SMAJ6.8A(CA)

Surface Mount transient Volage Suppessor Diode

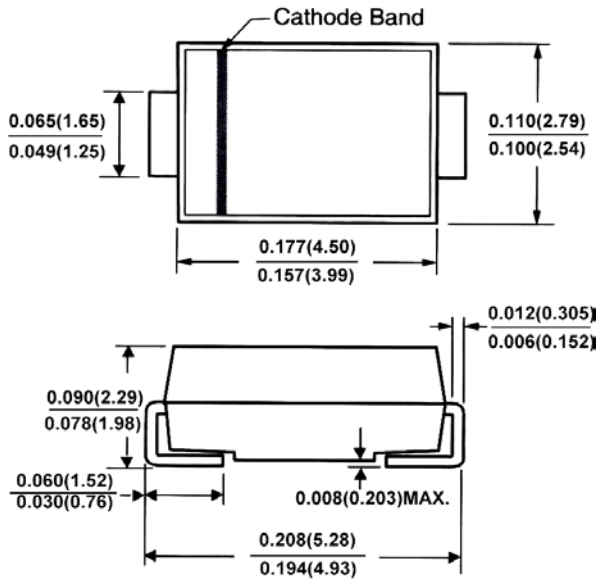
DO-214AA/SMA

Features

- Glass Passivated Die Construction
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



Dimensions in inches (millimeters)

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation (Non repetitive current pulse derated above T_A = 25°C) (Note 1)	P_{PK}	400	W
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) (Notes 1, 2, & 3)	I_{FSM}	40	A
Instantaneous Forward Voltage @ I_{PP} = 35A (Notes 1, 2, & 3)	V_F	3.5	V
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150	°C

Notes: 1. Valid provided that terminals are kept at ambient temperature.
2. Measured with 8.3ms single half sine-wave. Duty cycle = 4 pulses per minute maximum.
3. Unidirectional units only.

Electrical Characteristics T_A = 25°C unless otherwise specified

Part Number		Marking		V_R	I_R@ V_R	V_{BR}@I_T		I_T	V_C@ I_{PP}	I_{PP}①
Uni-polar	Bi-polar	Uni	Bi	(V)	μA	min(V)	max(V)	mA	V	A
SMAJ6.8A	SMAJ6.8CA	6V8A	6V8CA	5.8	120	6.45	7.14	10	10.5	39.0

Ratings and Characteristic Curves T_A=25°C unless otherwise noted

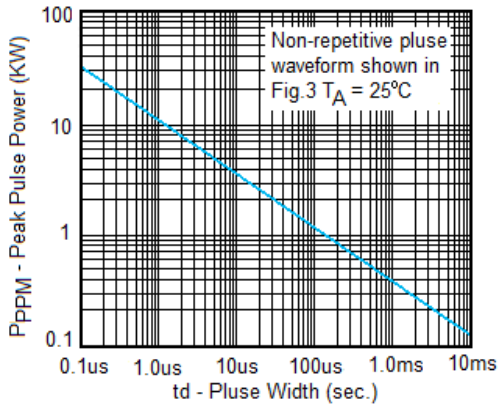


Fig. 1 Peak Pulse Power Rating

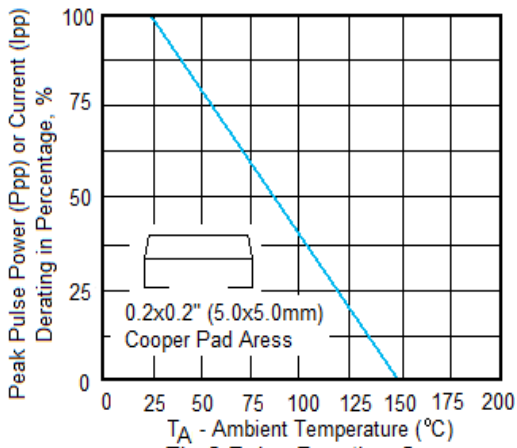


Fig.2 Pulse Derating Cure

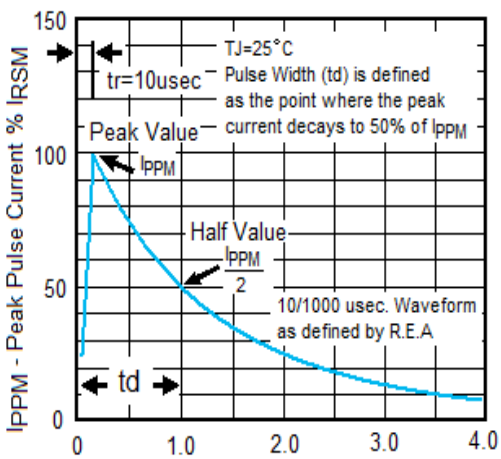


Fig.3 Pulse Waveform

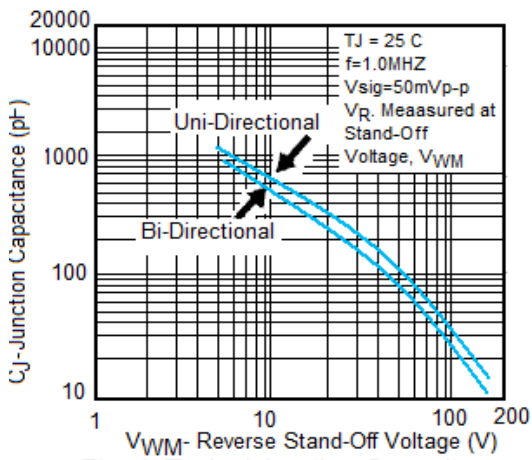


Fig. 4- Typical Junction Capacitance