

***Low Capacitance TRANSZORB***  
***Transient Voltage Suppressors***

**FEATURES**

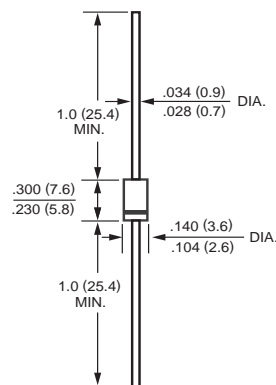
- \* Plastic package has underwriters laboratory
- \* Glass passivated chip construction
- \* 500 watt peak pulse power capability with a 10/1000us waveform, repetition rate (duty cycle):0.01%
- \* Excellent clamping capability
- \* Low incremental surge resistance
- \* Very fast response time
- \* Ideal for data line applications
- \* High temperature soldering guaranteed:  
265 °C /10 seconds, 0.375"(9.5mm) lead length,  
5lbs.(2.3kg) tension

**Mechanical Data**

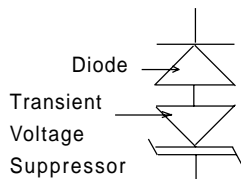
**Case:** JEDEC DO-204AC molded plastic body over passivated junction  
**Terminals:** Solder plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes TVS cathode  
**Mounting position:** Any  
**Weight:** 0.015 oz., 0.4g



**DO-15**



**Schematic**



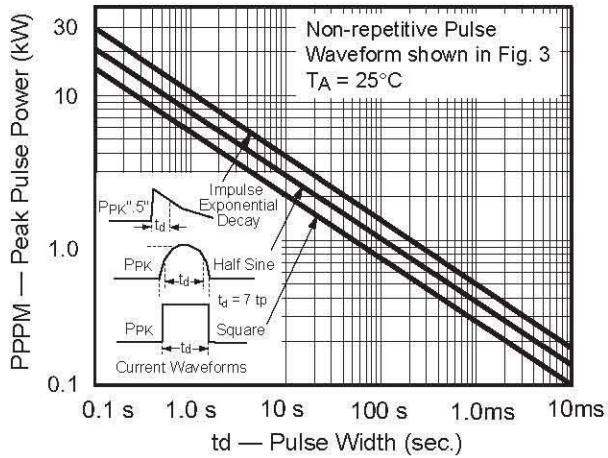
**Maximum Ratings and Thermal Characteristics** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	LIMIT	UNITS
Peak pulse power dissipation with a 10/1000uS waveform (note 1)	PPPM	Minimum 500	Watts
Steady state power dissipation at TL = 75°C lead lengths, .375" ( 9.5 mm ) ( NOTES 2 )	PM(AV)	5.0	Watts
Peak pulse forward surge current with a 10/1000us waveform(fig.3)	IFSM	100	Amps
Operating and storage temperature range	TJ, TSTG	-55 to + 150	°C

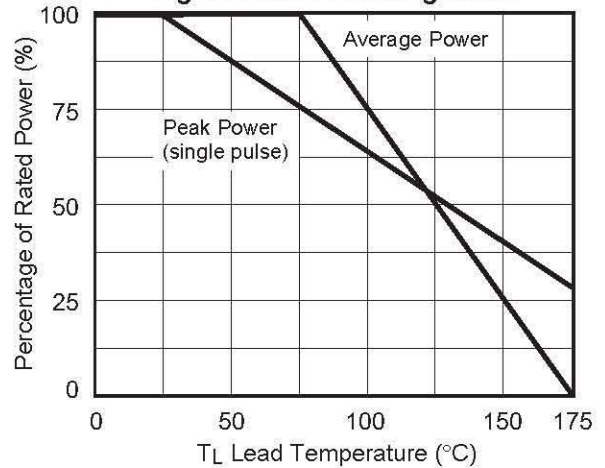
NOTES : 1. Non-repetitive current pulse, per Fig.3 and derated above TA= 25°C per Fig.2  
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

## RATING AND CHARACTERISTIC CURVES (SAC5.0)

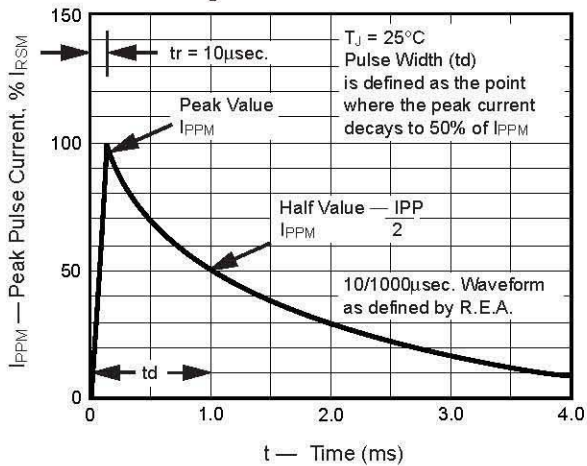
**Fig. 1 – Peak Pulse Power Rating Curve**



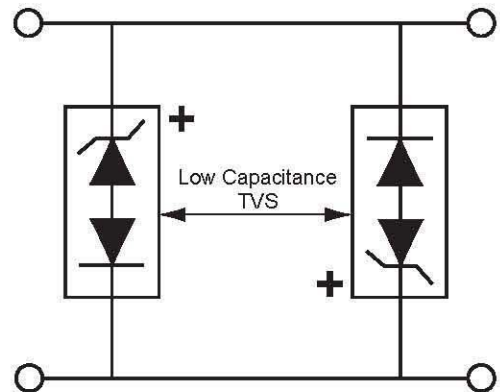
**Fig. 2 - Power Derating Curve**



**Fig. 3 – Pulse Waveform**



**Fig. 4 - AC Line Protection Application**



**Application Note:** Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal line protection.

## ELECTRICAL CHARACTERISTICS

Rectron House No.	Reverse Stand off Voltage VWM * (Volts)	Minimum Breakdown voltage at $I_T=1.0\text{mA}$ V(BR) (V)	Maximum Reverse Leakage at VWM ID ( $\mu\text{A}$ )	Maximum Clamping Voltage at IPPM=5.0 $\mu\text{A}$ VC (Volts)	Maximum Peak Pulse Current IPPM (Amps)	Maximum Junction Capacitance at 0 Volts (PF)	Working Inverse Blocking Voltage VWB (V)	Inverse Blocking Leakage Current VWB IIB(mA)	Peak Inverse Blocking Voltage VPIB (V)
SAC5.0	5.0	7.60	300	10.0	44	50	75	1.0	100

\* Non -repetitive current pulse,per Fig.3 and derated above  $T_A=25$  degree per Fig.2