

LOW CAPACITANCE TRANSZORB
Transient Voltage Suppressors

FEATURES

- * Plastic package has underwriters laboratory
- * Glass passivated chip construction
- * 500 watts 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

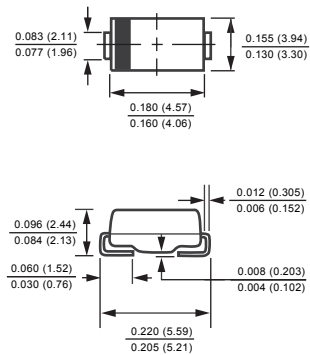
- * Case: JEDEC DO-204AC molded plastic body over passivated junction
- * Terminals: Solder plated axial leads, solderable per MIL-STD-750, Method 2026
- * Polarity: Color band denotes TVS cathode
- * Mounting position: Any
- * Weight: 0.098 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

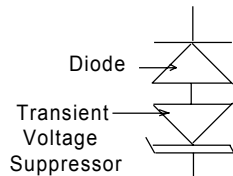
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



DO-214AA



Schematic



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	BSAC5.0	UNITS
Peak Pulse Power Dissipation With a 10/1000uS Waveform (Note 1)	P _{PPM}	Min. 500	Watts
Steady State Power Dissipation at T _L =75°C Lead Lengths .375" (9.5mm) (Note 2)	P _{M(AV)}	5.0	Watts
Peak Pulse Forward Surge Current With a 10/1000uS Waveform (Fig.3)	I _{FSM}	100	Amps
Operating Temperature Range	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 to + 150	°C

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

RATING AND CHARACTERISTIC CURVES (BSAC5.0)

Fig. 1 – Peak Pulse Power Rating Curve

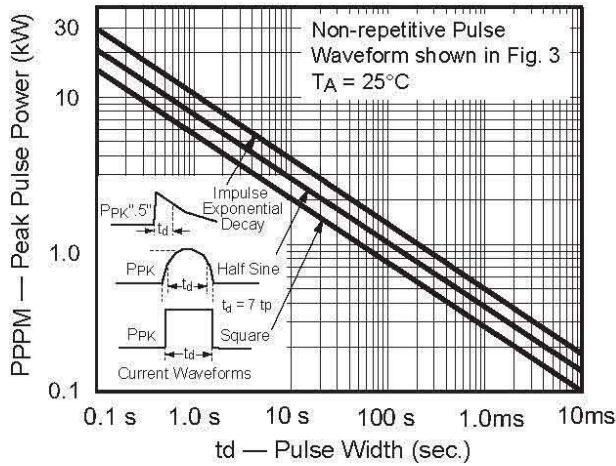


Fig. 2 - Power Derating Curve

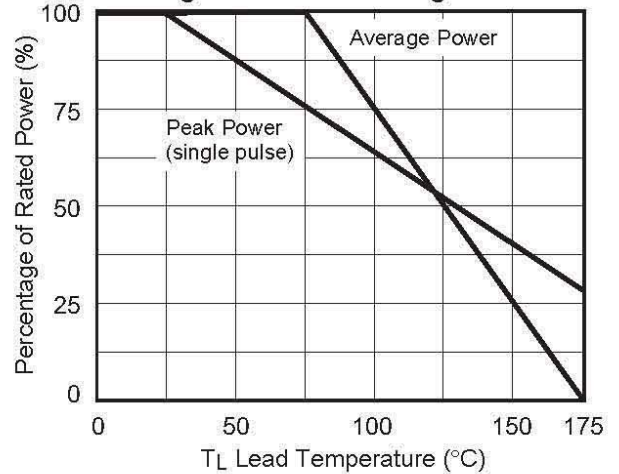


Fig. 3 – Pulse Waveform

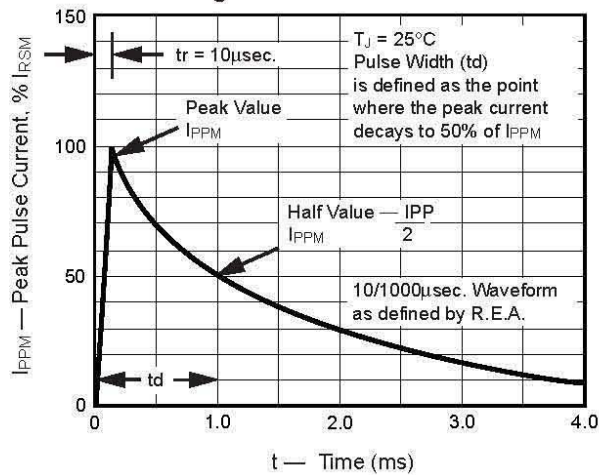
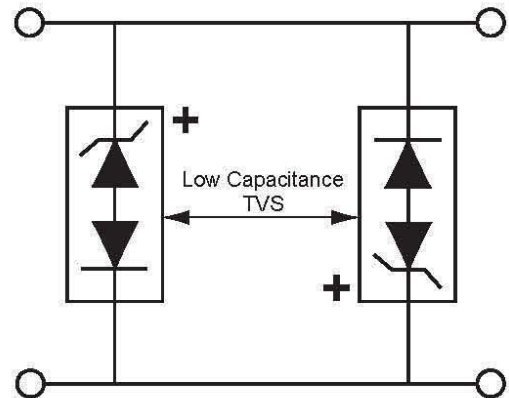


Fig. 4 - AC Line Protection Application



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 $I_T=1.0mA$ V(BR) (V)	Maximum Reverse Leakage at VWM ID (uA)	Maximum Clamping Voltage at IPPM=5.0A 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)
BSAC5.0	5.0	7.60	300	10.0	44	50	75	1.0	100

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

Mounting Pad Layout



Dimensions in inches and (millimeters)

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