

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) \geq 10V, ID are typically less than 1.0uA

MECHANICAL DATA

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

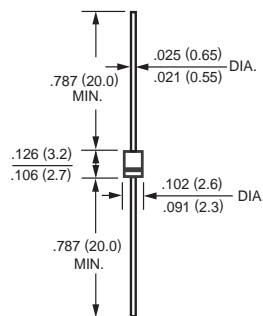
Ratings at 25 °C ambient temperature unless otherwise specified.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



R-1



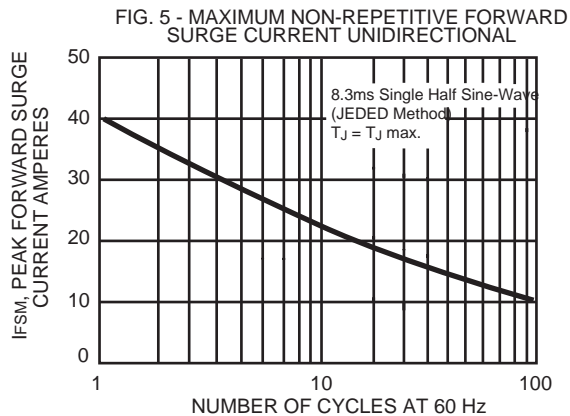
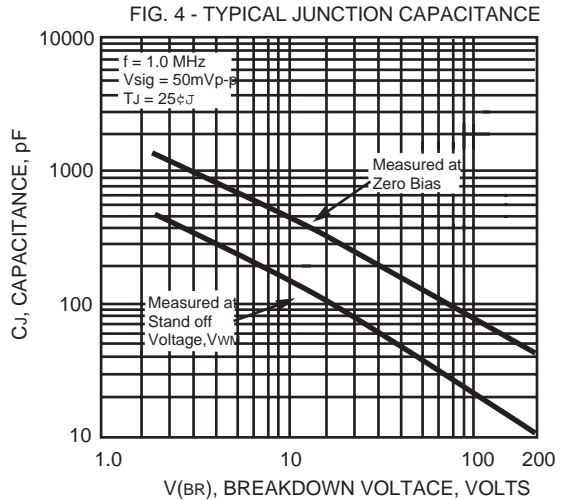
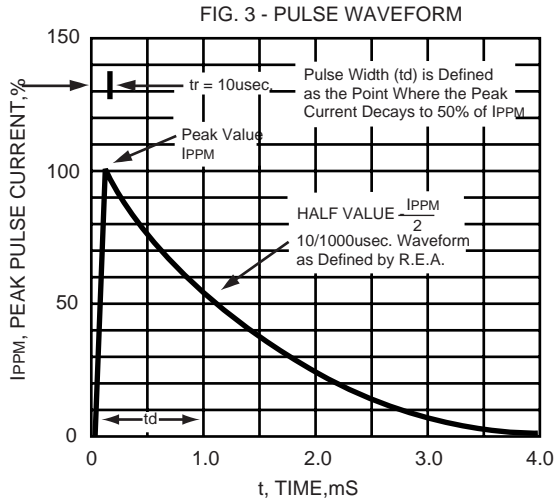
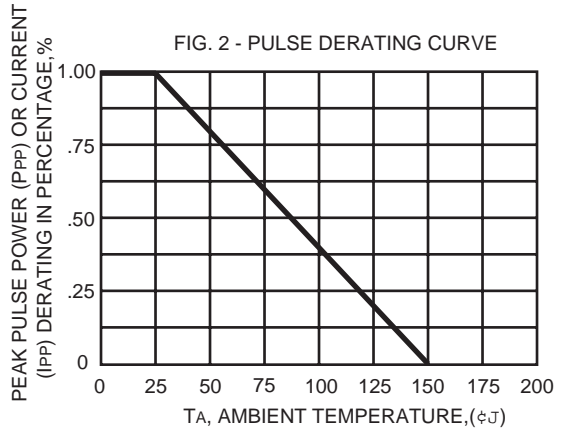
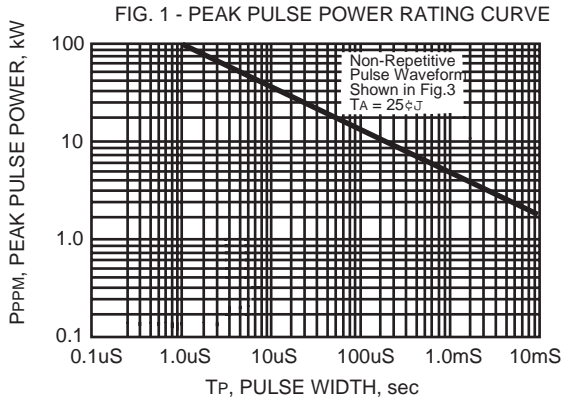
Electrical characteristics apply in uni-directional only

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

| RATINGS | SYMBOL | VALUE | UNITS |
|---|----------|--------------|-------|
| Peak Power Dissipation with a 10/1000uS (Note 1, Fig.1) | PPPM | 300 | Watts |
| Peak Pulse Current with a 10/1000uS waveform (Note 1, 2, Fig.3) | IPPM | SEE TABLE 1 | Amps |
| Steady State Power Dissipation (Note 2) | PM(AV) | 1.0 | Watts |
| Peak Forward Surge Current per Fig.5 (Note 2,4) | IFSM | 40 | Amps |
| Maximum Instantaneous Forward Voltage at 25A (Note 4) | VF | 3.5 | Volts |
| Operating and Storage Temperature Range | TJ, TSTG | -55 to + 150 | °C |

- NOTES : 1. Non-repetitive current pulse, per Fig.3 and derated above TA = 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 TL = 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)



TRANSIENT VOLTAGE SUPPRESSORS

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

| TYPE | Breakdown Voltage | | | Reverse Stand off Voltage VWM (Volts) | Maximum Reverse Leakage at VWM ID(uA) | Maximum Peak Pulse Current IPPM (Amps) | Maximum Clamping Voltage at IPPM Vc (Volts) |
|-----------|-------------------|------|----------|---------------------------------------|---------------------------------------|--|---|
| | VBR (Volts) | | @IT (mA) | | | | |
| | MIN. | MAX. | | | | | |
| TMPG06-27 | 24.3 | 29.7 | 1.0 | 21.8 | 1.0 | 7.6 | 39.4 |