3040 | 40 | 30 | 100 | 300 | 10    | 25 | 15  | 0.65 |
| NSM3045 | 45 | 30 | 100 | 300 | 10    | 25 | 15  | 0.65 |
| SD241   | 45 | 30 | 95  | 400 | **100 | 25 | *20 | 0.65 |

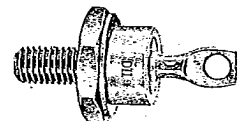
NOTE: 1. Standard Type = Common Cathode, Common Anode = Suffix "A", Doubler Connection = Suffix "D".  
2. \*\*\*\* @ 125°C, V<sub>R</sub> = 35V  
3. \*V<sub>F</sub> TEST @ T<sub>C</sub> = 125°C



## 30 AMPERES SCHOTTKY/DO-4

|         |    |    |     |     |     |     |    |       |
|---------|----|----|-----|-----|-----|-----|----|-------|
| NSD3020 | 20 | 30 | 125 | 500 | 150 | 125 | 30 | *0.60 |
| NSD3030 | 30 | 30 | 125 | 500 | 150 | 125 | 30 | *0.60 |
| NSD3045 | 45 | 30 | 125 | 500 | 150 | 125 | 30 | *0.60 |

NOTE: 1. \*V<sub>F</sub> TEST @ T<sub>C</sub> = 125°C  
2. Suffix "R" for reverse polarity



## 40/50/60 AMPERES SCHOTTKY/DO-5

|        |    |    |    |     |     |     |     |         |
|--------|----|----|----|-----|-----|-----|-----|---------|
| 1N5832 | 20 | 40 | 75 | 800 | 150 | 100 | 40  | 0.52    |
| 1N5833 | 30 | 40 | 75 | 800 | 150 | 100 | 40  | 0.55    |
| 1N5834 | 40 | 40 | 75 | 800 | 150 | 100 | 40  | 0.59    |
| 1N6097 | 30 | 50 | 70 | 800 | 250 | 115 | 157 | *0.86   |
| 1N6098 | 40 | 50 | 70 | 800 | 250 | 115 | 157 | *0.86   |
| SD51   | 45 | 60 | 95 | 800 | 200 | 125 | 60  | ** 0.70 |

NOTE: 1. \*V<sub>F</sub> TEST @ T<sub>C</sub> = 70°C, \*\* V<sub>F</sub> TEST @ T<sub>C</sub> = 125°C  
2. Suffix "R" for reverse polarity.