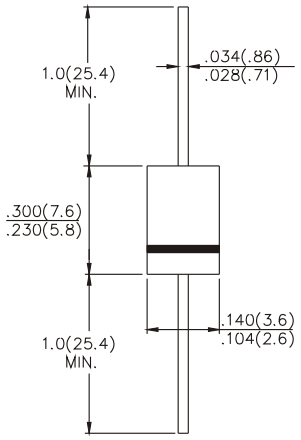
P6KE SERIES

GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR

CHENG-YI ELECTRONIC

VOLTAGE 6.8 to 440 VOLTS
600 WATT PEAK POWER
5.0 WATTS STEADY STATE

DO-15



Dimensions in inches and (millimeters)

FEATURES

- Plastic package has Underwrites Laboratory Flammability Classification 94V-O
- Glass passivated chip junction in DO-15 package
- 400W surge capability at 1 ms
- Excellent clamping capability
- Low zener impedance
- Fast response time: typically less than 1.0 ps from 0 volts to BV min.
- Typical I_R less than 1 μA above 10V
- High tempreature soldering guaranteed: 260 ^{0}C/10 seconds /.375",(9.5mm) lead length/51bs.,(2.3kg) tension

MECHANICAL DATA

- Case:JEDEC DO-15 Molded plastic
- Terminals:Plated Axial leads, solderable per MIL-STD-202, Method 208
- Polarity:Color band denotes cathode except Bipolar
- Mounting Position:Any
- Weight:0.015 ounce, 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25^{0}C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATINGS	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation at T_A=25^{0}C, T_P=1ms (NOTE 1)	P_{PK}	Minimum 6000	Watts
Steady Power Dissipation at T_L=75^{0}C Lead Lengths .375",(9.5mm)(NOTE 2)	P_D	5.0	Watts
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC Method)(NOTE 3)	I_{FSM}	100	Amps
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to + 175	^{0}C

Notes: 1. Non-repetitive current pulse, per Fig.3 and derated above T_A=25^{0}C per Fig.2
2. Measured on copper Leaf area of 1.57 in^2 (40mm^2)
3. 8.3mm single half sine-wave, duty cycle=4 pulses minutes maximum.

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RATING AND CHARACTERISTICS CURVES
P6KE SERIES

Fig. 1 - PEAK PULSE POWER VS PULSE TIME

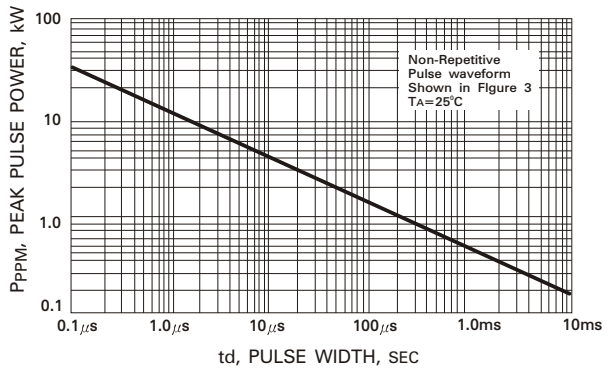

Fig. 2 - PULSE DERATING CURVE

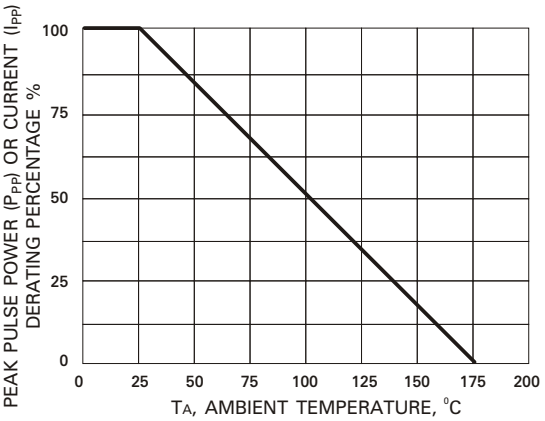

Fig. 3 - PULSE WAVEFORM

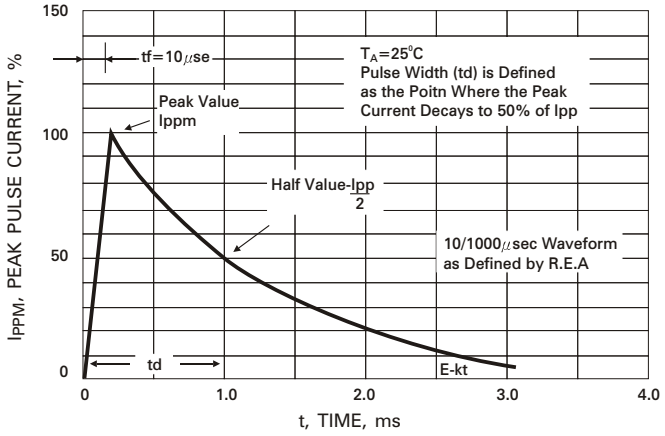

Fig. 4 - TYPICAL JUNCTION CAPACITANCE
UNIDIRECTIONAL

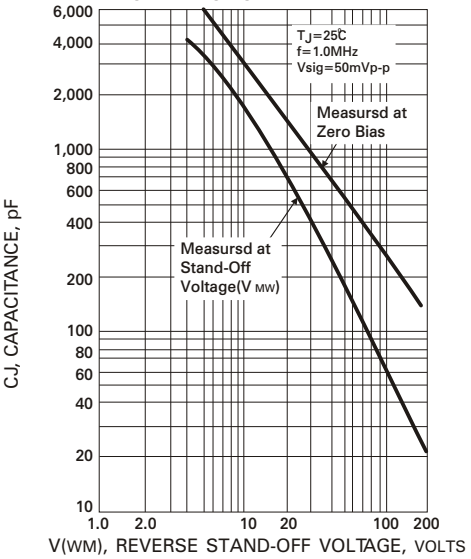

Fig. 5 - STEADY STATE POWER
DERATING CURVE

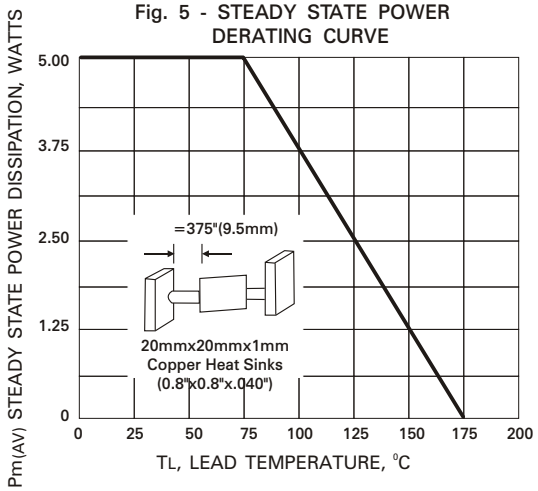

Fig. 6 - MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT