

Transient Voltage Suppressor **multicomp** PRO



Features:

- Low leakage
- Uni and Bi-Directional unit
- Excellent clamping capability
- Plastic material has UL recognition 94V-0
- Fast response time

Mechanical Data:

| | |
|-------------------|--|
| Case | : Molded Plastic |
| Polarity | : Colour band denotes cathode except in Bi-Directional |
| Weight | : 0.4 grams |
| Reverse Voltage | : 6.8 to 600 Volts |
| Power Dissipation | : 600 Watts |

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Characteristics | Symbol | Values | Unit |
|---|-------------|-------------|-------|
| Peak Power Dissipation at $T_A = 25^\circ\text{C}$ TP = 1ms (Note 1) | P_{PK} | Min. 600 | Watts |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I_{FSM} | 100 | Amps |
| Steady State Power Dissipation at $T_L = 75^\circ\text{C}$ Lead Lengths 0.375"(9.5mm) | $P_{M(AV)}$ | 5 | Watts |
| Maximum Instantaneous Forward Voltage at 50A for Uni-Directional Devices only (Note 2) | V_F | See Note 3 | Volts |
| Operating Temperature Range | T_J | -55 to +150 | °C |
| Storage Temperature Range | T_{STG} | -55 to +175 | °C |

Notes:

1. Non-repetitive current pulse, per Fig. 5 and derated above $T_A = 25^\circ\text{C}$ per Fig. 1.
2. 8.3ms single half-wave duty cycle=4 pulses per minutes maximum (uni-directional units only).
3. $V_F = 3.5\text{V}$ on P6KE6.8 thru P6KE200A devices.

| Part Number | | Reverse Standoff Voltage | Breakdown Voltage BV Volts@It | | | Max. Reverse Leakage | Max. Clamping Voltage | Max. Peak Pulse | Max. Voltage Temp. Variation |
|-------------|-----------|--------------------------|-------------------------------|---------|--------|----------------------|-----------------------|-----------------|------------------------------|
| (UNI) | (BI) | VR(V) | Min.(V) | Max.(V) | It(mA) | IR(μA) | Vc(V) | Ipp(A) | mV/°C |
| - | P6KE12CA+ | 10.2 | 11.4 | 12.6 | 1 | 5 | 16.7 | 36 | 0.078 |
| P6KE13A+ | - | 11.1 | 12.4 | 13.7 | 1 | 5 | 18.2 | 33 | 0.081 |
| P6KE150A+ | - | 128 | 143 | 158 | 1 | 5 | 207 | 2.9 | 0.108 |

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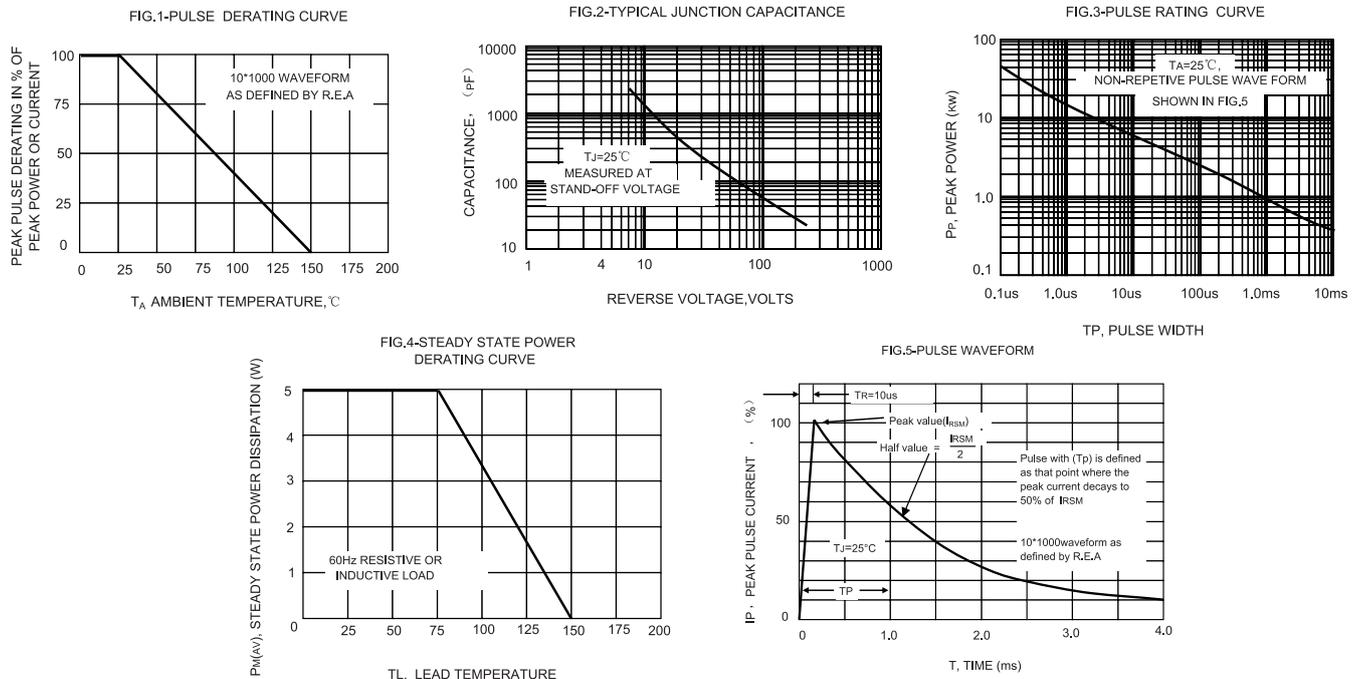
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| Part Number | | Reverse Standoff Voltage | Breakdown Voltage BV Volts@It | | | Max. Reverse Leakage | Max. Clamping Voltage | Max. Peak Pulse | Max. Voltage Temp. Variation |
|-------------|------------|--------------------------|-------------------------------|---------|---------|----------------------|-----------------------|-----------------|------------------------------|
| (UNI) | (BI) | | VR(V) | Min.(V) | Max.(V) | | | | |
| - | P6KE15CA+ | 12.8 | 14.3 | 15.8 | 1 | 5 | 21.2 | 28 | 0.084 |
| P6KE16A+ | P6KE16CA+ | 13.6 | 15.2 | 16.8 | 1 | 5 | 22.5 | 27 | 0.086 |
| P6KE180A+ | P6KE180CA+ | 154 | 171 | 189 | 1 | 5 | 246 | 2.4 | 0.108 |
| P6KE18A+ | P6KE18CA+ | 15.3 | 17.1 | 18.9 | 1 | 5 | 25.2 | 24 | 0.088 |
| P6KE20A+ | - | 17.1 | 19 | 21 | 1 | 5 | 27.7 | 22 | 0.09 |
| P6KE22A+ | - | 18.8 | 20.9 | 23.1 | 1 | 5 | 30.6 | 20 | 0.092 |
| - | P6KE24CA+ | 20.5 | 22.8 | 25.2 | 1 | 5 | 33.2 | 18 | 0.094 |
| P6KE30A+ | P6KE30CA+ | 25.6 | 28.5 | 31.5 | 1 | 5 | 41.4 | 14.4 | 0.097 |
| P6KE33A+ | - | 28.2 | 31.4 | 34.7 | 1 | 5 | 45.7 | 13.2 | 0.098 |
| - | P6KE36CA+ | 30.8 | 34.2 | 37.8 | 1 | 5 | 49.9 | 12 | 0.099 |
| P6KE39A+ | P6KE39CA+ | 33.3 | 37.1 | 41 | 1 | 5 | 53.9 | 11.2 | 0.1 |
| P6KE62A+ | - | 53 | 58.9 | 65.1 | 1 | 5 | 85 | 7.1 | 0.104 |
| P6KE7.5A+ | - | 6.4 | 7.13 | 7.88 | 10 | 500 | 11.3 | 53 | 0.061 |
| - | P6KE8.2CA+ | 7.02 | 7.79 | 8.61 | 10 | 200 | 12.1 | 50 | 0.065 |
| - | P6KE9.1CA+ | 7.78 | 8.65 | 9.55 | 1 | 50 | 13.4 | 45 | 0.068 |
| - | P6KE200CA+ | 171 | 190 | 210 | 1 | 5 | 274 | 2.2 | 0.108 |

Notes: Suffix 'C' denotes bidirectional device . Suffix 'A' denotes 5% tolerance device .no suffix denotes 10% tolerance device
 1. For bidirectional devices having VR of 10Volts and under ,the IR limit is doubled

Ratings and Characteristic Curves

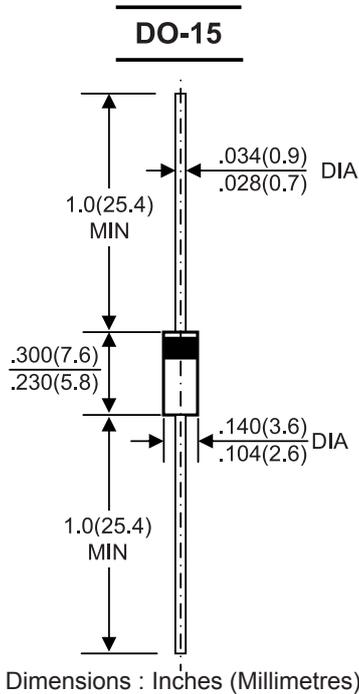


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Dimensions:



Part Number Table

| Description | Part Number |
|--|-------------|
| Unidirectional And Bidirectional Transient Voltage Suppressors | P6KE12CA+ |
| | P6KE13A+ |
| | P6KE150A+ |
| | P6KE15CA+ |
| | P6KE16A+ |
| | P6KE16CA+ |
| | P6KE180A+ |
| | P6KE180CA+ |
| | P6KE18A+ |
| | P6KE18CA+ |
| | P6KE200CA+ |
| | P6KE20A+ |

| Description | Part Number |
|--|-------------|
| Unidirectional And Bidirectional Transient Voltage Suppressors | P6KE22A+ |
| | P6KE24CA+ |
| | P6KE30A+ |
| | P6KE30CA+ |
| | P6KE33A+ |
| | P6KE36CA+ |
| | P6KE39A+ |
| | P6KE39CA+ |
| | P6KE62A+ |
| | P6KE7.5A+ |
| P6KE8.2CA+ | |
| P6KE9.1CA+ | |

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