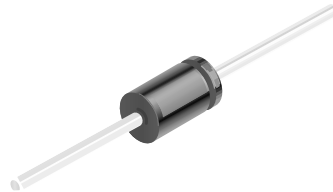


## Transient Voltage Suppressors P6KE6V8(C)A - P6KE440(C)A

### Features

- Glass passivated junction.
- 600W Peak Pulse Power capability at 1.0 ms.
- Excellent clamping capability.
- Low incremental surge resistance.
- Fast response time; typically less than 1.0 ps from 0 volts to BV for unidirectional and 5.0 ns for bidirectional.
- Typical  $I_R$  less than 1.0  $\mu$ A above 10V.



**DO-15**

COLOR BAND DENOTES CATHODE  
ON UNIDIRECTIONAL DEVICES ONLY. NO  
COLOR BAND ON BIDIRECTIONAL DEVICES.

### DEVICES FOR BIPOLAR APPLICATIONS

- Bidirectional types use CA suffix.
- Electrical Characteristics apply in both directions.

## 600 Watt Transient Voltage Suppressors

### Absolute Maximum Ratings\* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$P_{PPM}$	Peak Pulse Power Dissipation at $T_P=1\text{ms}$	600	W
$I_{PPM}$	Peak Pulse Current	see table	A
$P_D$	Power Dissipation .375 " lead length @ $T_A = 75^\circ\text{C}$	5.0	W
$I_{FSM}$	Non-repetitive Peak Forward Surge Current superimposed on rated load (JEDEC method) (Note 1)	100	A
$T_{stg}$	Storage Temperature Range	-65 to +175	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	+ 175	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**Note 1:** Measured on 8.3 ms single half-sine wave; Duty cycle = 4 pulses per minute maximum.



Typical Characteristics

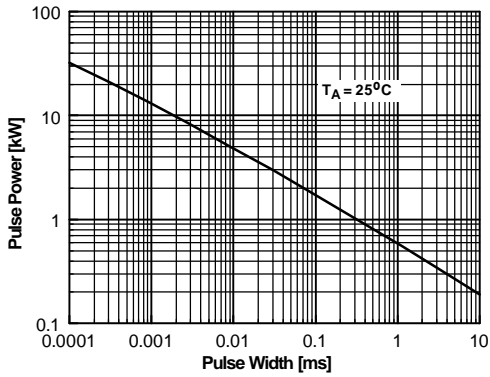


Figure 1. Peak Pulse Power Rating Curve

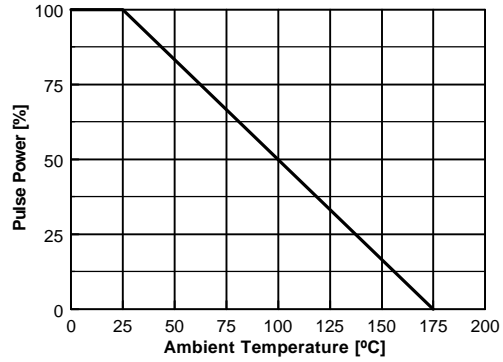


Figure 2. Pulse Derating Curve

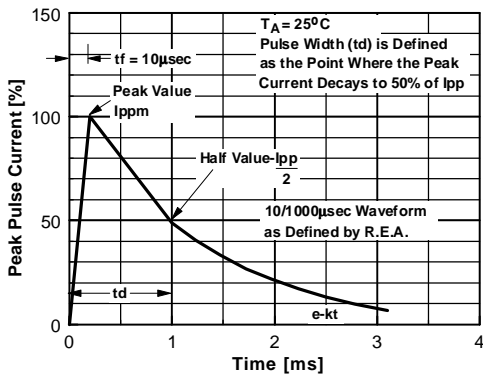


Figure 3. Pulse Waveform

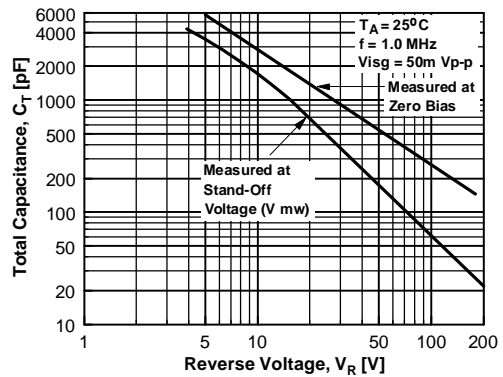


Figure 4. Total Capacitance - Unidirectional

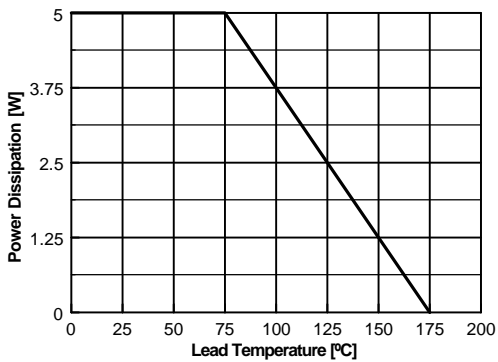


Figure 5. Steady State Power Derating Curve

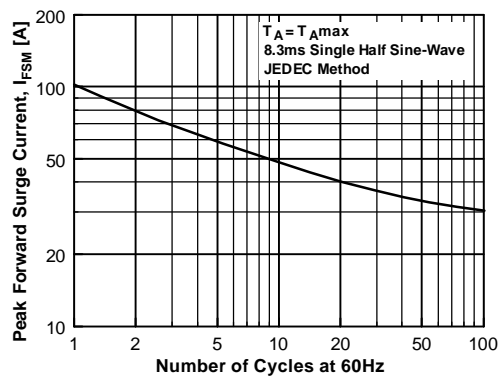


Figure 6. Non-Repetitive Surge Current