

# P6KE6.8CAS

## BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

**V<sub>BR</sub> : 6.45 - 7.14 Volts**

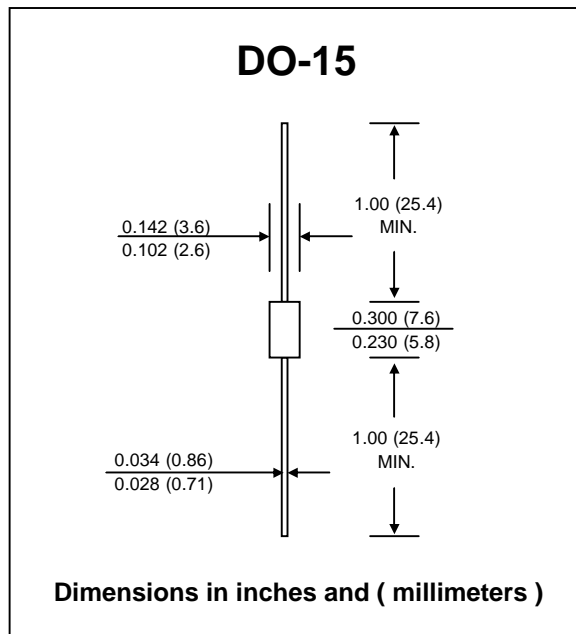
**P<sub>PK</sub> : 600 Watts**

### FEATURES :

- \* Glass passivated junction chip
- \* 600W surge capability at 1ms
- \* Excellent clamping capability
- \* Low zener impedance
- \* Fast response time : typically less than 1.0 ps from 0 volt to V<sub>BR(min.)</sub>
- \* Typical I<sub>R</sub> less than 1μA above 10V
- \* Pb / RoHS Free

### MECHANICAL DATA

- \* Case : DO-15 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Mounting position : Any
- \* Weight : 0.4 gram



### MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
Peak Power Dissipation at Ta = 25 °C, Tp=1ms (Note1)	P <sub>PK</sub>	Minimum 600	W
Steady State Power Dissipation at T <sub>L</sub> = 75 °C Lead Lengths 0.375", (9.5mm) (Note 2)	P <sub>D</sub>	5.0	W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 65 to + 175	°C

### ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
Breakdown Voltage @ I <sub>t</sub> (Note 3)	V <sub>BR</sub>	Min	6.45
		Max	7.14
		I <sub>t</sub>	10
Working Peak Reverse Voltage	V <sub>RWM</sub>	5.8	V
Maximum Reverse Leakage @ V <sub>RWM</sub>	I <sub>R</sub>	300	μA
Maximum Reverse Current	I <sub>RSM</sub>	57	A
Maximum Clamping Voltage @ I <sub>RSM</sub>	V <sub>RSM</sub>	10.5	V
Maximum Temperature Co-efficient of V <sub>BR</sub>		0.057	%/ °C

### Notes :

- (1) Non-repetitive Current pulse and derated above Ta= 25 °C.
- (2) Mounted on Copper Leaf area of 1.57 in<sup>2</sup> (40mm<sup>2</sup>).
- (3) V<sub>BR</sub> measured after I<sub>t</sub> applied for 300 μs., I<sub>t</sub> = square wave pulse or equivalent.