



## 600 W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

|   |   |  |
|---|---|--|
| <p><b>DO-15</b></p>    | <p>Peak Pulse Power Rating<br/>At 1 ms. Exp.<br/>600 W</p>  | <p>Reverse stand-off Voltage<br/>5.8 ÷ 459 V</p> |
|   |   |  |
|   | <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Glass passivated chip junction</li> <li>• Hyperrectifier structure for high reliability</li> <li>• 600 W peak pulse power capability with a 10/1000 <math>\mu</math>s waveform, repetitive rate (duty cycle): 0.01 %</li> <li>• Solder dip 260°C, 10s</li> <li>• AEC-Q101 qualified</li> <li>• Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC</li> <li>• Excellent clamping capability</li> <li>• Very fast response time</li> <li>• Low incremental surge resistance</li> <li>• Available in uni-directional and bi-directional</li> </ul> |  |
| <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• <b>Case:</b> DO-15<br/>Epoxy meets UL 94V-0 flammability rating.</li> <li>• <b>Polarity:</b> For uni-directional types the color band denotes cathode end, no marking on bi-directional types</li> <li>• <b>Terminals:</b> Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test. HE3 suffix for high reliability grade, meets JESD 201 class 2 whisker test.</li> </ul> |   |  |
| <p><b>TYPICAL APPLICATIONS</b></p> <p>Used in sensitive electronics protection against voltage transients induced by inductive load switching and lighting on ICs, MOSFET, signal lines of sensor units for consumer, computer, industrial, automotive and telecommunication.</p>   |   |  |

### Maximum Ratings and Electrical Characteristics at 25°C

|             |  |                  |
|-------------|--|------------------|
| $P_{pp}$    | Peak pulse power with 10/1000 $\mu$ s exponential pulse                        | 600 W            |
| $I_{FSM}$   | Non repetitive surge peak forward current (t = 8.3 ms) (Jedec Method) (Note 1) | 100 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 = 10mm)                                      | 5 W              |

### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

|             |   |                            |         |
|-------------|---|----------------------------|---------|
| $V_F$       | Max. forward voltage drop at $I_F = 50\text{ A}$ (Note 1) | $V_{BR} \leq 220\text{ V}$ | 3.5 V   |
|             |   | $V_{BR} > 220\text{ V}$    | 5.0 V   |
| $R_{thj-l}$ | Max. thermal resistance (l = 10 mm.)                      |                            | 30 °C/W |

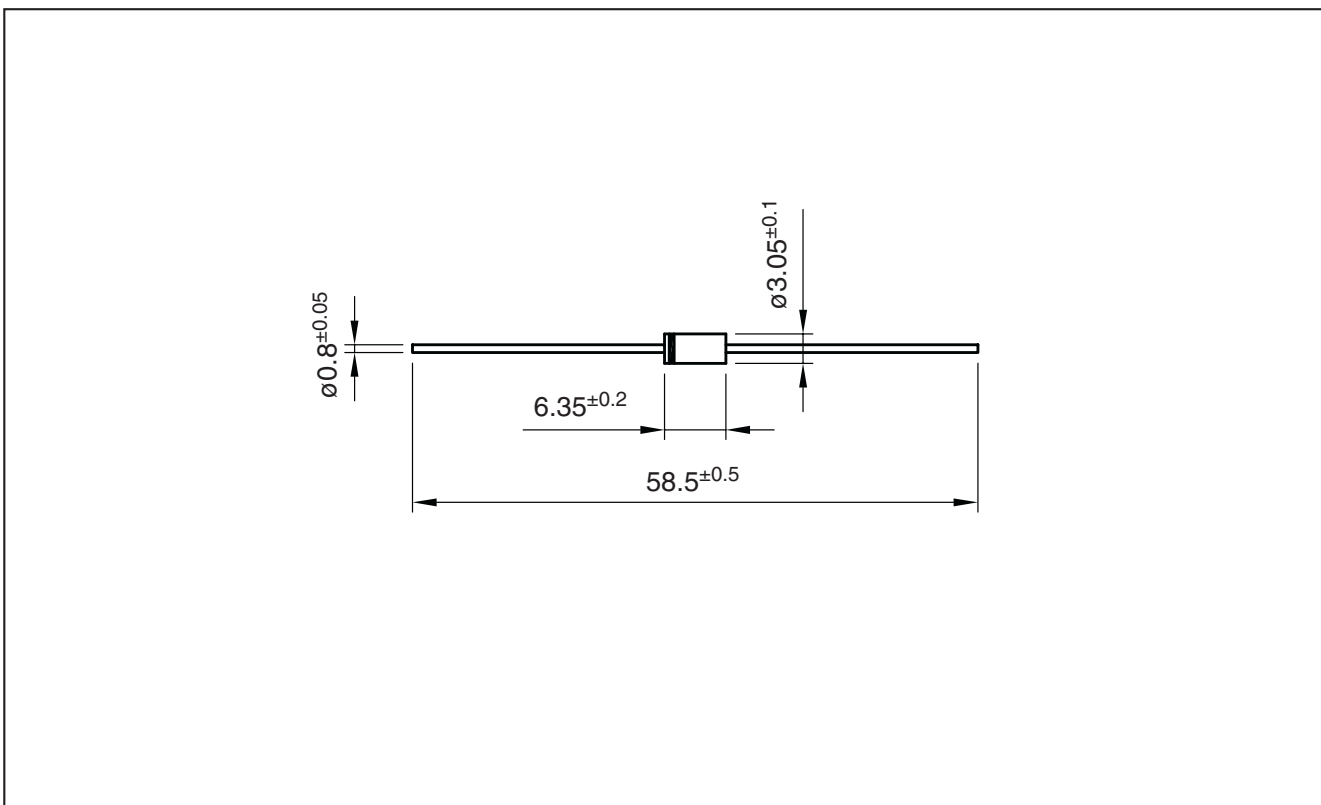
Note 1: Valid only for Unidirectional.

**600 W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes**

**Ordering information**

| PREFERRED P/N   | PACKAGE CODE | DELIVERY MODE              | BASE QUANTITY | UNIT WEIGHT (g) |
|-----------------|--------------|----------------------------|---------------|-----------------|
| P6KE47A AMP     | AMP          | AMMO BOX                   | 4,000         | 0.378           |
| P6KE47A TR      | TR           | 14" diameter tape and reel | 4,000         | 0.378           |
| P6KE47A HE3 AMP | AMP          | AMMO BOX                   | 4,000         | 0.378           |
| P6KE47A HE3 TR  | TR           | 14" diameter tape and reel | 4,000         | 0.378           |

**Package Outline Dimensions: (mm) DO-15**



## 600 W 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   | $I_R$ |       | $V_{CL}$              | at $I_{PP}$ |
| Unidirectional | ( $\mu A$ )                     | (V)         | Min.                  | Nom. | Max.  | (mA)  | (V)                   | (A)         |
| P6KE6V8        | 1000                            | 5.50        | 6.12                  | 6.8  | 7.48  | 10    | 10.8                  | 56          |
| P6KE6V8A       | 1000                            | 5.80        | 6.45                  | 6.8  | 7.14  | 10    | 10.5                  | 57          |
| P6KE7V5        | 500                             | 6.05        | 6.75                  | 7.5  | 8.25  | 10    | 11.7                  | 51          |
| P6KE7V5A       | 500                             | 6.40        | 7.13                  | 7.5  | 7.88  | 10    | 11.3                  | 53          |
| P6KE8V2        | 200                             | 6.63        | 7.38                  | 8.2  | 9.02  | 10    | 12.5                  | 48          |
| P6KE8V2A       | 200                             | 7.02        | 7.79                  | 8.2  | 8.61  | 10    | 12.1                  | 50          |
| P6KE9V1        | 50                              | 7.37        | 8.19                  | 9.1  | 10.0  | 1     | 13.8                  | 44          |
| P6KE9V1A       | 50                              | 7.78        | 8.65                  | 9.1  | 9.55  | 1     | 13.4                  | 45          |
| P6KE10         | 10                              | 8.10        | 9.00                  | 10   | 11.0  | 1     | 15.0                  | 40          |
| P6KE10A        | 10                              | 8.55        | 9.50                  | 10   | 10.5  | 1     | 14.5                  | 41          |
| P6KE11         | 5                               | 8.92        | 9.90                  | 11   | 12.1  | 1     | 16.2                  | 37          |
| P6KE11A        | 5                               | 9.40        | 10.5                  | 11   | 11.6  | 1     | 15.6                  | 38          |
| P6KE12         | 5                               | 9.72        | 10.8                  | 12   | 13.2  | 1     | 17.3                  | 35          |
| P6KE12A        | 5                               | 10.2        | 11.4                  | 12   | 12.6  | 1     | 16.7                  | 36          |
| P6KE13         | 5                               | 10.5        | 11.7                  | 13   | 14.3  | 1     | 19.0                  | 32          |
| P6KE13A        | 5                               | 11.1        | 12.4                  | 13   | 13.7  | 1     | 18.2                  | 33          |
| P6KE15         | 1                               | 12.1        | 13.5                  | 15   | 16.5  | 1     | 22.0                  | 27          |
| P6KE15A        | 1                               | 12.8        | 14.3                  | 15   | 15.8  | 1     | 21.2                  | 28          |
| P6KE16         | 1                               | 12.9        | 14.4                  | 16   | 17.6  | 1     | 23.5                  | 26          |
| P6KE16A        | 1                               | 13.6        | 15.2                  | 16   | 16.8  | 1     | 22.5                  | 27          |
| P6KE18         | 1                               | 14.5        | 16.2                  | 18   | 19.8  | 1     | 26.5                  | 23          |
| P6KE18A        | 1                               | 15.3        | 17.1                  | 18   | 18.9  | 1     | 25.5                  | 24          |
| P6KE20         | 1                               | 16.2        | 18.0                  | 20   | 22.0  | 1     | 29.1                  | 21          |
| P6KE20A        | 1                               | 17.1        | 19.0                  | 20   | 21.0  | 1     | 27.7                  | 22          |
| P6KE22         | 1                               | 17.8        | 19.8                  | 22   | 24.2  | 1     | 31.9                  | 19          |
| P6KE22A        | 1                               | 18.8        | 20.9                  | 22   | 23.1  | 1     | 30.6                  | 20          |
| P6KE24         | 1                               | 19.4        | 21.6                  | 24   | 26.4  | 1     | 34.7                  | 17          |
| P6KE24A        | 1                               | 20.5        | 22.8                  | 24   | 25.2  | 1     | 33.2                  | 18          |
| P6KE27         | 1                               | 21.8        | 24.3                  | 27   | 29.7  | 1     | 39.1                  | 15          |
| P6KE27A        | 1                               | 23.1        | 25.7                  | 27   | 28.4  | 1     | 37.5                  | 16          |
| P6KE30         | 1                               | 24.3        | 27.0                  | 30   | 33.0  | 1     | 43.5                  | 14          |
| P6KE30A        | 1                               | 25.6        | 28.5                  | 30   | 31.5  | 1     | 41.4                  | 14.4        |
| P6KE33         | 1                               | 26.8        | 29.7                  | 33   | 36.3  | 1     | 47.7                  | 12.6        |
| P6KE33A        | 1                               | 28.2        | 31.4                  | 33   | 34.7  | 1     | 45.7                  | 13.2        |
| P6KE36         | 1                               | 29.1        | 32.4                  | 36   | 39.6  | 1     | 52.0                  | 11.6        |
| P6KE36A        | 1                               | 30.8        | 34.2                  | 36   | 37.8  | 1     | 49.9                  | 12          |
| P6KE39         | 1                               | 31.6        | 35.1                  | 39   | 42.9  | 1     | 56.4                  | 10.6        |
| P6KE39A        | 1                               | 33.3        | 37.1                  | 39   | 41.0  | 1     | 53.9                  | 11.2        |
| P6KE43         | 1                               | 34.8        | 38.7                  | 43   | 47.3  | 1     | 61.9                  | 9.6         |
| P6KE43A        | 1                               | 36.8        | 40.9                  | 43   | 45.2  | 1     | 59.3                  | 10.1        |
| P6KE47         | 1                               | 38.1        | 42.3                  | 47   | 51.7  | 1     | 67.8                  | 8.9         |
| P6KE47A        | 1                               | 40.2        | 44.7                  | 47   | 49.4  | 1     | 64.8                  | 9.3         |
| P6KE51         | 1                               | 41.3        | 45.9                  | 51   | 56.1  | 1     | 73.5                  | 8.2         |
| P6KE51A        | 1                               | 43.6        | 48.5                  | 51   | 53.6  | 1     | 70.1                  | 8.6         |

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

## 600 W 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>(A) |
| P6KE56   | 1                               | 45.4               | 50.4                  | 56   | 61.6 | 1             | 80.5                  | 7.4                |
| P6KE56A  | 1                               | 47.8               | 53.2                  | 56   | 58.8 | 1             | 77.0                  | 7.8                |
| P6KE62   | 1                               | 50.2               | 55.8                  | 62   | 68.2 | 1             | 89.0                  | 6.8                |
| P6KE62A  | 1                               | 53.0               | 58.9                  | 62   | 65.1 | 1             | 85.0                  | 7.1                |
| P6KE68   | 1                               | 55.1               | 61.2                  | 68   | 74.8 | 1             | 98.0                  | 6.1                |
| P6KE68A  | 1                               | 58.1               | 64.6                  | 68   | 71.4 | 1             | 92.0                  | 6.5                |
| P6KE75   | 1                               | 60.7               | 67.5                  | 75   | 82.5 | 1             | 108                   | 5.5                |
| P6KE75A  | 1                               | 64.1               | 71.3                  | 75   | 78.8 | 1             | 103                   | 5.8                |
| P6KE82   | 1                               | 66.4               | 73.8                  | 82   | 90.2 | 1             | 118                   | 5.1                |
| P6KE82A  | 1                               | 70.1               | 77.9                  | 82   | 86.1 | 1             | 113                   | 5.3                |
| P6KE91   | 1                               | 73.7               | 81.9                  | 91   | 100  | 1             | 131                   | 4.5                |
| P6KE91A  | 1                               | 77.8               | 86.5                  | 91   | 95.5 | 1             | 125                   | 4.8                |
| P6KE100  | 1                               | 81.0               | 90.0                  | 100  | 110  | 1             | 144                   | 4.2                |
| P6KE100A | 1                               | 85.5               | 95.0                  | 100  | 105  | 1             | 137                   | 4.4                |
| P6KE110  | 1                               | 89.2               | 99.0                  | 110  | 121  | 1             | 158                   | 3.8                |
| P6KE110A | 1                               | 94.0               | 105                   | 110  | 116  | 1             | 152                   | 4.0                |
| P6KE120  | 1                               | 97.2               | 108                   | 120  | 132  | 1             | 173                   | 3.5                |
| P6KE120A | 1                               | 102                | 114                   | 120  | 126  | 1             | 165                   | 3.6                |
| P6KE130  | 1                               | 105                | 117                   | 130  | 143  | 1             | 187                   | 3.2                |
| P6KE130A | 1                               | 111                | 124                   | 130  | 137  | 1             | 179                   | 3.3                |
| P6KE150  | 1                               | 121                | 135                   | 150  | 165  | 1             | 215                   | 2.8                |
| P6KE150A | 1                               | 128                | 143                   | 150  | 158  | 1             | 207                   | 2.9                |
| P6KE160  | 1                               | 130                | 144                   | 160  | 176  | 1             | 230                   | 2.6                |
| P6KE160A | 1                               | 136                | 152                   | 160  | 168  | 1             | 219                   | 2.7                |
| P6KE170  | 1                               | 138                | 153                   | 170  | 187  | 1             | 244                   | 2.5                |
| P6KE170A | 1                               | 145                | 162                   | 170  | 179  | 1             | 234                   | 2.6                |
| P6KE180  | 1                               | 146                | 162                   | 180  | 198  | 1             | 258                   | 2.3                |
| P6KE180A | 1                               | 154                | 171                   | 180  | 189  | 1             | 246                   | 2.4                |
| P6KE200  | 1                               | 162                | 180                   | 200  | 220  | 1             | 287                   | 2.1                |
| P6KE200A | 1                               | 171                | 190                   | 200  | 210  | 1             | 274                   | 2.2                |
| P6KE220  | 1                               | 175                | 198                   | 220  | 242  | 1             | 344                   | 1.75               |
| P6KE220A | 1                               | 185                | 209                   | 220  | 231  | 1             | 328                   | 1.83               |
| P6KE250  | 1                               | 202                | 225                   | 250  | 275  | 1             | 360                   | 1.67               |
| P6KE250A | 1                               | 214                | 237                   | 250  | 263  | 1             | 344                   | 1.75               |
| P6KE300  | 1                               | 243                | 270                   | 300  | 330  | 1             | 430                   | 1.40               |
| P6KE300A | 1                               | 256                | 285                   | 300  | 315  | 1             | 414                   | 1.45               |
| P6KE320  | 1                               | 259                | 288                   | 320  | 352  | 1             | 457                   | 1.32               |
| P6KE320A | 1                               | 273                | 304                   | 320  | 336  | 1             | 438                   | 1.6                |
| P6KE350  | 1                               | 284                | 315                   | 350  | 385  | 1             | 504                   | 1.20               |
| P6KE350A | 1                               | 300                | 332                   | 350  | 368  | 1             | 482                   | 1.25               |
| P6KE400  | 1                               | 324                | 360                   | 400  | 440  | 1             | 574                   | 1.05               |
| P6KE400A | 1                               | 342                | 380                   | 400  | 420  | 1             | 548                   | 1.10               |
| P6KE440  | 1                               | 356                | 396                   | 440  | 484  | 1             | 631                   | 0.95               |
| P6KE440A | 1                               | 376                | 418                   | 440  | 462  | 1             | 602                   | 1.0                |
| P6KE480  | 1                               | 389                | 432                   | 480  | 528  | 1             | 686                   | 0.88               |
| P6KE480A | 1                               | 408                | 456                   | 480  | 504  | 1             | 658                   | 0.91               |
| P6KE510  | 1                               | 413                | 459                   | 510  | 561  | 1             | 729                   | 0.82               |
| P6KE510A | 1                               | 434                | 485                   | 510  | 535  | 1             | 698                   | 0.86               |
| P6KE540  | 1                               | 437                | 486                   | 540  | 594  | 1             | 772                   | 0.78               |
| P6KE540A | 1                               | 459                | 513                   | 540  | 567  | 1             | 740                   | 0.81               |

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

## 600 W 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) | $V_{BR}$<br>(V)       | at   |      |               | $V_{CL}$<br>(V)       | at $I_{PP}$<br>(A) |
| Bidirectional | ( $\mu$ A)                      | (V)                | Min.                  | Nom. | Max. | (mA)          | (V)                   | (A)                |
| P6KE6V8C      | 1000                            | 5.50               | 6.12                  | 6.8  | 7.48 | 10            | 10.8                  | 56                 |
| P6KE6V8CA     | 1000                            | 5.80               | 6.45                  | 6.8  | 7.14 | 10            | 10.5                  | 57                 |
| P6KE7V5C      | 500                             | 6.05               | 6.75                  | 7.5  | 8.25 | 10            | 11.7                  | 51                 |
| P6KE7V5CA     | 500                             | 6.40               | 7.13                  | 7.5  | 7.88 | 10            | 11.3                  | 53                 |
| P6KE8V2C      | 200                             | 6.63               | 7.38                  | 8.2  | 9.02 | 10            | 12.5                  | 48                 |
| P6KE8V2CA     | 200                             | 7.02               | 7.79                  | 8.2  | 8.61 | 10            | 12.1                  | 50                 |
| P6KE9V1C 50   | 50                              | 7.37               | 8.19                  | 9.1  | 10.0 | 1             | 13.8                  | 44                 |
| P6KE9V1CA     | 50                              | 7.78               | 8.65                  | 9.1  | 9.55 | 1             | 13.4                  | 45                 |
| P6KE10C       | 10                              | 8.10               | 9.00                  | 10   | 11.0 | 1             | 15.0                  | 40                 |
| P6KE10CA      | 10                              | 8.55               | 9.50                  | 10   | 10.5 | 1             | 14.5                  | 41                 |
| P6KE11C       | 5                               | 8.92               | 9.90                  | 11   | 12.1 | 1             | 16.2                  | 37                 |
| P6KE11CA      | 5                               | 9.40               | 10.5                  | 11   | 11.6 | 1             | 15.6                  | 38                 |
| P6KE12C       | 5                               | 9.72               | 10.8                  | 12   | 13.2 | 1             | 17.3                  | 35                 |
| P6KE12CA      | 5                               | 10.2               | 11.4                  | 12   | 12.6 | 1             | 16.7                  | 36                 |
| P6KE13C       | 5                               | 10.5               | 11.7                  | 13   | 14.3 | 1             | 19.0                  | 32                 |
| P6KE13CA      | 5                               | 11.1               | 12.4                  | 13   | 13.7 | 1             | 18.2                  | 33                 |
| P6KE15C       | 1                               | 12.1               | 13.5                  | 15   | 16.5 | 1             | 22.0                  | 27                 |
| P6KE15CA      | 1                               | 12.8               | 14.3                  | 15   | 15.8 | 1             | 21.2                  | 28                 |
| P6KE16C       | 1                               | 12.9               | 14.4                  | 16   | 17.6 | 1             | 23.5                  | 26                 |
| P6KE16CA      | 1                               | 13.6               | 15.2                  | 16   | 16.8 | 1             | 22.5                  | 27                 |
| P6KE18C       | 1                               | 14.5               | 16.2                  | 18   | 19.8 | 1             | 26.5                  | 23                 |
| P6KE18CA      | 1                               | 15.3               | 17.1                  | 18   | 18.9 | 1             | 25.5                  | 24                 |
| P6KE20C       | 1                               | 16.2               | 18.0                  | 20   | 22.0 | 1             | 29.1                  | 21                 |
| P6KE20CA      | 1                               | 17.1               | 19.0                  | 20   | 21.0 | 1             | 27.7                  | 22                 |
| P6KE22C       | 1                               | 17.8               | 19.8                  | 22   | 24.2 | 1             | 31.9                  | 19                 |
| P6KE22CA      | 1                               | 18.8               | 20.9                  | 22   | 23.1 | 1             | 30.6                  | 20                 |
| P6KE24C       | 1                               | 19.4               | 21.6                  | 24   | 26.4 | 1             | 34.7                  | 17                 |
| P6KE24CA      | 1                               | 20.5               | 22.8                  | 24   | 25.2 | 1             | 33.2                  | 18                 |
| P6KE27C       | 1                               | 21.8               | 24.3                  | 27   | 29.7 | 1             | 39.1                  | 15                 |
| P6KE27CA      | 1                               | 23.1               | 25.7                  | 27   | 28.4 | 1             | 37.5                  | 16                 |
| P6KE30C       | 1                               | 24.3               | 27.0                  | 30   | 33.0 | 1             | 43.5                  | 14                 |
| P6KE30CA      | 1                               | 25.6               | 28.5                  | 30   | 31.5 | 1             | 41.4                  | 14.4               |
| P6KE33C       | 1                               | 26.8               | 29.7                  | 33   | 36.3 | 1             | 47.7                  | 12.6               |
| P6KE33CA      | 1                               | 28.2               | 31.4                  | 33   | 34.7 | 1             | 45.7                  | 13.2               |
| P6KE36C       | 1                               | 29.1               | 32.4                  | 36   | 39.6 | 1             | 52.0                  | 11.6               |
| P6KE36CA      | 1                               | 30.8               | 34.2                  | 36   | 37.8 | 1             | 49.9                  | 12                 |
| P6KE39C       | 1                               | 31.6               | 35.1                  | 39   | 42.9 | 1             | 56.4                  | 10.6               |
| P6KE39CA      | 1                               | 33.3               | 37.1                  | 39   | 41.0 | 1             | 53.9                  | 11.2               |
| P6KE43C       | 1                               | 34.8               | 38.7                  | 43   | 47.3 | 1             | 61.9                  | 9.6                |
| P6KE43CA      | 1                               | 36.8               | 40.9                  | 43   | 45.2 | 1             | 59.3                  | 10.1               |
| P6KE47C       | 1                               | 38.1               | 42.3                  | 47   | 51.7 | 1             | 67.8                  | 8.9                |
| P6KE47CA      | 1                               | 40.2               | 44.7                  | 47   | 49.4 | 1             | 64.8                  | 9.3                |
| P6KE51C       | 1                               | 41.3               | 45.9                  | 51   | 56.1 | 1             | 73.5                  | 8.2                |
| P6KE51CA      | 1                               | 43.6               | 48.5                  | 51   | 53.6 | 1             | 70.1                  | 8.6                |

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

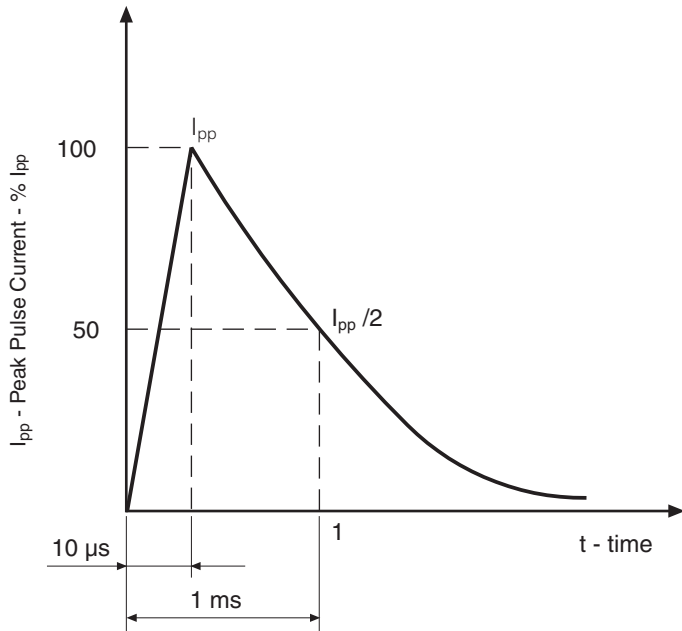
## 600 W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

| Type          | Maximum Reverse Leakage Current     |      | (1) Breakdown Voltage |      |      | $I_R$<br>(mA) | Max. Clamping Voltage       |      |
|---------------|-------------------------------------|------|-----------------------|------|------|---------------|-----------------------------|------|
|               | $I_{RM}$ at $V_{RM}$<br>( $\mu A$ ) | (V)  | Min.                  | Nom. | Max. |               | $V_{CL}$ at $I_{PP}$<br>(V) | (A)  |
| Bidirectional |                                     |      |                       |      |      |               |                             |      |
| P6KE56C       | 1                                   | 45.4 | 50.4                  | 56   | 61.6 | 1             | 80.5                        | 7.4  |
| P6KE56CA      | 1                                   | 47.8 | 53.2                  | 56   | 58.8 | 1             | 77.0                        | 7.8  |
| P6KE62C       | 1                                   | 50.2 | 55.8                  | 62   | 68.2 | 1             | 89.0                        | 6.8  |
| P6KE62CA      | 1                                   | 53.0 | 58.9                  | 62   | 65.1 | 1             | 85.0                        | 7.1  |
| P6KE68C       | 1                                   | 55.1 | 61.2                  | 68   | 74.8 | 1             | 98.0                        | 6.1  |
| P6KE68CA      | 1                                   | 58.1 | 64.6                  | 68   | 71.4 | 1             | 92.0                        | 6.5  |
| P6KE75C       | 1                                   | 60.7 | 67.5                  | 75   | 82.5 | 1             | 108                         | 5.5  |
| P6KE75CA      | 1                                   | 64.1 | 71.3                  | 75   | 78.8 | 1             | 103                         | 5.8  |
| P6KE82C       | 1                                   | 66.4 | 73.8                  | 82   | 90.2 | 1             | 118                         | 5.1  |
| P6KE82CA      | 1                                   | 70.1 | 77.9                  | 82   | 86.1 | 1             | 113                         | 5.3  |
| P6KE91C       | 1                                   | 73.7 | 81.9                  | 91   | 100  | 1             | 131                         | 4.5  |
| P6KE91CA      | 1                                   | 77.8 | 86.5                  | 91   | 95.5 | 1             | 125                         | 4.8  |
| P6KE100C      | 1                                   | 81.0 | 90.0                  | 100  | 110  | 1             | 144                         | 4.2  |
| P6KE100CA     | 1                                   | 85.5 | 95.0                  | 100  | 105  | 1             | 137                         | 4.4  |
| P6KE110C      | 1                                   | 89.2 | 99.0                  | 110  | 121  | 1             | 158                         | 3.8  |
| P6KE110CA     | 1                                   | 94.0 | 105                   | 110  | 116  | 1             | 152                         | 4.0  |
| P6KE120C      | 1                                   | 97.2 | 108                   | 120  | 132  | 1             | 173                         | 3.5  |
| P6KE120CA     | 1                                   | 102  | 114                   | 120  | 126  | 1             | 165                         | 3.6  |
| P6KE130C      | 1                                   | 105  | 117                   | 130  | 143  | 1             | 187                         | 3.2  |
| P6KE130CA     | 1                                   | 111  | 124                   | 130  | 137  | 1             | 179                         | 3.3  |
| P6KE150C      | 1                                   | 121  | 135                   | 150  | 165  | 1             | 215                         | 2.8  |
| P6KE150CA     | 1                                   | 128  | 143                   | 150  | 158  | 1             | 207                         | 2.9  |
| P6KE160C      | 1                                   | 130  | 144                   | 160  | 176  | 1             | 230                         | 2.6  |
| P6KE160CA     | 1                                   | 136  | 152                   | 160  | 168  | 1             | 219                         | 2.7  |
| P6KE170C      | 1                                   | 138  | 153                   | 170  | 187  | 1             | 244                         | 2.5  |
| P6KE170CA     | 1                                   | 145  | 162                   | 170  | 179  | 1             | 234                         | 2.6  |
| P6KE180C      | 1                                   | 146  | 162                   | 180  | 198  | 1             | 258                         | 2.3  |
| P6KE180CA     | 1                                   | 154  | 171                   | 180  | 189  | 1             | 246                         | 2.4  |
| P6KE200C      | 1                                   | 162  | 180                   | 200  | 220  | 1             | 287                         | 2.1  |
| P6KE200CA     | 1                                   | 171  | 190                   | 200  | 210  | 1             | 274                         | 2.2  |
| P6KE220C      | 1                                   | 175  | 198                   | 220  | 242  | 1             | 344                         | 1.75 |
| P6KE220CA     | 1                                   | 185  | 209                   | 220  | 231  | 1             | 328                         | 1.83 |
| P6KE250C      | 1                                   | 202  | 225                   | 250  | 275  | 1             | 360                         | 1.67 |
| P6KE250CA     | 1                                   | 214  | 237                   | 250  | 263  | 1             | 344                         | 1.75 |
| P6KE300C      | 1                                   | 243  | 270                   | 300  | 330  | 1             | 430                         | 1.40 |
| P6KE300CA     | 1                                   | 256  | 285                   | 300  | 315  | 1             | 414                         | 1.45 |
| P6KE320C      | 1                                   | 259  | 288                   | 320  | 352  | 1             | 457                         | 1.32 |
| P6KE320CA     | 1                                   | 273  | 304                   | 320  | 336  | 1             | 438                         | 1.40 |
| P6KE350C      | 1                                   | 284  | 315                   | 350  | 385  | 1             | 504                         | 1.20 |
| P6KE350CA     | 1                                   | 300  | 332                   | 350  | 368  | 1             | 482                         | 1.25 |
| P6KE400C      | 1                                   | 324  | 360                   | 400  | 440  | 1             | 574                         | 1.05 |
| P6KE400CA     | 1                                   | 342  | 380                   | 400  | 420  | 1             | 548                         | 1.10 |
| P6KE440C      | 1                                   | 356  | 396                   | 440  | 484  | 1             | 631                         | 0.95 |
| P6KE440CA     | 1                                   | 376  | 418                   | 440  | 462  | 1             | 602                         | 1.0  |

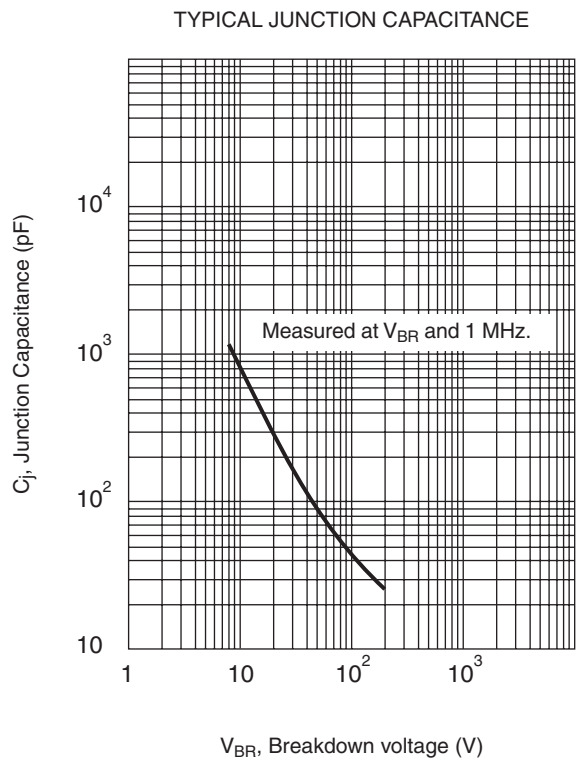
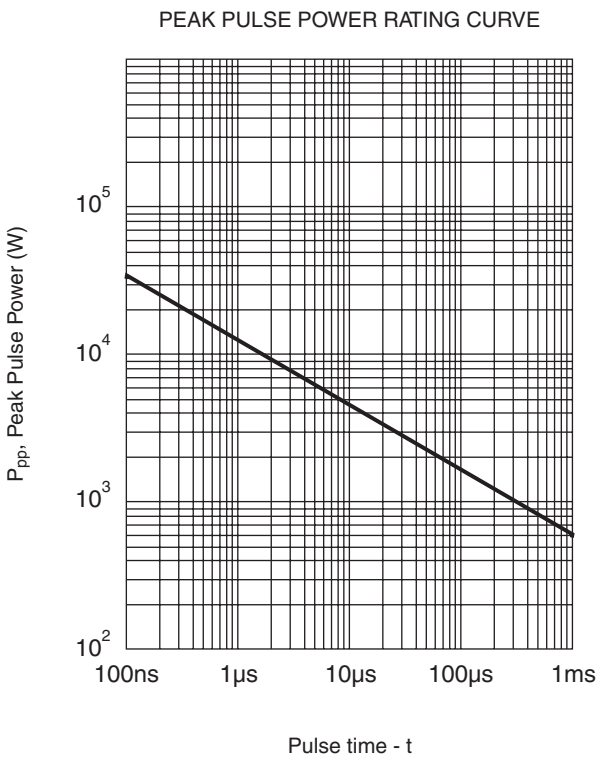
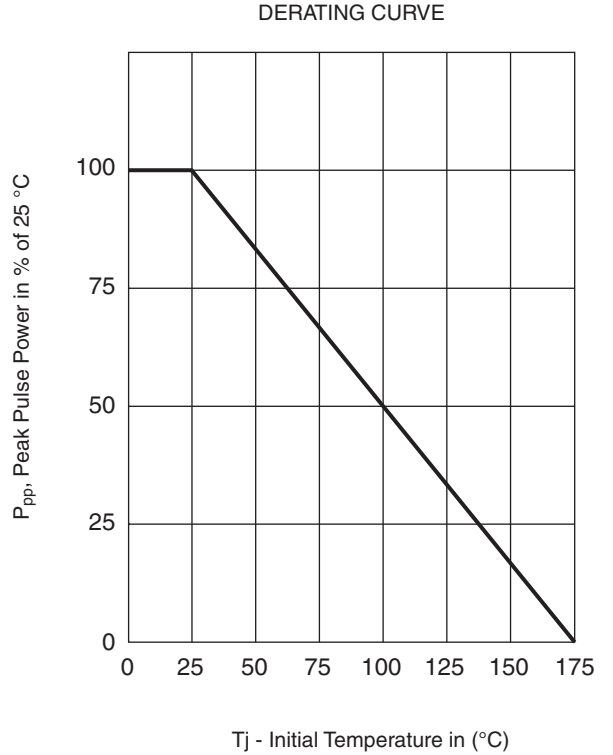
(1) Tested with pulses.  
Pulse test:  $t_p \leq 50$  ms;  $\delta < 2\%$

**600 W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes**

**Ratings and Characteristics (Ta 25 °C unless otherwise noted)**



Pulse wave form 10/1000



## 600 W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

### Disclaimer

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