RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

TMPG06-27

TRANSIENT VOLTAGE SUPPRESSOR

300 WATT PEAK POWER 1.0 WATT STEADY STATE

FEATURES

* Designed for the hood applications
* Available in uni-directional only
* Glass passivated chip construction
* Excellent clamping capability
* Low incremental surge resistance
* Fast response time: typically less than 1.0ps from 0 Volts to V(BR)
* For devices with V(BR)>=10V, ID are typically less than 1.0uA

MECHANICAL DATA

* Case: Molded plastic black body
* Epoxy: Device hasUL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 0.19 gram

Ratings at 25 °C ambient temperature unless otherwise specified.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

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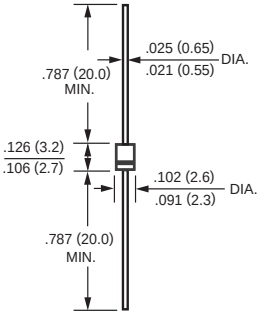

Dimensions in inches and (millimeters)

Electrical characteristics apply in uni-directional only

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

RATINGS	SYMBOL	VALUE	UNITS
Peak Power Dissipation with a 10/1000uS (Note 1, Fig.1)	P_{PPM}	300	Watts
Peak Pulse Current with a 10/1000uS waveform (Note 1, 2, Fig.3)	I_{PPM}	SEE TABLE 1	Amps
Steady State Power Dissipation (Note 2)	$P_{M(AV)}$	1.0	Watts
Peak Forward Surge Current per Fig.5 (Note 2,4)	I_{FSM}	40	Amps
Maximum Instantaneous Forward Voltage at 25A (Note 4)	V_F	3.5	Volts
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	°C

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NOTES : 1. Non-repetitive current pulse, per Fig.3 and derated above T_A = 25°C per Fig.2.
2. Mounted on 0.2 X 0.2"(5.0 X 5.0mm) copper pad to each terminal.
3. Lead temperature at T_L = 75°C
4. Measured on 8.3mS single half sine-wave or equivalent square wave, duty cycle = 4 pules per minute maximum.
5. Peak pulse power waveform is 10/1000uS.

RATING AND CHARACTERISTIC CURVES (TMPG06-27)

FIG. 1 - PEAK PULSE POWER RATING CURVE

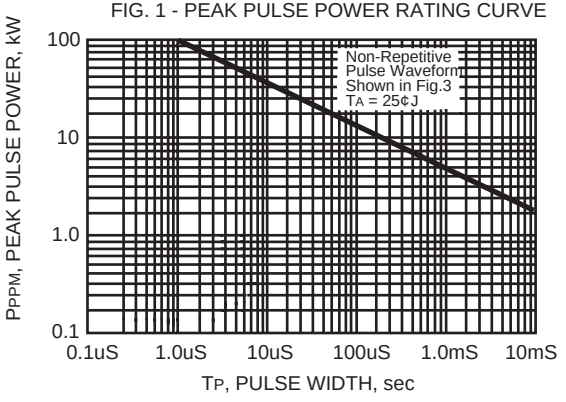


FIG. 2 - PULSE DERATING CURVE

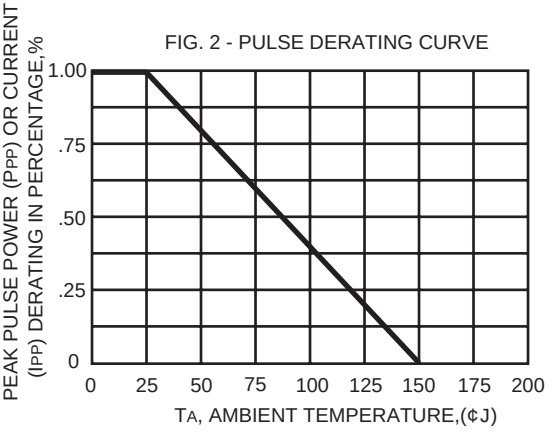


FIG. 3 - PULSE WAVEFORM

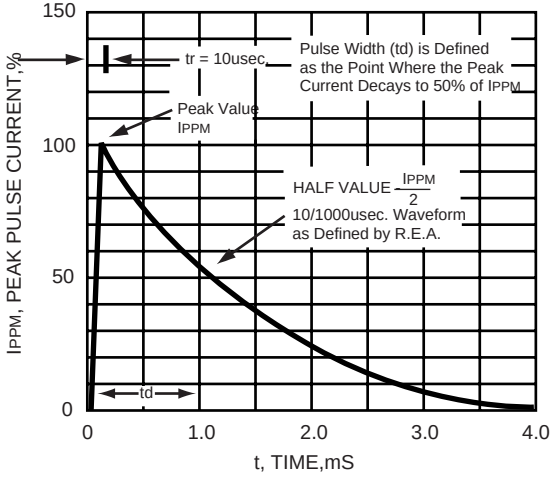


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

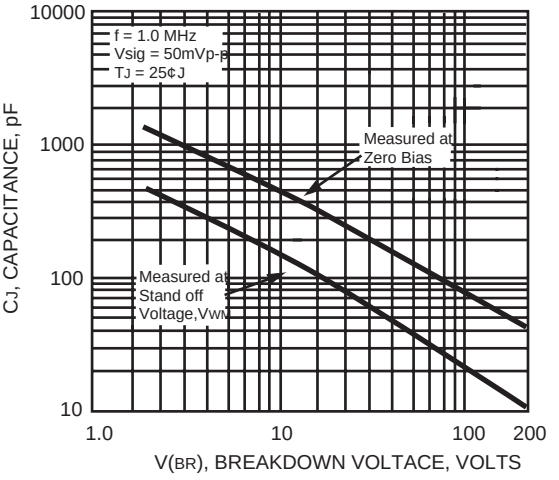
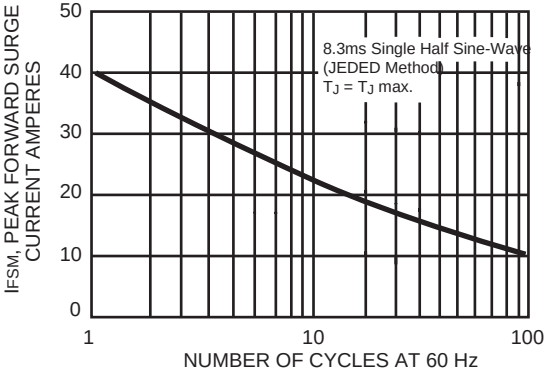


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT UNIDIRECTIONAL



TRANSIENT VOLTAGE SUPPRESSORS

300W SERIES TVS DIODES / R-1 300W (TABLE 1)

TYPE	Breakdown Voltage			Reverse Stand off Voltage V_{WM} (Volts)	Maximum Reverse Leakage at V_{WM} I_D(uA)	Maximum Peak Pulse Current I_{PPM} (Amps)	Maximum Clamping Voltage at I_{PPM} V_C (Volts)
	V_{BR} (Volts)		@I_T (mA)				
	MIN.	MAX.					
TMPG06-27	24.3	29.7	1.0	21.8	1.0	7.6	39.4