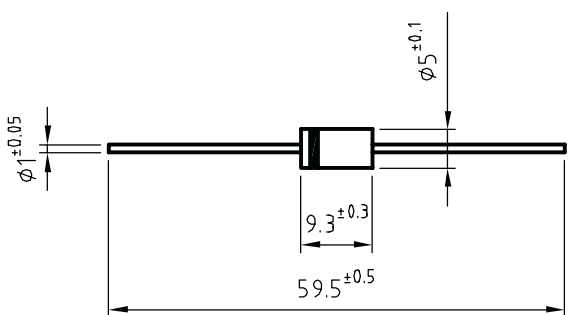



## 1500W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

|   |   |
|---|---|
| <p>Dimensions in mm.</p> <p>DO201-AE<br/>(PLASTIC)</p>  <p>Mounting instructions</p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350°C.</li> <li>3. Max. soldering time, 3.5 sec.</li> <li>4. Do not bend lead at a point closer than 3 mm. to the body.</li> </ol> | <p>Peak Pulse Power Rating<br/>At 1 ms. Exp.<br/>1500 W</p> <p>Reverse stand-off Voltage<br/>5.5 ÷ 376 V</p>    |
|   | <ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• Low Capacitance AC signal protection</li> <li>• Response time typically &lt; 1 ns.</li> <li>• Molded case</li> <li>• The plastic material carries U/L recognition 94 V-0</li> <li>• Terminals: Axial leads</li> </ul> |

Maximum Ratings, according to IEC publication No. 134

|             |   |                  |
|-------------|---|------------------|
| $P_{pp}$    | Peak pulse power with 10/1000 $\mu$ s exponential pulse                           | 1500 W           |
| $I_{FSM}$   | Non repetitive surge peak forward current (t = 8.3 msec.) (Jedec Method) (Note 1) | 200 A            |
| $T_j$       | Operating temperature range   | - 65 to + 175 °C |
| $T_{stg}$   | Storage temperature range   | - 65 to + 175 °C |
| $P_{M(AV)}$ | Steady state Power Dissipation (l = 10 mm)  | 5 W              |

Electrical Characteristics at Tamb = 25 °C

|             |   |                                      |                |
|-------------|---|--------------------------------------|----------------|
| $V_F$       | Max. forward voltage drop at $I_F = 100$ A (Note 1) | $V_{BR} < 220$ V<br>$V_{BR} > 220$ V | 3.5 V<br>5.0 V |
| $R_{thj-l}$ | Max. thermal resistance (l = 10 mm.)                |                                      | 20 °C/W        |

Note 1: Valid only for Unidirectional.

## 1500W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

| Type    | Maximum Reverse Leakage Current |                    | (1) Breakdown Voltage |      |     |                    | $I_R$<br>(mA) | Max. Clamping Voltage |                                       |
|---------|---------------------------------|--------------------|-----------------------|------|-----|--------------------|---------------|-----------------------|---------------------------------------|
|         | $I_{RM}$<br>( $\mu$ A)          | at $V_{RM}$<br>(V) | Min.                  | Nom  | Max | $V_{BR}$<br>(V) at |               | $V_{CL}$<br>(V)       | at $I_{pp}$<br>(A)<br>max. 1ms. Expo. |
| 1N6267  | 1.5KE6V8                        | 1000               | 5.50                  | 6.12 | 6.8 | 7.48               | 10            | 10.8                  | 139                                   |
| 1N6267A | 1.5KE6V8A                       | 1000               | 5.80                  | 6.45 | 6.8 | 7.14               | 10            | 10.5                  | 143                                   |
| 1N6268  | 1.5KE7V5                        | 500                | 6.05                  | 6.75 | 7.5 | 8.25               | 10            | 11.7                  | 128                                   |
| 1N6268A | 1.5KE7V5A                       | 500                | 6.40                  | 7.13 | 7.5 | 7.88               | 10            | 11.3                  | 132                                   |
| 1N6269  | 1.5KE8V2                        | 200                | 6.63                  | 7.38 | 8.2 | 9.02               | 10            | 12.5                  | 120                                   |
| 1N6269A | 1.5KE8V2A                       | 200                | 7.02                  | 7.79 | 8.2 | 8.61               | 10            | 12.1                  | 124                                   |
| 1N6270  | 1.5KE9V1                        | 50                 | 7.37                  | 8.19 | 9.1 | 10.0               | 1             | 13.8                  | 109                                   |
| 1N6270A | 1.5KE9V1A                       | 50                 | 7.78                  | 8.65 | 9.1 | 9.55               | 1             | 13.4                  | 112                                   |
| 1N6271  | 1.5KE10                         | 10                 | 8.10                  | 9.00 | 10  | 11.0               | 1             | 15.0                  | 100                                   |
| 1N6271A | 1.5KE10A                        | 10                 | 8.55                  | 9.50 | 10  | 10.5               | 1             | 14.5                  | 103                                   |
| 1N6272  | 1.5KE11                         | 5                  | 8.92                  | 9.90 | 11  | 12.1               | 1             | 16.2                  | 93                                    |
| 1N6272A | 1.5KE11A                        | 5                  | 9.40                  | 10.5 | 11  | 11.6               | 1             | 15.6                  | 96                                    |
| 1N6273  | 1.5KE12                         | 5                  | 9.72                  | 10.8 | 12  | 13.2               | 1             | 17.3                  | 87                                    |
| 1N6273A | 1.5KE12A                        | 5                  | 10.2                  | 11.4 | 12  | 12.6               | 1             | 16.7                  | 90                                    |
| 1N6274  | 1.5KE13                         | 5                  | 10.5                  | 11.7 | 13  | 14.3               | 1             | 19.0                  | 79                                    |
| 1N6274A | 1.5KE13A                        | 5                  | 11.1                  | 12.4 | 13  | 13.7               | 1             | 18.2                  | 82                                    |
| 1N6275  | 1.5KE15                         | 5                  | 12.1                  | 13.5 | 15  | 16.5               | 1             | 22.0                  | 68                                    |
| 1N6275A | 1.5KE15A                        | 5                  | 12.8                  | 14.3 | 15  | 15.8               | 1             | 21.2                  | 71                                    |
| 1N6276  | 1.5KE16                         | 5                  | 12.9                  | 14.4 | 16  | 17.6               | 1             | 23.5                  | 64                                    |
| 1N6276A | 1.5KE16A                        | 5                  | 13.6                  | 15.2 | 16  | 16.8               | 1             | 22.5                  | 67                                    |
| 1N6277  | 1.5KE18                         | 5                  | 14.5                  | 16.2 | 18  | 19.8               | 1             | 26.5                  | 56.5                                  |
| 1N6277A | 1.5KE18A                        | 5                  | 15.3                  | 17.1 | 18  | 18.9               | 1             | 25.5                  | 59.5                                  |
| 1N6278  | 1.5KE20                         | 5                  | 16.2                  | 18.0 | 20  | 22.0               | 1             | 29.1                  | 51.5                                  |
| 1N6278A | 1.5KE20A                        | 5                  | 17.1                  | 19.0 | 20  | 21.0               | 1             | 27.7                  | 54                                    |
| 1N6279  | 1.5KE22                         | 5                  | 17.8                  | 19.8 | 22  | 24.2               | 1             | 31.9                  | 47                                    |
| 1N6279A | 1.5KE22A                        | 5                  | 18.8                  | 20.9 | 22  | 23.1               | 1             | 30.6                  | 49                                    |
| 1N6280  | 1.5KE24                         | 5                  | 19.4                  | 21.6 | 24  | 26.4               | 1             | 34.7                  | 43                                    |
| 1N6280A | 1.5KE24A                        | 5                  | 20.5                  | 22.8 | 24  | 25.2               | 1             | 33.2                  | 45                                    |
| 1N6281  | 1.5KE27                         | 5                  | 21.8                  | 24.3 | 27  | 29.7               | 1             | 39.1                  | 38.5                                  |
| 1N6281A | 1.5KE27A                        | 5                  | 23.1                  | 25.7 | 27  | 28.4               | 1             | 37.5                  | 40                                    |
| 1N6282  | 1.5KE30                         | 5                  | 24.3                  | 27.0 | 30  | 33.0               | 1             | 43.5                  | 34.5                                  |
| 1N6282A | 1.5KE30A                        | 5                  | 25.6                  | 28.5 | 30  | 31.5               | 1             | 41.4                  | 36                                    |
| 1N6283  | 1.5KE33                         | 5                  | 26.8                  | 29.7 | 33  | 36.3               | 1             | 47.7                  | 31.5                                  |
| 1N6283A | 1.5KE33A                        | 5                  | 28.2                  | 31.4 | 33  | 34.7               | 1             | 45.7                  | 33                                    |
| 1N6284  | 1.5KE36                         | 5                  | 29.1                  | 32.4 | 36  | 39.6               | 1             | 52.0                  | 29                                    |
| 1N6284A | 1.5KE36A                        | 5                  | 30.8                  | 34.2 | 36  | 37.8               | 1             | 49.9                  | 30                                    |
| 1N6285  | 1.5KE39                         | 5                  | 31.6                  | 35.1 | 39  | 42.9               | 1             | 56.4                  | 26.5                                  |
| 1N6285A | 1.5KE39A                        | 5                  | 33.3                  | 37.1 | 39  | 41.0               | 1             | 53.9                  | 28                                    |
| 1N6286  | 1.5KE43                         | 5                  | 34.8                  | 38.7 | 43  | 47.3               | 1             | 61.9                  | 24                                    |
| 1N6286A | 1.5KE43A                        | 5                  | 36.8                  | 40.9 | 43  | 45.2               | 1             | 59.3                  | 25.3                                  |
| 1N6287  | 1.5KE47                         | 5                  | 38.1                  | 42.3 | 47  | 51.7               | 1             | 67.8                  | 22.2                                  |
| 1N6287A | 1.5KE47A                        | 5                  | 40.2                  | 44.7 | 47  | 49.4               | 1             | 64.8                  | 23.2                                  |
| 1N6288  | 1.5KE51                         | 5                  | 41.3                  | 45.9 | 51  | 56.1               | 1             | 73.5                  | 20.4                                  |
| 1N6288A | 1.5KE51A                        | 5                  | 43.6                  | 48.5 | 51  | 53.6               | 1             | 70.1                  | 21.4                                  |

(1) Tested with pulses.  
Pulse test:  $t_p$  - 50 ms;  $\delta$  < 2%

## 1500W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

| Type              | Maximum Reverse Leakage Current |             | (1) Breakdown Voltage |     |      |          | $I_R$ | Max. Clamping Voltage |                    |
|-------------------|---------------------------------|-------------|-----------------------|-----|------|----------|-------|-----------------------|--------------------|
|                   | $I_{RM}$                        | at $V_{RM}$ | $V_{BR}$ at           |     |      | $I_{pp}$ |       | $V_{CL}$              | at max. 1ms. Expo. |
| Unidirectional    | ( $\mu A$ )                     | (V)         | Min.                  | Nom | Max  | (mA)     | (V)   | (A)                   |                    |
| 1N6289 1.5KE56    | 5                               | 45.4        | 50.4                  | 56  | 61.6 | 1        | 80.5  | 18.6                  |                    |
| 1N6289A 1.5KE56A  | 5                               | 47.8        | 53.2                  | 56  | 58.8 | 1        | 77.0  | 19.5                  |                    |
| 1N6290 1.5KE62    | 5                               | 50.2        | 55.8                  | 62  | 68.2 | 1        | 89.0  | 16.9                  |                    |
| 1N6290A 1.5KE62A  | 5                               | 53.0        | 58.9                  | 62  | 65.1 | 1        | 85.0  | 17.7                  |                    |
| 1N6291 1.5KE68    | 5                               | 55.1        | 61.2                  | 68  | 74.8 | 1        | 98.0  | 15.3                  |                    |
| 1N6291A 1.5KE68A  | 5                               | 58.1        | 64.6                  | 68  | 71.4 | 1        | 92.0  | 16.3                  |                    |
| 1N6292 1.5KE75    | 5                               | 60.7        | 67.5                  | 75  | 82.5 | 1        | 108   | 13.9                  |                    |
| 1N6292A 1.5KE75A  | 5                               | 64.1        | 71.3                  | 75  | 78.8 | 1        | 103   | 14.6                  |                    |
| 1N6293 1.5KE82    | 5                               | 66.4        | 73.8                  | 82  | 90.2 | 1        | 118   | 12.7                  |                    |
| 1N6293A 1.5KE82A  | 5                               | 70.1        | 77.9                  | 82  | 86.1 | 1        | 113   | 13.3                  |                    |
| 1N6294 1.5KE91    | 5                               | 73.7        | 81.9                  | 91  | 100  | 1        | 131   | 11.4                  |                    |
| 1N6294A 1.5KE91A  | 5                               | 77.8        | 86.5                  | 91  | 95.5 | 1        | 125   | 12                    |                    |
| 1N6295 1.5KE100   | 5                               | 81.0        | 90.0                  | 100 | 110  | 1        | 144   | 10.4                  |                    |
| 1N6295A 1.5KE100A | 5                               | 85.5        | 95.0                  | 100 | 105  | 1        | 137   | 11                    |                    |
| 1N6296 1.5KE110   | 5                               | 89.2        | 99.0                  | 110 | 121  | 1        | 158   | 9.5                   |                    |
| 1N6296A 1.5KE110A | 5                               | 94.0        | 105                   | 110 | 116  | 1        | 152   | 9.9                   |                    |
| 1N6297 1.5KE120   | 5                               | 97.2        | 108                   | 120 | 132  | 1        | 173   | 8.7                   |                    |
| 1N6297A 1.5KE120A | 5                               | 102         | 114                   | 120 | 126  | 1        | 165   | 9.1                   |                    |
| 1N6298 1.5KE130   | 5                               | 105         | 117                   | 130 | 143  | 1        | 187   | 8                     |                    |
| 1N6298A 1.5KE130A | 5                               | 111         | 124                   | 130 | 137  | 1        | 179   | 8.4                   |                    |
| 1N6299 1.5KE150   | 5                               | 121         | 135                   | 150 | 165  | 1        | 215   | 7                     |                    |
| 1N6299A 1.5KE150A | 5                               | 128         | 143                   | 150 | 158  | 1        | 207   | 7.2                   |                    |
| 1N6300 1.5KE160   | 5                               | 130         | 144                   | 160 | 176  | 1        | 230   | 6.5                   |                    |
| 1N6300A 1.5KE160A | 5                               | 136         | 152                   | 160 | 168  | 1        | 219   | 6.8                   |                    |
| 1N6301 1.5KE170   | 5                               | 138         | 153                   | 170 | 187  | 1        | 244   | 6.2                   |                    |
| 1N6301A 1.5KE170A | 5                               | 145         | 162                   | 170 | 179  | 1        | 234   | 6.4                   |                    |
| 1N6302 1.5KE180   | 5                               | 146         | 162                   | 180 | 198  | 1        | 258   | 5.8                   |                    |
| 1N6302A 1.5KE180A | 5                               | 154         | 171                   | 180 | 189  | 1        | 246   | 6.1                   |                    |
| 1N6303 1.5KE200   | 5                               | 162         | 180                   | 200 | 220  | 1        | 287   | 5.2                   |                    |
| 1N6303A 1.5KE200A | 5                               | 171         | 190                   | 200 | 210  | 1        | 274   | 5.5                   |                    |
| 1.5KE220          | 5                               | 175         | 198                   | 220 | 242  | 1        | 344   | 4.3                   |                    |
| 1.5KE220A         | 5                               | 185         | 209                   | 220 | 231  | 1        | 328   | 4.6                   |                    |
| 1.5KE250          | 5                               | 202         | 225                   | 250 | 275  | 1        | 360   | 5                     |                    |
| 1.5KE250A         | 5                               | 214         | 237                   | 250 | 263  | 1        | 344   | 5                     |                    |
| 1.5KE300          | 5                               | 243         | 270                   | 300 | 330  | 1        | 430   | 5                     |                    |
| 1.5KE300A         | 5                               | 256         | 285                   | 300 | 315  | 1        | 414   | 5                     |                    |
| 1.5KE320          | 5                               | 259         | 288                   | 320 | 352  | 1        | 457   | 4.50                  |                    |
| 1.5KE320A         | 5                               | 273         | 304                   | 320 | 336  | 1        | 438   | 4.50                  |                    |
| 1.5KE350          | 5                               | 284         | 315                   | 350 | 385  | 1        | 504   | 4                     |                    |
| 1.5KE350A         | 5                               | 300         | 332                   | 350 | 368  | 1        | 482   | 4                     |                    |
| 1.5KE400          | 5                               | 324         | 360                   | 400 | 440  | 1        | 574   | 4                     |                    |
| 1.5KE400A         | 5                               | 342         | 380                   | 400 | 420  | 1        | 548   | 4                     |                    |
| 1.5KE440          | 5                               | 356         | 396                   | 440 | 484  | 1        | 631   | 2.38                  |                    |
| 1.5KE440A         | 5                               | 376         | 418                   | 440 | 462  | 1        | 602   | 2.5                   |                    |

(1) Tested with pulses.  
Pulse test:  $t_p - 50 \text{ ms}$ ;  $\delta < 2\%$

## 1500W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

| Type                | Maximum Reverse Leakage Current |                    | (1) Breakdown Voltage |     |      |                 | $I_R$<br>(mA) | Max. Clamping Voltage                 |  |
|---------------------|---------------------------------|--------------------|-----------------------|-----|------|-----------------|---------------|---------------------------------------|--|
|                     | $I_{RM}$<br>( $\mu$ A)          | at $V_{RM}$<br>(V) | Min.                  | Nom | Max  | $V_{CL}$<br>(V) |               | at $I_{pp}$<br>max. 1ms. Expo.<br>(A) |  |
| 1N6267C 1.5KE6V8C   | 1000                            | 5.50               | 6.12                  | 6.8 | 7.48 | 10              | 10.8          | 139                                   |  |
| 1N6267CA 1.5KE6V8CA | 1000                            | 5.80               | 6.45                  | 6.8 | 7.14 | 10              | 10.5          | 143                                   |  |
| 1N6268C 1.5KE7V5C   | 500                             | 6.05               | 6.75                  | 7.5 | 8.25 | 10              | 11.7          | 128                                   |  |
| 1N6268CA 1.5KE7V5CA | 500                             | 6.40               | 7.13                  | 7.5 | 7.88 | 10              | 11.3          | 132                                   |  |
| 1N6269C 1.5KE8V2C   | 200                             | 6.63               | 7.38                  | 8.2 | 9.02 | 10              | 12.5          | 120                                   |  |
| 1N6269CA 1.5KE8V2CA | 200                             | 7.02               | 7.79                  | 8.2 | 8.61 | 10              | 12.1          | 124                                   |  |
| 1N6270C 1.5KE9V1C   | 50                              | 7.37               | 8.19                  | 9.1 | 10.0 | 1               | 13.8          | 109                                   |  |
| 1N6270CA 1.5KE9V1CA | 50                              | 7.78               | 8.65                  | 9.1 | 9.55 | 1               | 13.4          | 112                                   |  |
| 1N6271C 1.5KE10C    | 10                              | 8.10               | 9.00                  | 10  | 11.0 | 1               | 15.0          | 100                                   |  |
| 1N6271CA 1.5KE10CA  | 10                              | 8.55               | 9.50                  | 10  | 10.5 | 1               | 14.5          | 103                                   |  |
| 1N6272C 1.5KE11C    | 5                               | 8.92               | 9.90                  | 11  | 12.1 | 1               | 16.2          | 93                                    |  |
| 1N6272CA 1.5KE11CA  | 5                               | 9.40               | 10.5                  | 11  | 11.6 | 1               | 15.6          | 96                                    |  |
| 1N6273C 1.5KE12C    | 5                               | 9.72               | 10.8                  | 12  | 13.2 | 1               | 17.3          | 87                                    |  |
| 1N6273CA 1.5KE12CA  | 5                               | 10.2               | 11.4                  | 12  | 12.6 | 1               | 16.7          | 90                                    |  |
| 1N6274C 1.5KE13C    | 5                               | 10.5               | 11.7                  | 13  | 14.3 | 1               | 19.0          | 79                                    |  |
| 1N6274CA 1.5KE13CA  | 5                               | 11.1               | 12.4                  | 13  | 13.7 | 1               | 18.2          | 82                                    |  |
| 1N6275C 1.5KE15C    | 5                               | 12.1               | 13.5                  | 15  | 16.5 | 1               | 22.0          | 68                                    |  |
| 1N6275CA 1.5KE15CA  | 5                               | 12.8               | 14.3                  | 15  | 15.8 | 1               | 21.2          | 71                                    |  |
| 1N6276C 1.5KE16C    | 5                               | 12.9               | 14.4                  | 16  | 17.6 | 1               | 23.5          | 64                                    |  |
| 1N6276CA 1.5KE16CA  | 5                               | 13.6               | 15.2                  | 16  | 16.8 | 1               | 22.5          | 67                                    |  |
| 1N6277C 1.5KE18C    | 5                               | 14.5               | 16.2                  | 18  | 19.8 | 1               | 26.5          | 56.5                                  |  |
| 1N6277CA 1.5KE18CA  | 5                               | 15.3               | 17.1                  | 18  | 18.9 | 1               | 25.5          | 59.5                                  |  |
| 1N6278C 1.5KE20C    | 5                               | 16.2               | 18.0                  | 20  | 22.0 | 1               | 29.1          | 51.5                                  |  |
| 1N6278CA 1.5KE20CA  | 5                               | 17.1               | 19.0                  | 20  | 21.0 | 1               | 27.7          | 54                                    |  |
| 1N6279C 1.5KE22C    | 5                               | 17.8               | 19.8                  | 22  | 24.2 | 1               | 31.9          | 47                                    |  |
| 1N6279CA 1.5KE22CA  | 5                               | 18.8               | 20.9                  | 22  | 23.1 | 1               | 30.6          | 49                                    |  |
| 1N6280C 1.5KE24C    | 5                               | 19.4               | 21.6                  | 24  | 26.4 | 1               | 34.7          | 43                                    |  |
| 1N6280CA 1.5KE24CA  | 5                               | 20.5               | 22.8                  | 24  | 25.2 | 1               | 33.2          | 45                                    |  |
| 1N6281C 1.5KE27C    | 5                               | 21.8               | 24.3                  | 27  | 29.7 | 1               | 39.1          | 38.5                                  |  |
| 1N6281CA 1.5KE27CA  | 5                               | 23.1               | 25.7                  | 27  | 28.4 | 1               | 37.5          | 40                                    |  |
| 1N6282C 1.5KE30C    | 5                               | 24.3               | 27.0                  | 30  | 33.0 | 1               | 43.5          | 34.5                                  |  |
| 1N6282CA 1.5KE30CA  | 5                               | 25.6               | 28.5                  | 30  | 31.5 | 1               | 41.4          | 36                                    |  |
| 1N6283C 1.5KE33C    | 5                               | 26.8               | 29.7                  | 33  | 36.3 | 1               | 47.7          | 31.5                                  |  |
| 1N6283CA 1.5KE33CA  | 5                               | 28.2               | 31.4                  | 33  | 34.7 | 1               | 45.7          | 33                                    |  |
| 1N6284C 1.5KE36C    | 5                               | 29.1               | 32.4                  | 36  | 39.6 | 1               | 52.0          | 29                                    |  |
| 1N6284CA 1.5KE36CA  | 5                               | 30.8               | 34.2                  | 36  | 37.8 | 1               | 49.9          | 30                                    |  |
| 1N6285C 1.5KE39C    | 5                               | 31.6               | 35.1                  | 39  | 42.9 | 1               | 56.4          | 26.5                                  |  |
| 1N6285CA 1.5KE39CA  | 5                               | 33.3               | 37.1                  | 39  | 41.0 | 1               | 53.9          | 28                                    |  |
| 1N6286C 1.5KE43C    | 5                               | 34.8               | 38.7                  | 43  | 47.3 | 1               | 61.9          | 24                                    |  |
| 1N6286CA 1.5KE43CA  | 5                               | 36.8               | 40.9                  | 43  | 45.2 | 1               | 59.3          | 25.3                                  |  |
| 1N6287C 1.5KE47C    | 5                               | 38.1               | 42.3                  | 47  | 51.7 | 1               | 67.8          | 22.2                                  |  |
| 1N6287CA 1.5KE47CA  | 5                               | 40.2               | 44.7                  | 47  | 49.4 | 1               | 64.8          | 23.2                                  |  |
| 1N6288C 1.5KE51C    | 5                               | 41.3               | 45.9                  | 51  | 56.1 | 1               | 73.5          | 20.4                                  |  |
| 1N6288CA 1.5KE51CA  | 5                               | 43.6               | 48.5                  | 51  | 53.6 | 1               | 70.1          | 21.4                                  |  |

(1) Tested with pulses.  
Pulse test:  $t_p$  - 50 ms;  $\delta$  < 2%

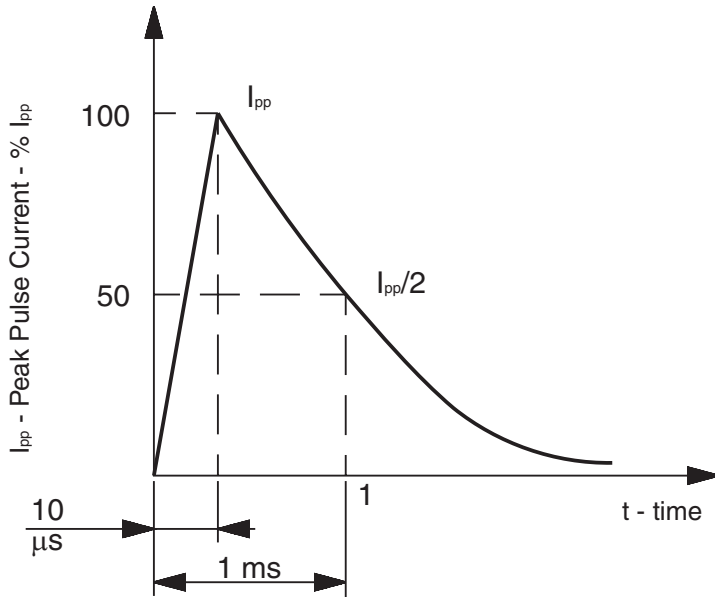
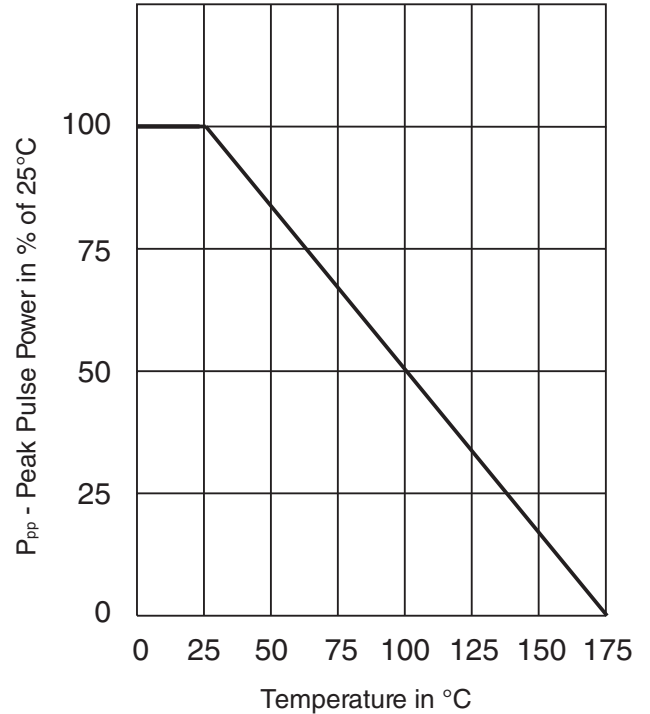
## 1500W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

| Type                | Maximum Reverse Leakage Current |          | (1) Breakdown Voltage |     |      |                      | Max. Clamping Voltage |      |
|---------------------|---------------------------------|----------|-----------------------|-----|------|----------------------|-----------------------|------|
|                     | $I_{RM}$ at $V_{RM}$            | $V_{RM}$ | $V_{BR}$ at $I_R$     |     |      | $V_{CL}$ at $I_{PP}$ | max. 1ms. Expo.       |      |
| Bidirectional       | ( $\mu A$ )                     | (V)      | Min.                  | Nom | Max  | (mA)                 | (V)                   | (A)  |
| 1N6289C 1.5KE56C    | 5                               | 45.4     | 50.4                  | 56  | 61.6 | 1                    | 80.5                  | 18.6 |
| 1N6289CA 1.5KE56CA  | 5                               | 47.8     | 53.2                  | 56  | 58.8 | 1                    | 77.0                  | 19.5 |
| 1N6290C 1.5KE62C    | 5                               | 50.2     | 55.8                  | 62  | 68.2 | 1                    | 89.0                  | 16.9 |
| 1N6290CA 1.5KE62CA  | 5                               | 53.0     | 58.9                  | 62  | 65.1 | 1                    | 85.0                  | 17.7 |
| 1N6291C 1.5KE68C    | 5                               | 55.1     | 61.2                  | 68  | 74.8 | 1                    | 98.0                  | 15.3 |
| 1N6291CA 1.5KE68C   | 5                               | 58.1     | 64.6                  | 68  | 71.4 | 1                    | 92.0                  | 16.3 |
| 1N6292C 1.5KE75C    | 5                               | 60.7     | 67.5                  | 75  | 82.5 | 1                    | 108                   | 13.9 |
| 1N6292CA 1.5KE75CA  | 5                               | 64.1     | 71.3                  | 75  | 78.8 | 1                    | 103                   | 14.6 |
| 1N6293C 1.5KE82C    | 5                               | 66.4     | 73.8                  | 82  | 90.2 | 1                    | 118                   | 12.7 |
| 1N6293CA 1.5KE82CA  | 5                               | 70.1     | 77.9                  | 82  | 86.1 | 1                    | 113                   | 13.3 |
| 1N6294C 1.5KE91C    | 5                               | 73.7     | 81.9                  | 91  | 100  | 1                    | 131                   | 11.4 |
| 1N6294CA 1.5KE91CA  | 5                               | 77.8     | 86.5                  | 91  | 95.5 | 1                    | 125                   | 12   |
| 1N6295C 1.5KE100C   | 5                               | 81.0     | 90.0                  | 100 | 110  | 1                    | 144                   | 10.4 |
| 1N6295CA 1.5KE100CA | 5                               | 85.5     | 95.0                  | 100 | 105  | 1                    | 137                   | 11   |
| 1N6296C 1.5KE110C   | 5                               | 89.2     | 99.0                  | 110 | 121  | 1                    | 158                   | 9.5  |
| 1N6296CA 1.5KE110CA | 5                               | 94.0     | 105                   | 110 | 116  | 1                    | 152                   | 9.9  |
| 1N6297C 1.5KE120C   | 5                               | 97.2     | 108                   | 120 | 132  | 1                    | 173                   | 8.7  |
| 1N6297CA 1.5KE120CA | 5                               | 102      | 114                   | 120 | 126  | 1                    | 165                   | 9.1  |
| 1N6298C 1.5KE130C   | 5                               | 105      | 117                   | 130 | 143  | 1                    | 187                   | 8    |
| 1N6298CA 1.5KE130CA | 5                               | 111      | 124                   | 130 | 137  | 1                    | 179                   | 8.4  |
| 1N6299C 1.5KE150C   | 5                               | 121      | 135                   | 150 | 165  | 1                    | 215                   | 7    |
| 1N6299CA 1.5KE150CA | 5                               | 128      | 143                   | 150 | 158  | 1                    | 207                   | 7.2  |
| 1N6300C 1.5KE160C   | 5                               | 130      | 144                   | 160 | 176  | 1                    | 230                   | 6.5  |
| 1N6300CA 1.5KE160CA | 5                               | 136      | 152                   | 160 | 168  | 1                    | 219                   | 6.8  |
| 1N6301C 1.5KE170C   | 5                               | 138      | 153                   | 170 | 187  | 1                    | 244                   | 6.2  |
| 1N6301CA 1.5KE170CA | 5                               | 145      | 162                   | 170 | 179  | 1                    | 234                   | 6.4  |
| 1N6302C 1.5KE180C   | 5                               | 146      | 162                   | 180 | 198  | 1                    | 258                   | 5.8  |
| 1N6302CA 1.5KE180CA | 5                               | 154      | 171                   | 180 | 189  | 1                    | 246                   | 6.1  |
| 1N6303C 1.5KE200C   | 5                               | 162      | 180                   | 200 | 220  | 1                    | 287                   | 5.2  |
| 1N6303CA 1.5KE200CA | 5                               | 171      | 190                   | 200 | 210  | 1                    | 274                   | 5.5  |
| 1.5KE220C           | 5                               | 175      | 198                   | 220 | 242  | 1                    | 344                   | 4.3  |
| 1.5KE220CA          | 5                               | 185      | 209                   | 220 | 231  | 1                    | 328                   | 4.6  |
| 1.5KE250C           | 5                               | 202      | 225                   | 250 | 275  | 1                    | 360                   | 5    |
| 1.5KE250CA          | 5                               | 214      | 237                   | 250 | 263  | 1                    | 344                   | 5    |
| 1.5KE300C           | 5                               | 243      | 270                   | 300 | 330  | 1                    | 430                   | 5    |
| 1.5KE300CA          | 5                               | 256      | 285                   | 300 | 315  | 1                    | 414                   | 5    |
| 1.5KE320C           | 5                               | 259      | 288                   | 320 | 352  | 1                    | 457                   | 4.50 |
| 1.5KE320CA          | 5                               | 273      | 304                   | 320 | 336  | 1                    | 438                   | 4.50 |
| 1.5KE350C           | 5                               | 284      | 315                   | 350 | 385  | 1                    | 504                   | 4    |
| 1.5KE350CA          | 5                               | 300      | 332                   | 350 | 368  | 1                    | 482                   | 4    |
| 1.5KE400C           | 5                               | 324      | 360                   | 400 | 440  | 1                    | 574                   | 4    |
| 1.5KE400CA          | 1                               | 342      | 380                   | 400 | 420  | 1                    | 548                   | 4    |
| 1.5KE440C           | 5                               | 356      | 396                   | 440 | 484  | 1                    | 631                   | 2.38 |
| 1.5KE440CA          | 5                               | 376      | 418                   | 440 | 462  | 1                    | 602                   | 2.5  |
| 1.5KE520C           | 5                               | 423      | 480                   | 520 | 570  | 1                    | 746                   | 2.01 |

(1) Tested with pulses.  
Pulse test:  $t_p$  - 50 ms;  $\delta$  < 2%

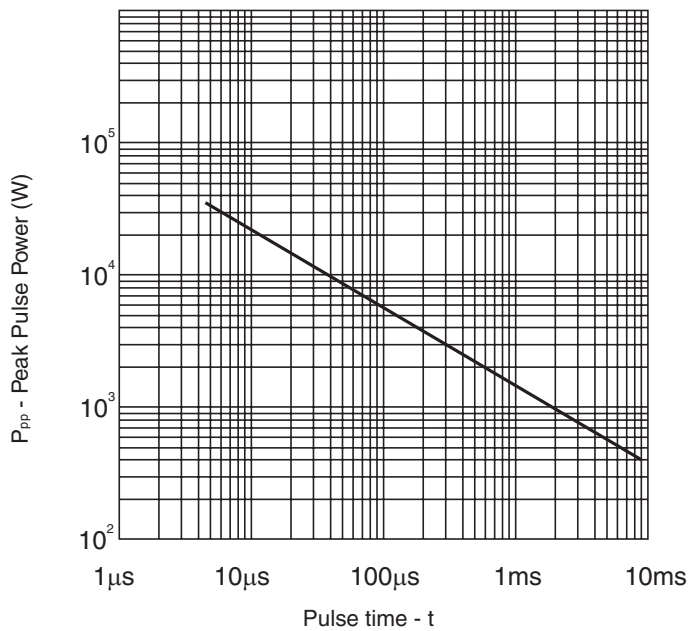
## Characteristic Curves

DERATING CURVE



Pulse wave form 10/1000

PEAK PULSE POWER RATING CURVE



TYPICAL JUNCTION CAPACITANCE

