

P6SMA6.8A

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR POWER 600 Watts

STAND-OFF VOLTAGE

6.8 Volts

SMA / DO-214AC

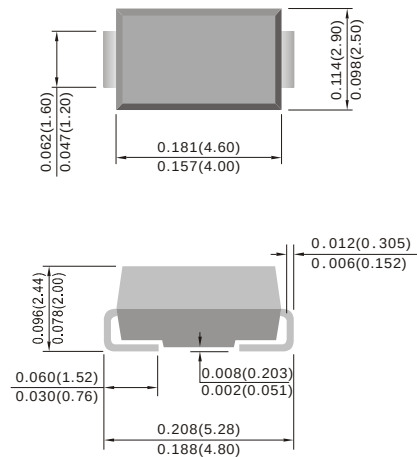
Unit : inch(mm)

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 ($I_{PP} \times V_{C_{MAX}}$) at $T_A = 25^\circ\text{C}$ (Notes 1,2,4)	P_{PP}	600	Watts
Peak Pulse Current on 10/1000 μs 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_{JA}	123	$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Clamp Voltage 10/1000μs		Peak Pulse Current 10/1000μs	Marking Code
	V _{RWM}	V _{BR} @ I _T		I _T	I _R @ V _{RWM}	V _C @ I _{PP}		I _{PP}	
		Min.	Max.			Typ.	Max.		
	V	V	V	mA	μA	V	V	A	
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 10/1000 μs .

P6SMA6.8A

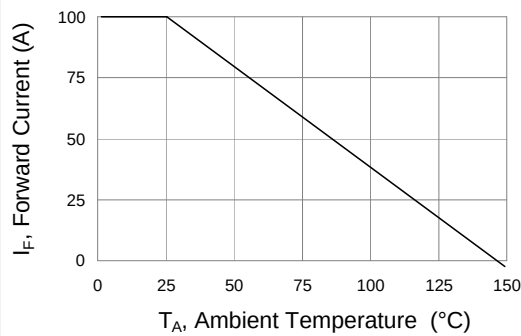


Fig.1 Forward Current Derating Curve

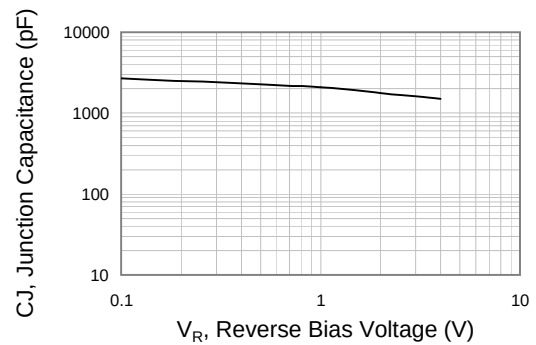


Fig.2 Typical Junction Capacitance

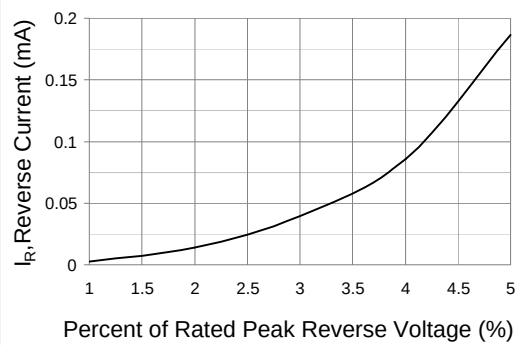


Fig.3 Typical Reverse Characteristics

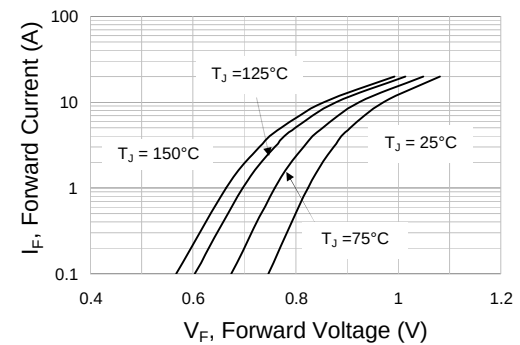


Fig.4 Typical Forward Characteristics

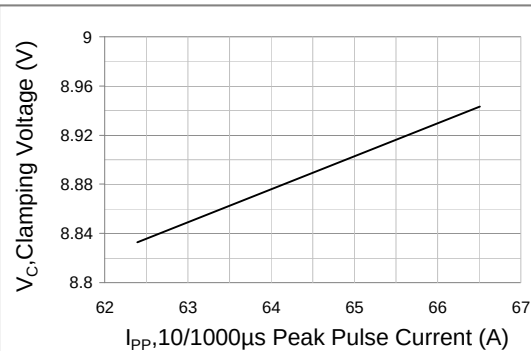


Fig.5 Typical Peak Clamping Voltage

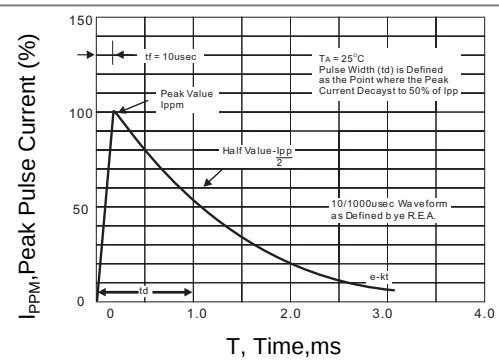


Fig.6 Pulse Waveform

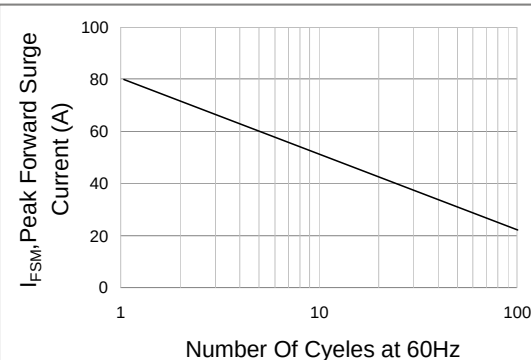
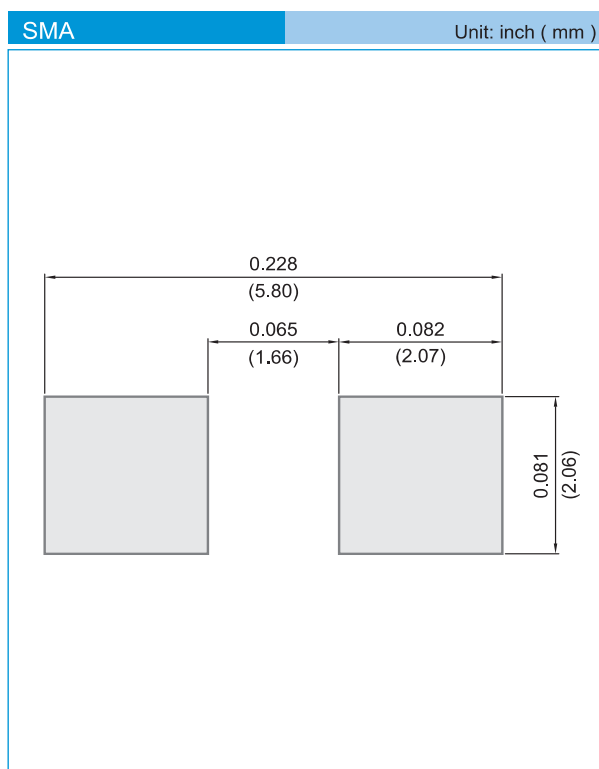


Fig.7 Maximum Non-Repetitive Peak Forward Surge Current

P6SMA6.8A

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 7.5K per 13" plastic Reel
 - T/R - 1.8Kper 7" plastic Reel

LEGAL STATEMENT

Copyright PanJit International, Inc 2010

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.