

GPP TRANSIENT VOLTAGE SUPPRESSOR
3000 WATT PEAK POWER 8.0 WATTS STEADY STATE

FEATURES

- * Plastic package has underwriters laboratory
- * Glass passivated chip construction
- * 3000 watt surge capability at 1ms
- * Excellent clamping capability
- * Low zener impedance
- * Fast response time

Ratings at 25 °C ambient temperature unless otherwise specified.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

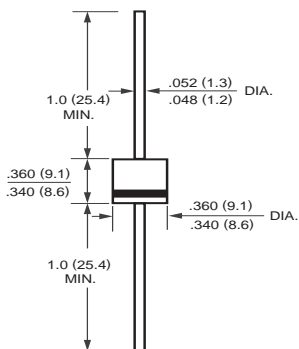
Ratings at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.



R6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation with a 10/1000uS waveform (Note 1, FIG.1)	PPPM	Minimum 3000	Watts
Peak Pulse Current with a 10/1000uS waveform (Note 1, Fig. 3)	I _{PPM}	SEE TABLE 1	Amps
Steady State Power Dissipation at T _L = 75°C lead lengths 0.375" (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)	I _{FSM}	250	Amps
Operating and Storage Temperature Range	T _J , T _{STG}	-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 pad area of 0.8 X 0.8" (20 X 20mm) per Fig. 5

3. Measured on 8.3mS single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

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RATING AND CHARACTERISTIC CURVES (3KP28A)

FIG. 1 - PEAK PULSE POWER RATING CURVE

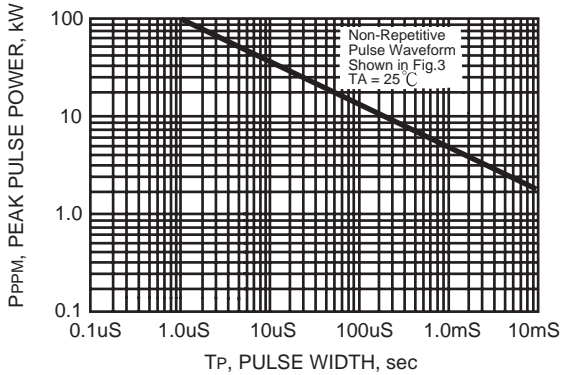


FIG. 2 - PULSE DERATING CURVE

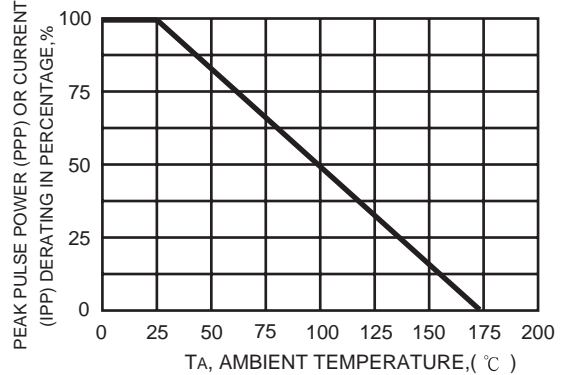


FIG. 3 - PULSE WAVEFORM

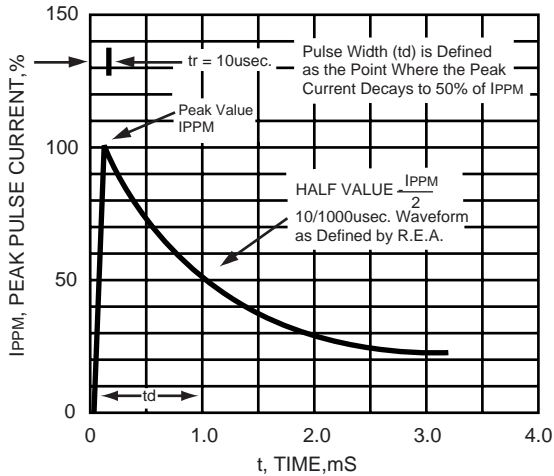


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

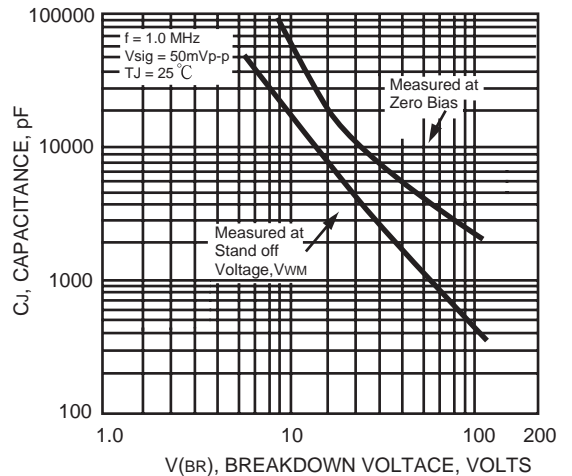


FIG. 5 - STEADY STATE POWER DERATING CURVE

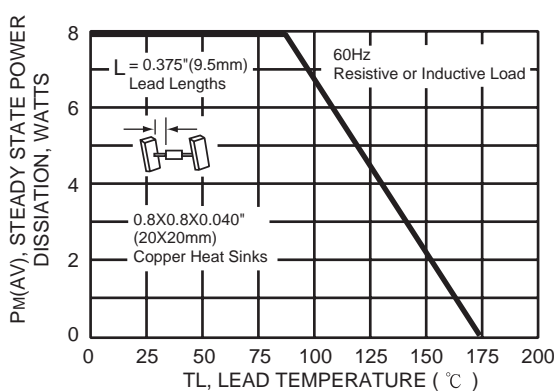
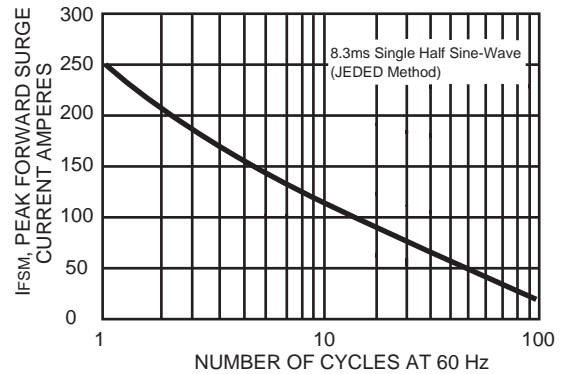


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT UNIDIRECTIONAL



TRANSIENT VOLTAGE SUPPRESSORS

3000W SERIES TVS DIODES / R6 3000W (TABLE 1)

TYPE	Breakdown Voltage			Reverse Stand off Voltage V _{WM} (Volts)	Maximum Reverse Leakage at V _{WM} I _D (μ A)	Maximum Peak Pulse Current I _{PPM} (Amps)	Maximum Clamping Voltage at I _{PPM} V _C (Volts)
	V _{BR} (Volts)		@I _T (mA)				
	MIN.	MAX.					
3KP28A	31.10	34.40	5.0	28	10	66.0	45.4