



## UNI-AND BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS

- HIGH SURGE CAPABILITY :  
600 W / 1 ms EXPO
- VERY FAST CLAMPING TIME :  
1 ps FOR UNIDIRECTIONAL TYPES  
5 ns FOR BIDIRECTIONAL TYPES
- LARGE VOLTAGE RANGE :  
5.8 V → 376 V
- ORDER CODE :  
TYPE NUMBER FOR UNIDIRECTIONAL  
TYPES, TYPE NUMBER + SUFFIX C FOR  
BIDIRECTIONAL TYPES



### DESCRIPTION

Transient voltage suppressor diodes especially useful in protecting integrated circuits, MOS, hybrids and other voltage-sensitive semiconductors and components.

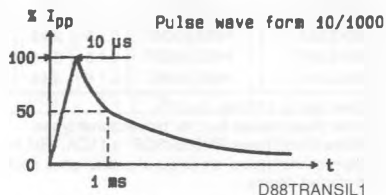
### ABSOLUTE RATINGS (limiting values)

| Symbol             | Parameter                                                            |                                      | Value              | Unit     |
|--------------------|----------------------------------------------------------------------|--------------------------------------|--------------------|----------|
| $P_p$              | Peak Pulse Power for 1 ms Exponential Pulse                          | $T_j$ Initial = 25 °C<br>See note 1  | 600                | W        |
| P                  | Power Dissipation on Infinite Heatsink                               | $T_{amb} = 75$ °C                    | 5                  | W        |
| $I_{FSM}$          | Non Repetitive Surge Peak Forward Current for Unidirectional Types   | $T_j$ Initial = 25 °C<br>$t = 10$ ms | 100                | A        |
| $T_{stg}$<br>$T_j$ | Storage and Operating Junction Temperature Range                     |                                      | - 55 to 175<br>175 | °C<br>°C |
| $T_L$              | Maximum Lead Temperature for Soldering During 10 s at 4 mm from Case |                                      | 230                | °C       |

### THERMAL RESISTANCE

| Symbol        | Parameter                                                  | Value | Unit |
|---------------|------------------------------------------------------------|-------|------|
| $R_{th(j-l)}$ | Junction-leads on Infinite Heatsink for $L_{lead} = 10$ mm | 20    | °C/W |

**Note :** 1. For surges upper than the maximum values, the diode will present a short-circuit anode-cathode.



ELECTRICAL CHARACTERISTICS ( $T_j = 25^\circ\text{C}$ )

| Symbol         | Parameter                                                                |                      | Value      |
|----------------|--------------------------------------------------------------------------|----------------------|------------|
| $V_{RM}$       | Stand-off Voltage                                                        |                      | See tables |
| $V_{(BR)}$     | Breakdown Voltage                                                        |                      |            |
| $V_{(CL)}$     | Clamping Voltage                                                         |                      |            |
| $I_{PP}$       | Peak Pulse Current                                                       |                      |            |
| $\alpha_T$     | Temperature Coefficient of $V_{(BR)}$                                    |                      |            |
| C              | Capacitance                                                              |                      |            |
| $t_{clamping}$ | Clamping Time (0 volt to $V_{(BR)}$ )                                    | Unidirectional Types | 1 ps max.  |
|                |                                                                          | Bidirectional Types  | 5 ns max.  |
| $V_{FM}$       | Forward Voltage Drop for Unidirectional Types ( $I_{FM} = 50\text{ A}$ ) |                      | 3.5 V max. |

| Types          |               | $I_{RM}$ @ $V_{RM}$<br>max. |      | $V_{(BR)}^*$ @ $I_R$<br>(V) |      |      |      | $V_{(CL)}$ @ $I_{PP}$<br>max.<br>1 ms expo |      | $V_{(CL)}$ @ $I_{PP}$<br>max.<br>8-20 $\mu\text{s}$ expo |     | $\alpha_T$<br>max.           | C**<br>typ<br>$V_R=0$<br>f=1 MHz |
|----------------|---------------|-----------------------------|------|-----------------------------|------|------|------|--------------------------------------------|------|----------------------------------------------------------|-----|------------------------------|----------------------------------|
| Unidirectional | Bidirectional | ( $\mu\text{A}$ )           | (V)  | min.                        | nom. | max. | (mA) | (V)                                        | (A)  | (V)                                                      | (A) | ( $10^{-6}/^\circ\text{C}$ ) | (pF)                             |
| P P6KE6V8P     | P P6KE6V8CP   | 1000§                       | 5.8  | 6.45                        | 6.8  | 7.48 | 10   | 10.5                                       | 57   | 13.4                                                     | 261 | 5.7                          | 4000                             |
| P6KE6V8A       | P6KE6V8CA     | 1000§                       | 5.8  | 6.45                        | 6.8  | 7.14 | 10   | 10.5                                       | 57   | 13.4                                                     | 261 | 5.7                          | 4000                             |
| P P6KE7V5P     | P P6KE7V5CP   | 500§                        | 6.4  | 7.13                        | 7.5  | 8.25 | 10   | 11.3                                       | 53   | 14.5                                                     | 241 | 6.1                          | 3700                             |
| P6KE7V5A       | P6KE7V5CA     | 500§                        | 6.4  | 7.13                        | 7.5  | 7.88 | 10   | 11.3                                       | 53   | 14.5                                                     | 241 | 6.1                          | 3700                             |
| P P6KE8V2P     | P6KE8V2CP     | 200§                        | 7.02 | 7.79                        | 8.2  | 9.02 | 10   | 12.1                                       | 50   | 15.5                                                     | 226 | 6.5                          | 3400                             |
| P6KE8V2A       | P6KE8V2CA     | 200§                        | 7.02 | 7.79                        | 8.2  | 8.61 | 10   | 12.1                                       | 50   | 15.5                                                     | 226 | 6.5                          | 3400                             |
| P6KE9V1P       | P6KE9V1CP     | 50§                         | 7.78 | 8.65                        | 9.1  | 10   | 1    | 13.4                                       | 45   | 17.1                                                     | 205 | 6.8                          | 3100                             |
| P6KE9V1A       | P6KE9V1CA     | 50§                         | 7.78 | 8.65                        | 9.1  | 9.55 | 1    | 13.4                                       | 45   | 17.1                                                     | 205 | 6.8                          | 3100                             |
| P6KE10P        | P6KE10CP      | 10§                         | 8.55 | 9.5                         | 10   | 11   | 1    | 14.5                                       | 41   | 18.6                                                     | 387 | 7.3                          | 2800                             |
| P6KE10A        | P6KE10CA      | 10§                         | 8.55 | 9.5                         | 10   | 10.5 | 1    | 14.5                                       | 41   | 18.6                                                     | 387 | 7.3                          | 2800                             |
| P6KE11P        | P6KE11CP      | 5§                          | 9.4  | 10.5                        | 11   | 12.1 | 1    | 15.6                                       | 38   | 20.3                                                     | 355 | 7.5                          | 2500                             |
| P6KE11A        | P6KE11CA      | 5§                          | 9.4  | 10.5                        | 11   | 11.6 | 1    | 15.6                                       | 38   | 20.3                                                     | 355 | 7.5                          | 2500                             |
| P P6KE12P      | P P6KE12CP    | 5                           | 10.2 | 11.4                        | 12   | 13.2 | 1    | 16.7                                       | 36   | 21.7                                                     | 332 | 7.8                          | 2300                             |
| P6KE12A        | P6KE12CA      | 5                           | 10.2 | 11.4                        | 12   | 12.6 | 1    | 16.7                                       | 36   | 21.7                                                     | 332 | 7.8                          | 2300                             |
| P P6KE13P      | P P6KE13CP    | 5                           | 11.1 | 12.4                        | 13   | 14.3 | 1    | 18.2                                       | 33   | 23.6                                                     | 305 | 8.1                          | 2150                             |
| P6KE13A        | P6KE13CA      | 5                           | 11.1 | 12.4                        | 13   | 13.7 | 1    | 18.2                                       | 33   | 23.6                                                     | 305 | 8.1                          | 2150                             |
| P P6KE15P      | P P6KE15CP    | 5                           | 12.8 | 14.3                        | 15   | 16.5 | 1    | 21.2                                       | 28   | 27.2                                                     | 265 | 8.4                          | 1900                             |
| P6KE15A        | P6KE15CA      | 5                           | 12.8 | 14.3                        | 15   | 15.8 | 1    | 21.2                                       | 28   | 27.2                                                     | 265 | 8.4                          | 1900                             |
| P6KE16P        | P6KE16CP      | 5                           | 13.6 | 15.2                        | 16   | 17.6 | 1    | 22.5                                       | 27   | 28.9                                                     | 249 | 8.6                          | 1800                             |
| P6KE16A        | P6KE16CA      | 5                           | 13.6 | 15.2                        | 16   | 16.8 | 1    | 22.5                                       | 27   | 28.9                                                     | 249 | 8.6                          | 1800                             |
| P P6KE18P      | P P6KE18CP    | 5                           | 15.3 | 17.1                        | 18   | 19.8 | 1    | 25.2                                       | 24   | 32.5                                                     | 222 | 8.8                          | 1600                             |
| P6KE18A        | P6KE18CA      | 5                           | 15.3 | 17.1                        | 18   | 18.9 | 1    | 25.2                                       | 24   | 32.5                                                     | 222 | 8.8                          | 1600                             |
| P P6KE20P      | P6KE20CP      | 5                           | 17.1 | 19                          | 20   | 22   | 1    | 27.7                                       | 22   | 36.1                                                     | 199 | 9.0                          | 1500                             |
| P6KE20A        | P6KE20CA      | 5                           | 17.1 | 19                          | 20   | 21   | 1    | 27.7                                       | 22   | 36.1                                                     | 199 | 9.0                          | 1500                             |
| P6KE22P        | P P6KE22CP    | 5                           | 18.8 | 20.9                        | 22   | 24.2 | 1    | 30.6                                       | 20   | 39.3                                                     | 183 | 9.2                          | 1350                             |
| P6KE22A        | P6KE22CA      | 5                           | 18.8 | 20.9                        | 22   | 23.1 | 1    | 30.6                                       | 20   | 39.3                                                     | 183 | 9.2                          | 1350                             |
| P6KE24P        | P6KE24CP      | 5                           | 20.5 | 22.8                        | 24   | 26.4 | 1    | 33.2                                       | 18   | 42.8                                                     | 168 | 9.4                          | 1250                             |
| P6KE24A        | P6KE24CA      | 5                           | 20.5 | 22.8                        | 24   | 25.2 | 1    | 33.2                                       | 18   | 42.8                                                     | 168 | 9.4                          | 1250                             |
| P P6KE27P      | P6KE27CP      | 5                           | 23.1 | 25.7                        | 27   | 29.7 | 1    | 37.5                                       | 16   | 48.3                                                     | 149 | 9.6                          | 1150                             |
| P6KE27A        | P6KE27CA      | 5                           | 23.1 | 25.7                        | 27   | 28.4 | 1    | 37.5                                       | 16   | 48.3                                                     | 149 | 9.6                          | 1150                             |
| P P6KE30P      | P6KE30CP      | 5                           | 25.6 | 28.5                        | 30   | 33   | 1    | 41.5                                       | 14.5 | 53.5                                                     | 134 | 9.7                          | 1075                             |
| P6KE30A        | P6KE30CA      | 5                           | 25.6 | 28.5                        | 30   | 31.5 | 1    | 41.5                                       | 14.5 | 53.5                                                     | 134 | 9.7                          | 1075                             |
| P P6KE33P      | P P6KE33CP    | 5                           | 28.2 | 31.4                        | 33   | 36.3 | 1    | 45.7                                       | 13.1 | 59                                                       | 122 | 9.8                          | 1000                             |
| P6KE33A        | P6KE33CA      | 5                           | 28.2 | 31.4                        | 33   | 34.7 | 1    | 45.7                                       | 13.1 | 59                                                       | 122 | 9.8                          | 1000                             |
| P P6KE36P      | P6KE36CP      | 5                           | 30.8 | 34.2                        | 36   | 39.6 | 1    | 49.9                                       | 12   | 64.3                                                     | 112 | 9.9                          | 950                              |
| P6KE36A        | P6KE36CA      | 5                           | 30.8 | 34.2                        | 36   | 37.8 | 1    | 49.9                                       | 12   | 64.3                                                     | 112 | 9.9                          | 950                              |

\* Pulse test  $t_p < 50\text{ ms}$   $\delta < 2\%$ .

\*\* Divide these values by 2 for bidirectional types.

For bidirectional types P6KE6V8CP → 11CA,  $I_{RM}$  must be double that specified for unidirectional types.

For bidirectional types, electrical characteristics apply in both directions.

P : Preferred device.

| Types          |               | $I_{RM}$ @ $V_{RM}$<br>max. |      | $V_{(BR)}^*$ @ $I_R$<br>(V) |      |      | $V_{(CL)}$ @ $I_{pp}$<br>max.<br>1 ms expo |      | $V_{CL}$ @ $I_{pp}$<br>max.<br>8-20 $\mu$ s expo |      | $\alpha_T$<br>max. | $C^{**}$<br>typ.<br>$V_R=0$<br>f=1 MHz |      |
|----------------|---------------|-----------------------------|------|-----------------------------|------|------|--------------------------------------------|------|--------------------------------------------------|------|--------------------|----------------------------------------|------|
| Unidirectional | Bidirectional | ( $\mu$ A)                  | (V)  | min.                        | nom. | max. | (mA)                                       | (V)  | (A)                                              | (V)  | (A)                | (10 <sup>-6</sup> /°C)                 | (pF) |
| P P6KE39P      | P P6KE39CP    | 5                           | 33.3 | 37.1                        | 39   | 42.9 | 1                                          | 53.9 | 11.1                                             | 69.7 | 103                | 10.0                                   | 900  |
| P6KE39A        | P6KE39CA      | 5                           | 33.3 | 37.1                        | 39   | 41   | 1                                          | 53.9 | 11.1                                             | 69.7 | 103                | 10.0                                   | 900  |
| P6KE43P        | P6KE43CP      | 5                           | 36.8 | 40.9                        | 43   | 47.3 | 1                                          | 59.3 | 10.1                                             | 76.8 | 94                 | 10.1                                   | 850  |
| P6KE43A        | P6KE43CA      | 5                           | 36.8 | 40.9                        | 43   | 45.2 | 1                                          | 59.3 | 10.1                                             | 76.8 | 94                 | 10.1                                   | 850  |
| P6KE47P        | P P6KE47CP    | 5                           | 40.2 | 44.7                        | 47   | 51.7 | 1                                          | 64.8 | 9.3                                              | 84   | 86                 | 10.1                                   | 800  |
| P6KE47A        | P6KE47CA      | 5                           | 40.2 | 44.7                        | 47   | 49.4 | 1                                          | 64.8 | 9.3                                              | 84   | 86                 | 10.1                                   | 800  |
| P P6KE51P      | P6KE51CP      | 5                           | 43.6 | 48.5                        | 51   | 56.1 | 1                                          | 70.1 | 8.6                                              | 91   | 79                 | 10.2                                   | 750  |
| P6KE51A        | P6KE51CA      | 5                           | 43.6 | 48.5                        | 51   | 53.6 | 1                                          | 70.1 | 8.6                                              | 91   | 79                 | 10.2                                   | 750  |
| P P6KE56P      | P6KE56CP      | 5                           | 47.8 | 53.2                        | 56   | 61.6 | 1                                          | 77   | 7.8                                              | 100  | 72                 | 10.3                                   | 700  |
| P6KE56A        | P6KE56CA      | 5                           | 47.8 | 53.2                        | 56   | 58.8 | 1                                          | 77   | 7.8                                              | 100  | 72                 | 10.3                                   | 700  |
| P6KE62P        | P6KE62CP      | 5                           | 53   | 58.9                        | 62   | 68.2 | 1                                          | 85   | 7.1                                              | 111  | 65                 | 10.4                                   | 650  |
| P6KE62A        | P6KE62CA      | 5                           | 53   | 58.9                        | 62   | 65.1 | 1                                          | 85   | 7.1                                              | 111  | 65                 | 10.4                                   | 650  |
| P P6KE68P      | P6KE68CP      | 5                           | 58.1 | 64.6                        | 68   | 74.8 | 1                                          | 92   | 6.5                                              | 121  | 59.5               | 10.4                                   | 625  |
| P6KE68A        | P6KE68CA      | 5                           | 58.1 | 64.6                        | 68   | 71.4 | 1                                          | 92   | 6.5                                              | 121  | 59.5               | 10.4                                   | 625  |
| P6KE75P        | P6KE75CP      | 5                           | 64.1 | 71.3                        | 75   | 82.5 | 1                                          | 103  | 5.8                                              | 134  | 53.5               | 10.5                                   | 575  |
| P6KE75A        | P6KE75CA      | 5                           | 64.1 | 71.3                        | 75   | 78.8 | 1                                          | 103  | 5.8                                              | 134  | 53.5               | 10.5                                   | 575  |
| P P6KE82P      | P6KE82CP      | 5                           | 70.1 | 77.9                        | 82   | 90.2 | 1                                          | 113  | 5.3                                              | 146  | 49                 | 10.5                                   | 550  |
| P6KE82A        | P6KE82CA      | 5                           | 70.1 | 77.9                        | 82   | 86.1 | 1                                          | 113  | 5.3                                              | 146  | 49                 | 10.5                                   | 550  |
| P6KE91P        | P6KE91CP      | 5                           | 77.8 | 86.5                        | 91   | 100  | 1                                          | 125  | 4.8                                              | 162  | 44.5               | 10.6                                   | 525  |
| P6KE91A        | P6KE91CA      | 5                           | 77.8 | 86.5                        | 91   | 95.5 | 1                                          | 125  | 4.8                                              | 162  | 44.5               | 10.6                                   | 525  |
| P6KE100P       | P6KE100CP     | 5                           | 85.5 | 95                          | 100  | 110  | 1                                          | 137  | 4.4                                              | 178  | 40.5               | 10.6                                   | 500  |
| P6KE100A       | P6KE100CA     | 5                           | 85.5 | 95                          | 100  | 105  | 1                                          | 137  | 4.4                                              | 178  | 40.5               | 10.6                                   | 500  |
| P6KE110P       | P6KE110CP     | 5                           | 94   | 105                         | 110  | 121  | 1                                          | 152  | 3.9                                              | 195  | 37                 | 10.7                                   | 470  |
| P6KE110A       | P6KE110CA     | 5                           | 94   | 105                         | 110  | 116  | 1                                          | 152  | 3.9                                              | 195  | 37                 | 10.7                                   | 470  |
| P6KE120P       | P6KE120CP     | 5                           | 102  | 114                         | 120  | 132  | 1                                          | 165  | 3.6                                              | 212  | 34                 | 10.7                                   | 450  |
| P6KE120A       | P6KE120CA     | 5                           | 102  | 114                         | 120  | 126  | 1                                          | 165  | 3.6                                              | 212  | 34                 | 10.7                                   | 450  |
| P P6KE130P     | P6KE130CP     | 5                           | 111  | 124                         | 130  | 143  | 1                                          | 179  | 3.4                                              | 230  | 31.5               | 10.7                                   | 420  |
| P6KE130A       | P6KE130CA     | 5                           | 111  | 124                         | 130  | 137  | 1                                          | 179  | 3.4                                              | 230  | 31.5               | 10.7                                   | 420  |
| P6KE150P       | P6KE150CP     | 5                           | 128  | 143                         | 150  | 165  | 1                                          | 207  | 2.9                                              | 265  | 27.2               | 10.8                                   | 400  |
| P6KE150A       | P6KE150CA     | 5                           | 128  | 143                         | 150  | 158  | 1                                          | 207  | 2.9                                              | 265  | 27.2               | 10.8                                   | 400  |
| P6KE160P       | P P6KE160CP   | 5                           | 136  | 152                         | 160  | 176  | 1                                          | 219  | 2.7                                              | 282  | 25.5               | 10.8                                   | 380  |
| P6KE160A       | P6KE160CA     | 5                           | 136  | 152                         | 160  | 168  | 1                                          | 219  | 2.7                                              | 282  | 25.5               | 10.8                                   | 380  |
| P6KE170P       | P6KE170CP     | 5                           | 145  | 161                         | 170  | 187  | 1                                          | 234  | 2.6                                              | 301  | 24                 | 10.8                                   | 370  |
| P6KE170A       | P6KE170CA     | 5                           | 145  | 161                         | 170  | 179  | 1                                          | 234  | 2.6                                              | 301  | 24                 | 10.8                                   | 370  |
| P P6KE180P     | P6KE180CP     | 5                           | 154  | 171                         | 180  | 198  | 1                                          | 246  | 2.4                                              | 317  | 22.7               | 10.8                                   | 360  |
| P6KE180A       | P6KE180CA     | 5                           | 154  | 171                         | 180  | 189  | 1                                          | 246  | 2.4                                              | 317  | 22.7               | 10.8                                   | 360  |
| P P6KE200P     | P6KE200CP     | 5                           | 171  | 190                         | 200  | 220  | 1                                          | 274  | 2.2                                              | 353  | 20.4               | 10.8                                   | 350  |
| P6KE200A       | P6KE200CA     | 5                           | 171  | 190                         | 200  | 210  | 1                                          | 274  | 2.2                                              | 353  | 20.4               | 10.8                                   | 350  |
| P6KE220P       | P6KE220CP     | 5                           | 188  | 209                         | 220  | 242  | 1                                          | 301  | 2                                                | 388  | 18.6               | 10.8                                   | 330  |
| P6KE220A       | P6KE220CA     | 5                           | 188  | 209                         | 220  | 231  | 1                                          | 301  | 2                                                | 388  | 18.6               | 10.8                                   | 330  |
| P P6KE250P     | P6KE250CP     | 5                           | 213  | 237                         | 250  | 275  | 1                                          | 344  | 2                                                | 442  | 19                 | 11                                     | 310  |
| P6KE250A       | P6KE250CA     | 5                           | 213  | 237                         | 250  | 263  | 1                                          | 344  | 2                                                | 442  | 19                 | 11                                     | 310  |
| P6KE280P       | P6KE280CP     | 5                           | 239  | 266                         | 280  | 308  | 1                                          | 384  | 2                                                | 494  | 18                 | 11                                     | 300  |
| P6KE280A       | P6KE280CA     | 5                           | 239  | 266                         | 280  | 294  | 1                                          | 384  | 2                                                | 494  | 18                 | 11                                     | 300  |
| P6KE300P       | P6KE300CP     | 5                           | 256  | 285                         | 300  | 330  | 1                                          | 414  | 1.6                                              | 529  | 14                 | 11                                     | 290  |
| P6KE300A       | P6KE300CA     | 5                           | 256  | 285                         | 300  | 315  | 1                                          | 414  | 1.6                                              | 529  | 14                 | 11                                     | 290  |
| P6KE320P       | P6KE320CP     | 5                           | 273  | 304                         | 320  | 352  | 1                                          | 438  | 1.6                                              | 564  | 14                 | 11                                     | 280  |
| P6KE320A       | P6KE320CA     | 5                           | 273  | 304                         | 320  | 336  | 1                                          | 438  | 1.6                                              | 564  | 14                 | 11                                     | 280  |
| P6KE350P       | P6KE350CP     | 5                           | 299  | 332                         | 350  | 385  | 1                                          | 482  | 1.6                                              | 618  | 14                 | 11                                     | 270  |
| P6KE350A       | P6KE350CA     | 5                           | 299  | 332                         | 350  | 368  | 1                                          | 482  | 1.6                                              | 618  | 14                 | 11                                     | 270  |
| P P6KE400P     | P P6KE400CP   | 5                           | 342  | 380                         | 400  | 440  | 1                                          | 548  | 1.3                                              | 706  | 11                 | 11                                     | 360  |
| P6KE400A       | P6KE400CA     | 5                           | 342  | 380                         | 400  | 420  | 1                                          | 548  | 1.3                                              | 706  | 11                 | 11                                     | 360  |
| P P6KE440P     | P6KE440CP     | 5                           | 376  | 418                         | 440  | 484  | 1                                          | 603  | 1.3                                              | 776  | 11                 | 11                                     | 350  |
| P6KE440A       | P6KE440CA     | 5                           | 376  | 418                         | 440  | 462  | 1                                          | 603  | 1.3                                              | 776  | 11                 | 11                                     | 350  |

\* Pulse test  $t_p \leq 50$  ms  $\delta < 2\%$ .

\*\* Divide these values by 2 for bidirectional types.

For bidirectional types, electrical characteristics apply in both directions.

P: Preferred device.

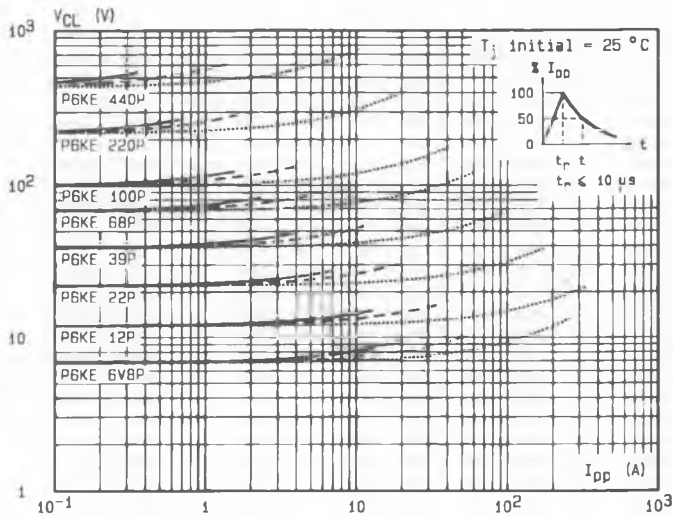
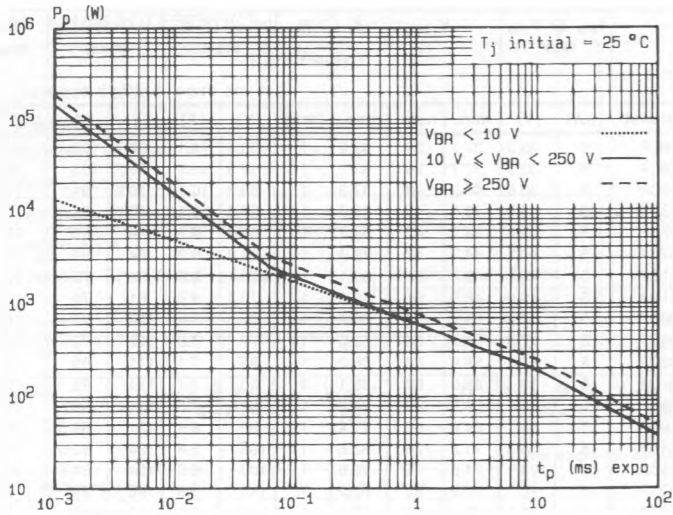


Fig. 2 - Clamping voltage versus peak pulse current.  
exponential waveform  $t = 20 \mu s$  .....  
 $t = 1 ms$  ----  
 $t = 10 ms$  ———

Note : The curves of the figure 2 are specified for a junction temperature of 25 °C before surge. The given results may be extrapolated for other junction temperatures by using the following formula :  $\Delta V_{(BR)} = \alpha_T (V_{(BR)}) \times (T_j - 25) \times V_{(BR)}$   
For intermediate voltages, extrapolate the given results.

D88P6KEP4

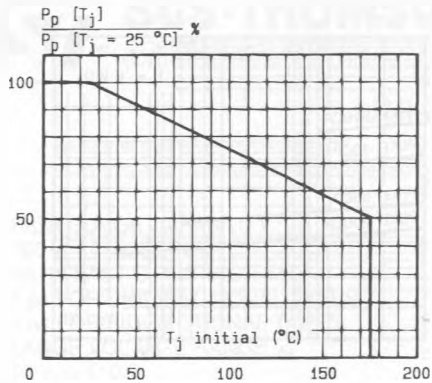


Fig.3 - Allowable power dissipation versus junction temperature.

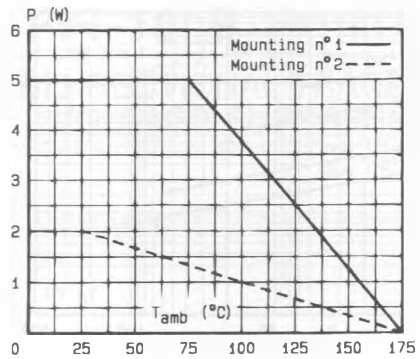


Fig.4 - Power dissipation versus ambient temperature.

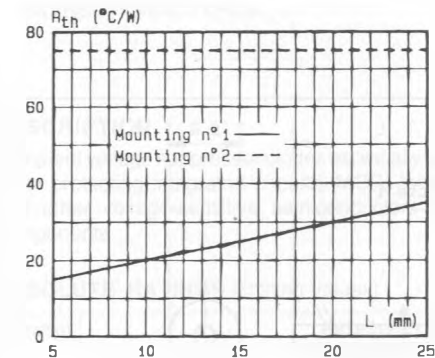


Fig.5 - Thermal resistance versus lead length.

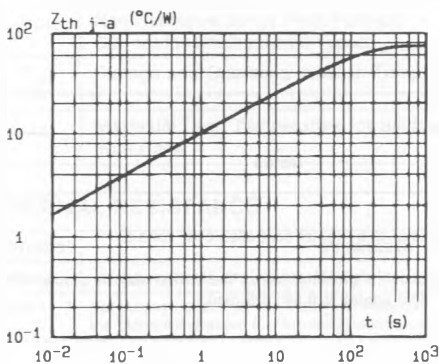


Fig.6 - Transient thermal impedance junction-ambient for mounting n°2 versus pulse duration ( $L = 10$  mm).

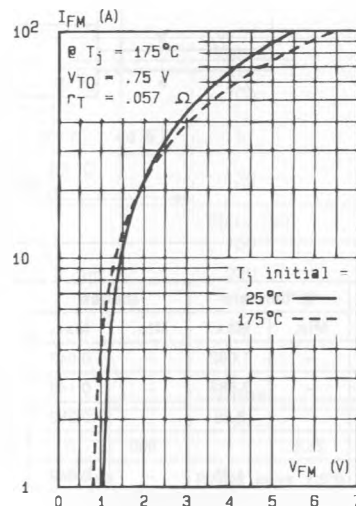
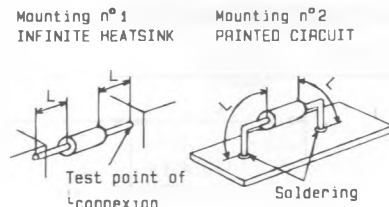


Fig.7 - Peak forward current versus peak forward voltage drop (typical values for unidirectional types).

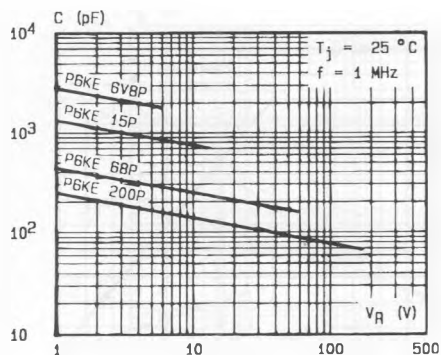


Fig.8a - Capacitance versus reverse applied voltage for unidirectional types (typical values).

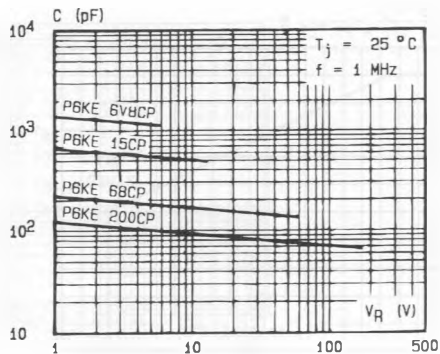
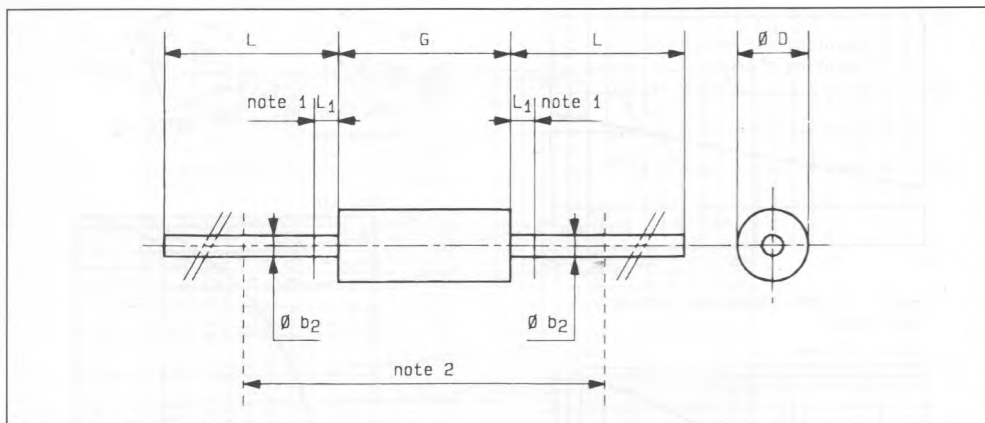


Fig.8b - Capacitance versus reverse applied voltage for bidirectional types (typical values).

D88P6KEP6

## PACKAGE MECHANICAL DATA

CB-417 Plastic



| Ref.             | Millimeters |       | Inches |       | Notes                                                                                                                                                                                                               |
|------------------|-------------|-------|--------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | Min.        | Max.  | Min.   | Max.  |                                                                                                                                                                                                                     |
| Ø b <sub>2</sub> | —           | 1.092 | —      | 0.043 | 1 - The lead diameter Ø b <sub>2</sub> is not controlled over zone L <sub>1</sub> .<br><br>2 - The minimum axial length within which the device may be placed with its leads bent at right angles is 0.59" (15 mm). |
| Ø D              | —           | 3.683 | —      | 0.145 |                                                                                                                                                                                                                     |
| G                | —           | 8.89  | —      | 0.350 |                                                                                                                                                                                                                     |
| L                | 25.4        | —     | 1.000  | —     |                                                                                                                                                                                                                     |
| L <sub>1</sub>   | —           | 1.25  | —      | 0.049 |                                                                                                                                                                                                                     |

Cooling method : by convection (method A).

Marking : type number ; white band indicates cathode for unidirectional types.

Weight : 0.6 g.