



P6SMA6.8A

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR POWER 600 Watts

STAND-OFF VOLTAGE

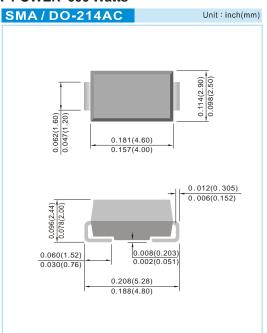
6.8 Volts

FEATURES

- For surface mounted applications in order to optimize board space.
- Low profile package
- Built-in strain relief
- Glass passivated junction
- · Low inductance
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC DO-214AC, Molded plastic over passivated junction.
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard Packaging:12mm tape (EIA-481)
- Weight: 0.002 ounce, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation ($I_{PP} \times V_{CMAX}$) at $T_A = 25$ °C (Notes 1,2,4)	P _{PP}	600	Watts
Peak Pulse Current on 10/1000μs waveform (Notes 1)	I _{PPM}	See table	Amps
Peak Forward Surge Current (Notes 3)	I _{FSM}	80	Amps
Typical Thermal Resistance Junction to Air (Notes 2)	R _{eJA}	123	°C / W
Operating Junction and Storage Temperature Range	T_{J}, T_{STG}	-55 to +150	°C

Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Clamp Voltage 10/1000μs		Peak Pulse Current 10/1000μs	Marking Code
	Vrwm	VBR @ IT			1- @ \/	Vc @ Ipp		1	
		Min.	Max.	lτ	Ir @ Vrwm	Тур.	Max.	I PP	
	٧	V	V	m A	μΑ	V	٧	Α	
P6SMA6.8A	5.8	6.45	7.14	10	800	8.8	10.5	57	AZB

NOTES:

- 1. Non-repetitive current pulse.
- 2. Mounted on copper pads to each terminal.
- 3. 8.3ms single half sine-wave, or equivalent square wave, duty cycle = 4 pulses per minutes maximum.
- 4. Peak pulse power waveform is 10/1000μS.

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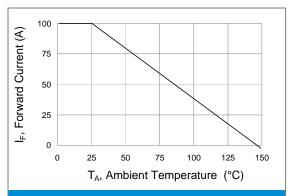


Fig.1 Forward Current Derating Curve

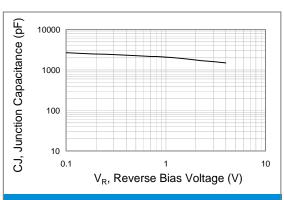


Fig.2 Typical Junction Capacitance

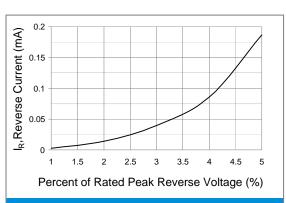


Fig.3 Typical Reverse Characteristics

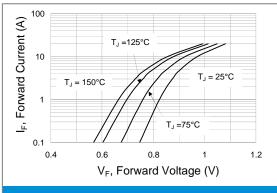


Fig.4 Typical Forward Characteristics

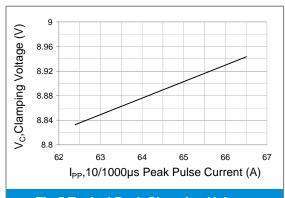
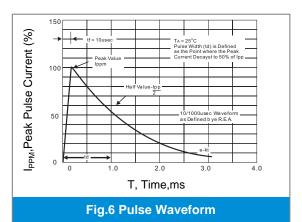


Fig.5 Typical Peak Clamping Voltage



Number Of Cyeles at 60Hz

Fig.7 Maximum Non-Repetitive Peak
Forward Surge Current

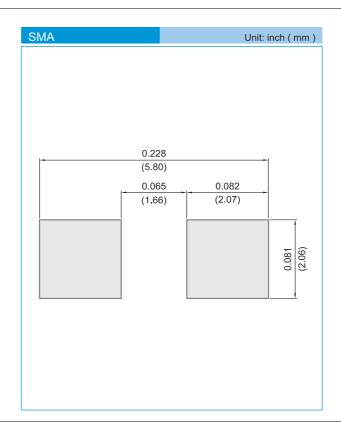
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MOUNTING PAD LAYOUT



ORDER INFORMATION

Packing information

T/R - 7.5K per 13" plastic Reel

T/R - 1.8Kper 7" plastic Reel

LEGAL STATEMENT

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