SMAJ530 THRU SMAJ550

Surface Mount TransZorb™ Transient Voltage Suppressors

Voltage Range
530 to 550 Volts
300 Watts Peak Power

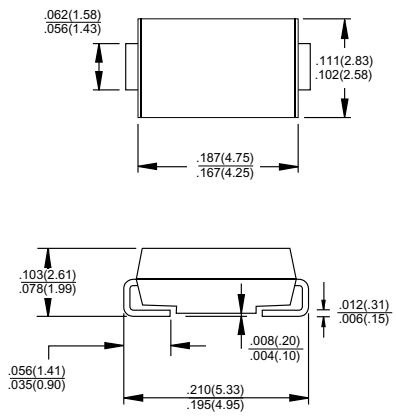
Features

- ✧ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Protects power IC controllers such as TOPSwitch®
- ✧ Excellent clamping capability
- ✧ Glass passivated junction
- ✧ High temperature soldering guaranteed: 260℃ / 10 seconds at terminals
- ✧ Available in unidirectional only

Mechanical Data

- ✧ Case: JEDEC DO-201AC molded plastic body over passivated junction
- ✧ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ✧ Polarity: The band denotes the cathode, which is positive with respect to the anode under normal TVS operation
- ✧ Mounting position: Any
- ✧ Weight: 0.002 ounce, 0.064 gram

SMA/DO-214AC



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics TA= 25℃ Unless Otherwise Noted.

Type Number	Symbol	SMAJ530	SMAJ550	Units
Device Marking Code		HD	SB	
Peak Pulse Power Dissipation (Note 1, 2 Fig. 1)	P_{PPM}	Minimum 300		Watts
Steady State Power Dissipation at T_L=75 °C	$P_{M(AV)}$	1.0		Watts
Stand-off Voltage	V_{WM}	477	495	V
Typical Thermal resistance Junction-to-lead	R θ JL	27		℃/W
Typical Thermal Resistance Junction-to-ambient	R θ JA	75		℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150		℃

Electrical Characteristics

Type Number	Symbol	SMAJ530	SMAJ550	Units
Minimum Breakdown Voltage at 100uA	$V_{(BR)}$	530	550	V
Max. Clamping Voltage at 400mA, 10/1000uS-Waveform	V_C	760		V
Maximum DC Reverse Leakage Current at V_{WM}	I_D	5.0		uA
Typical Temperature Coefficient of V_{BR}		650		mV℃
Typical Capacitance (Note 3) at 0V 200V	C_J	90 7.5		pF

Notes: 1. Non Repetitive Current Pulse per Fig. 3 and Derated above 25°C per Fig. 2.
2. Peak Pulse Power Waveform is 10 / 1000uS.
3. Measured at 1MHz.

RATINGS AND CHARACTERISTIC CURVES (SMAJ530 THRU SMAJ550)

FIG.1- PEAK PULSE POWER RATING CURVE

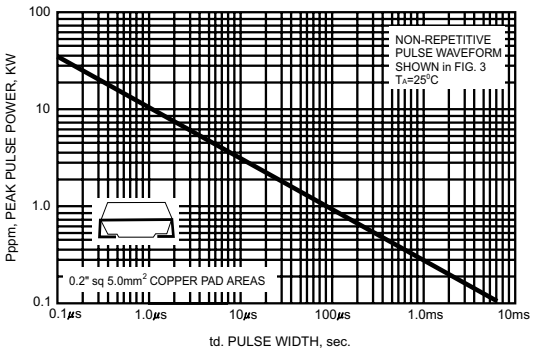


FIG.2- PULSE DERATING CURVE

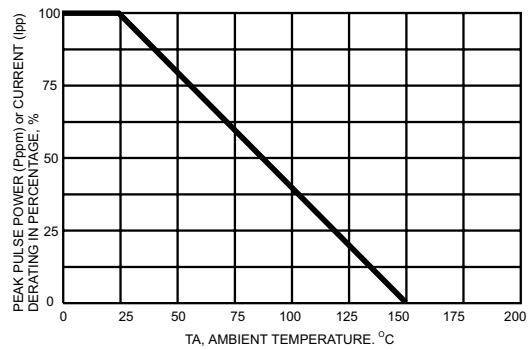


FIG.3- PULSE WAVEFORM