BSACxxx

LOW CAPACITANCE TRANSZORB

Transient Voltage Suppressors

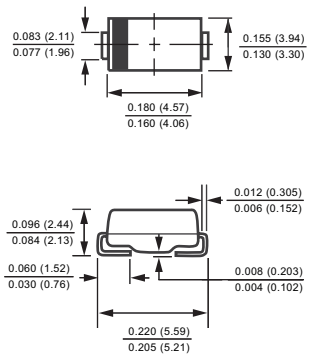
FEATURES

* 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

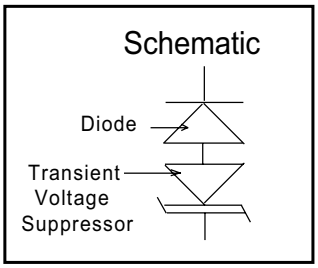
DO-214AA



Dimensions in inches and (millimeters)

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%.



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

RATINGS	SYMBOL	BSACxxx	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 (**BSACxxx**)

Fig. 1 – Peak Pulse Power Rating Curve

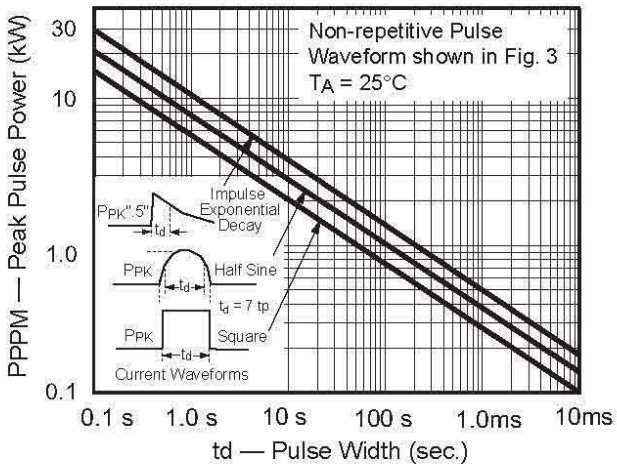


Fig. 2 - Power Derating Curve

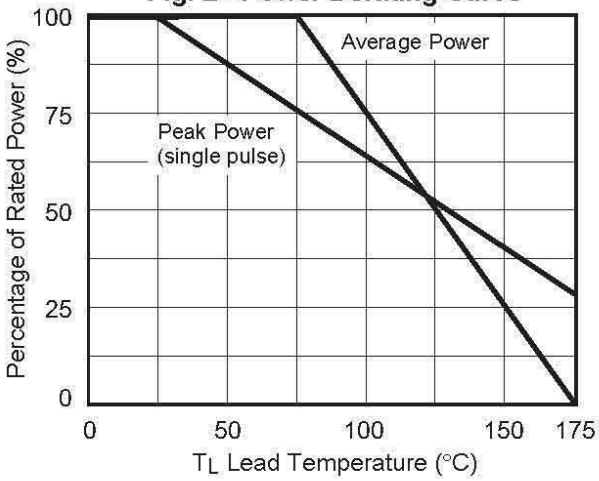


Fig. 3 – Pulse Waveform

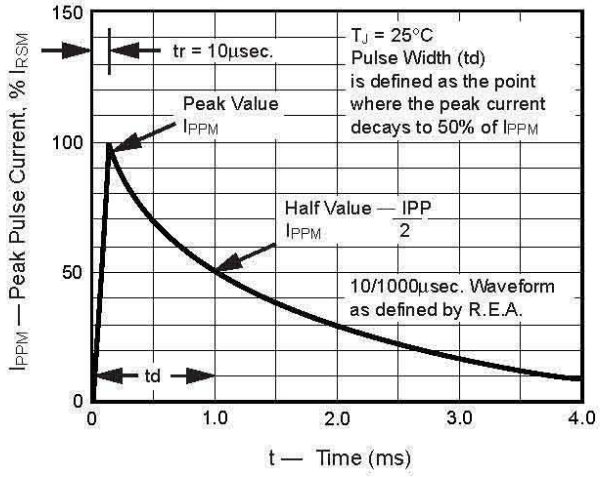
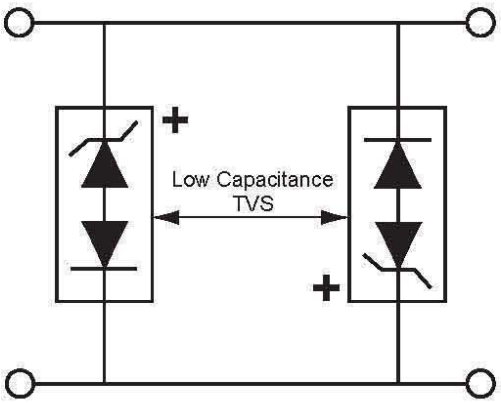


Fig. 4 - AC Line Protection Application



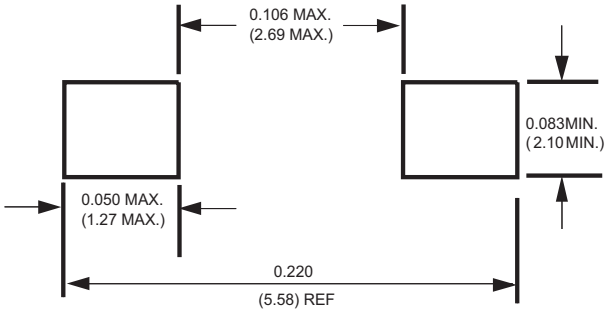
Application Note: Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal line protection.

ELECTRICAL CHARACTERISTICS

House No.	Reverse Stand off Voltage V_{WM} * (Volts)	Minimum Breakdown voltage at I_T=1.0mA $V_{(BR)}$ (V)	Maximum Reverse Leakage at V_{WM} I_D (uA)	Maximum Clamping Voltage at IPPM=5.0uA V_C (Volts)	Maximum Peak Pulse Current IPPM (Amps)	Maximum Junction Capacitance at 0 Volts (PF)	Working Inverse Blocking Voltage V_{WB} (V)	Inverse Blocking Leakage Current V_{WB} I_{IB}(mA)	Peak Inverse Blocking Voltage V_{PIB} (V)
BSACxxx	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)