5KP SERIES

GLASS PASSIVATED JUNCTION TRAN-SIENT VOLTAGE SUPPRESSOR





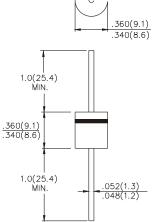
FEATURES

- Plastic package has Underwrites Laboratory Flammability Classification 94V-O
- · Glass passivated junction
- 5000W Peak Pulse Power capability on 10/1000 μ s waveform
- · Excellent clamping capability
- Repetition rate (Duty Cycle):0.5%
- · Low incremental surge resistance
- Fast response time: typically less than 1.0 ps from 0 volts to BV
- Typical ID less than 1 $\,\mu\text{A}$ above 10V
- High temperature soldering guaranteed: 300°C/10 seconds /.375',(9.5mm) lead length/51bs.,(2.3kg) tension

VOLTAGE 5.0 to 110 VOLTS 5000 WATT PEAK PULSE POWER

P600





Dimensions in inches and (millimeters)

MECHANICAL DATA

- · Case:Molded plastic over glass passivated junction
- Terminals:Plated Axial leads, solderable per MIL-STD-750, Method 2026
- · Polarity:Color band denote positive end (cathode)
- · Mounting Position: Any
- · Weight: 0.07 ounces, 2.1gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

RATINGS	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000 μs waveform (NOTE 1,Fig.1)	РРРМ	Minimum 5000	Watts
Peak Pulse Current of on 10/1000 μs waveform (NOTE 1,Fig.3)	РРРМ	SEE TABLE 1	Amps
Steady Power Dissipation at TL=75°C Lead Lengths .375",(9.5mm)(NOTE 2)	P _{M(AV)}	8.0	Watts
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC Method)(NOTE 3)	IFSM	400	Amps
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 175	°C

Notes: 1. Non-repetitive current pulse, per Fig.3 and derated above TA=25°C per Fig.2

- 2. Mounted on Copper Leaf area of 0.79 in² (20mm²)
- Measured on 8.3ms single half sine-wave or equivalent square wave, Duty Cycle=4 pulses per minuters maximum.

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RATING AND CHARACTERISTICS CURVES 5KP SERIES

Fig. 1 - PEAK PULSE POWER VS PULSE TIME

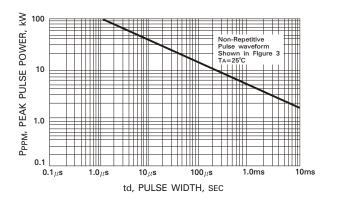


Fig. 3 - PULSE WAVEFORM 150 T_A=25°C Pulse Width (td) is Defined tf=10μse IPPM, PEAK PULSE CURRENT, as the Poitn Where the Peak Current Decays to 50% of Ipp Peak Value 100 Half Value-<u>lpp</u> 10/1000 usec Waveform 50 as Defined by R.E.A e-kt 0 0 1.0 2.0 3.0 t, TIME, ms

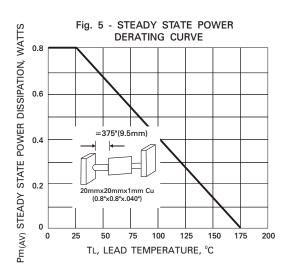


Fig. 2 - PULSE DERATING CURVE

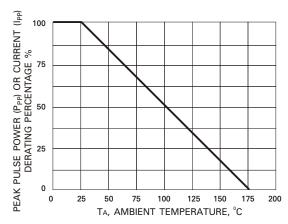
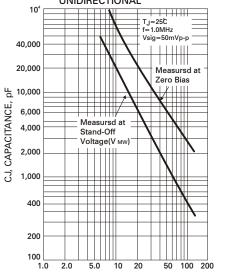


Fig. 4 - TYPICAL JUNCTION CAPACITANCE UNIDIRECTIONAL



V(WM), REVERSE STAND-OFF VOLTAGE, VOLTS

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

