FEATURE

- Plastic package.
- Glass passivated chip junction in SMA Package
- Excellent clamping capability.
- Low zener impedance.
- 400W peak pulse power capability on 10/1000μs waveform.
- Typical IR less than 1μA above 13V.
- Fast response time: typically less than 1.0ps from 0 Volts to BV min.
- High temperature soldering guaranteed: 265℃/10 seconds

MECHANICAL DATE

- Case: JEDEC SMA Molded Plastic.
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026.
- Polarity: Color band denoted cathode except bidirectional.
- Mounting Position: Any.

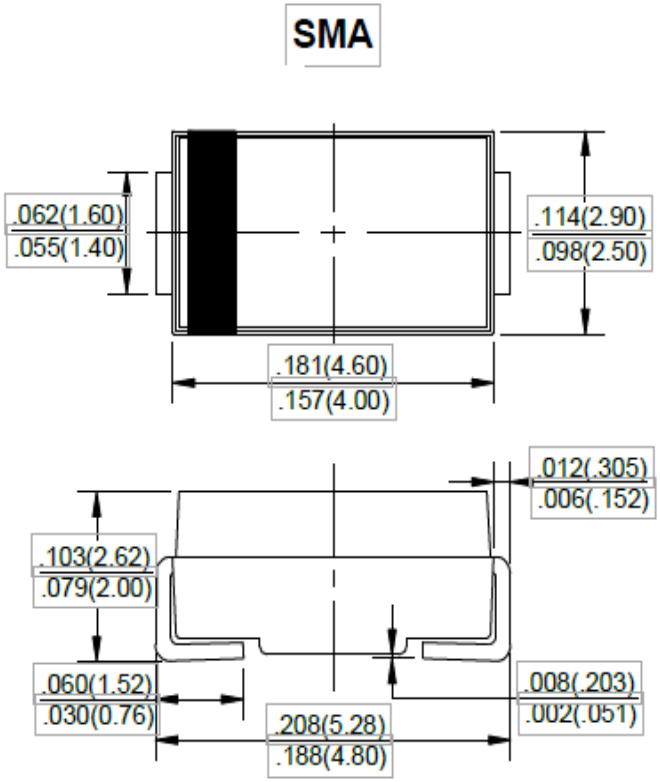
MAXIMUM RATINGS AND CHRACTERISTICS

Ratings at 25ć ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000us waveform (Note1, Fig.1).	P_{PPM}	Minimum 400	Watts
Peak Pulse Current of on 10/1000us waveform. (Note1, Fig.3)	I_{PPM}	See Table	Amps
Steady State Power Dissipation at TL =75℃, Lead lengths.375″, (9.5mm) (Fig.5).	$P_{M(AV)}$	3.3	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load, (JEDEC Method) (Note 2, Fig.6).	I_{FSM}	40	Amps
Operating junction and Storage Temperature Range.	T_J, T_{STG}	-55 to +150	℃

Notes:

1. Non-repetitive current pulse, per Fig. 3 and derated above TA = 25℃ per Fig. 2.
2. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.



Dimensions in inches and (millimeters)

ELECTRICAL CHARACTERISTICS

Part Number	Marking	Reverse Stand-Off Voltage	Breakdown Voltage NIN.@IT	Breakdown Voltage MAX.@IT	Reverse Leakage @VRWM	Test Current	Peak Pulse Current	Maximum Clamping Voltage @IPP
BI	BI	VR(V)	VBL(V)	VBH(V)	IR(uA)	IT(mA)	IPP(A)	VCH(V)
SMAJ6.8CA	WK	6.5	7.22	7.98	500	10	35.7	11.2

RATINGS AND CHARACTERISTIC CURVES (TA=25℃ unless otherwise noted)

Fig. 1 – Peak Pulse Power Rating Curve

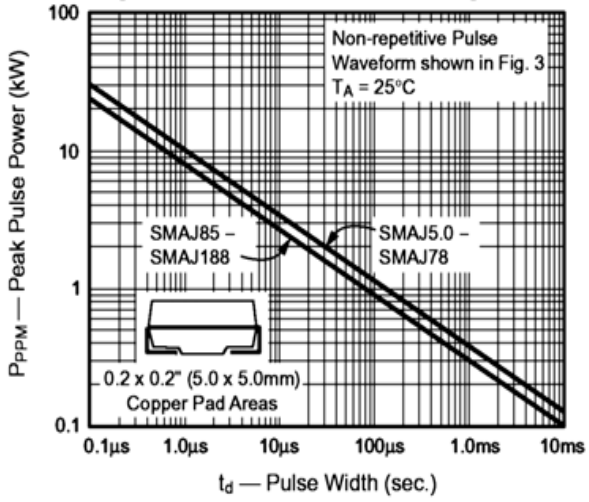


Fig. 2 – Pulse Derating Curve

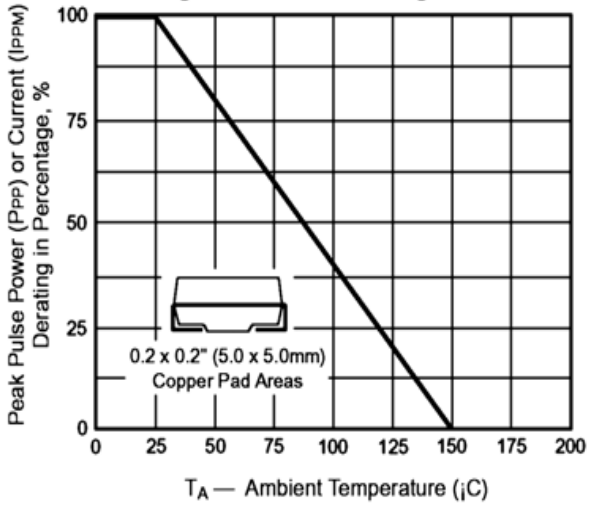


Fig. 3 – Pulse Waveform

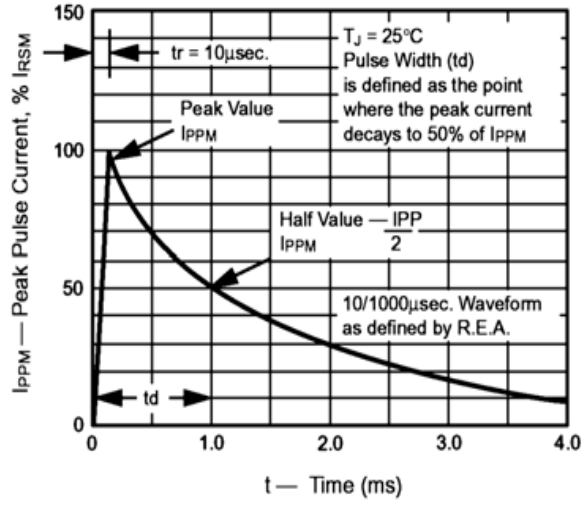


Fig. 4 – Typical Junction Capacitance

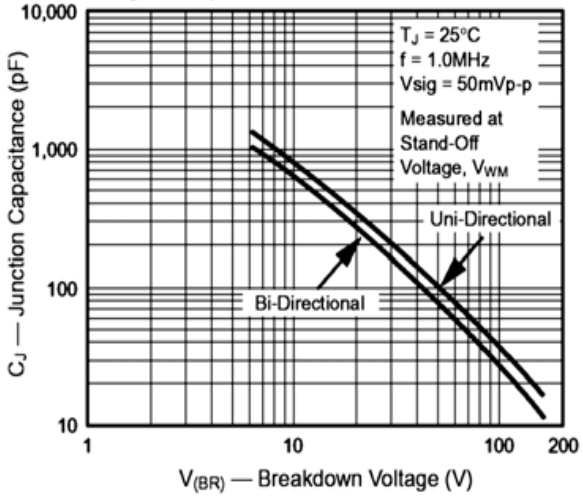


Fig. 5 – Typical Transient Thermal Impedance

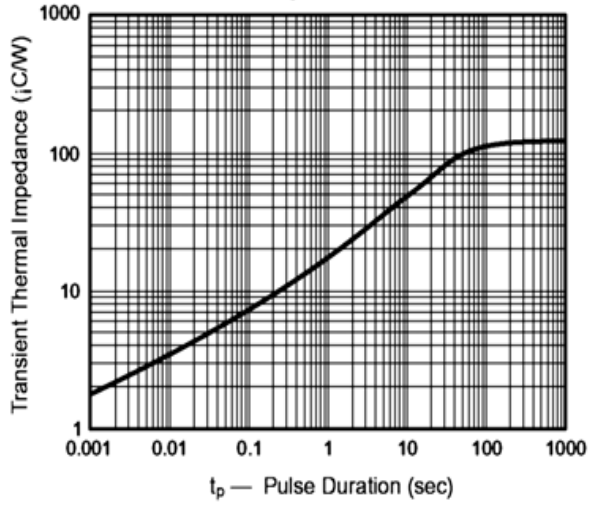


Fig. 6 - Maximum Non-Repetitive Forward Surge Current Uni-Directional Only