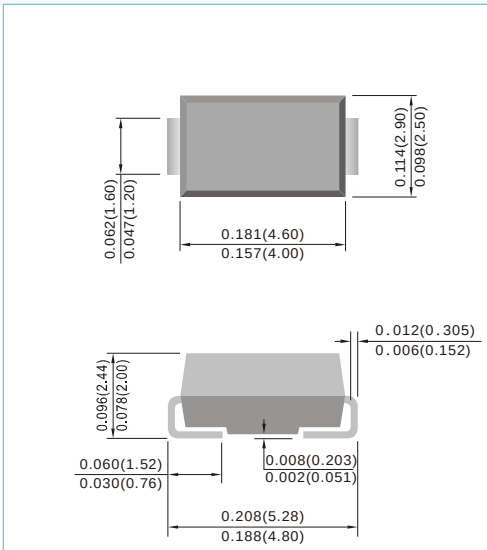
PANJIT SEMI CONDUCTOR

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} x 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)	$R_{\theta JA}$	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
	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 10/1000μS.

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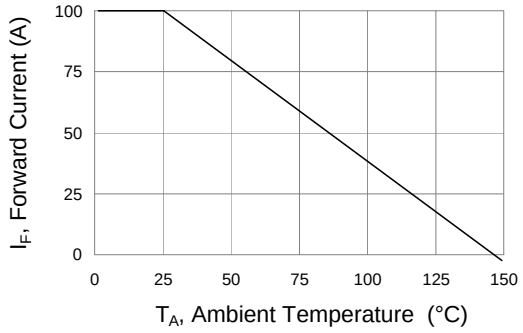

Fig.1 Forward Current Derating Curve

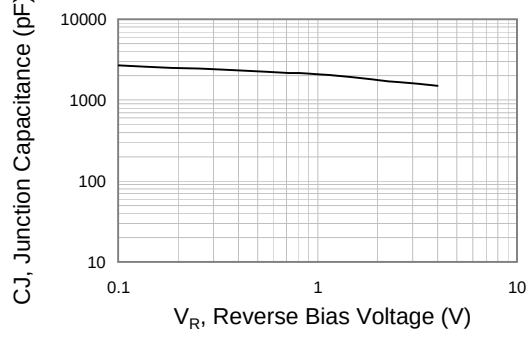

Fig.2 Typical Junction Capacitance

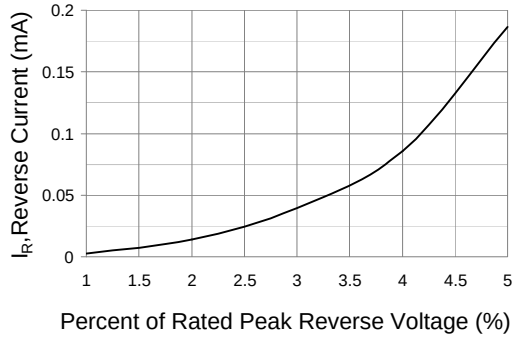

Fig.3 Typical Reverse Characteristics

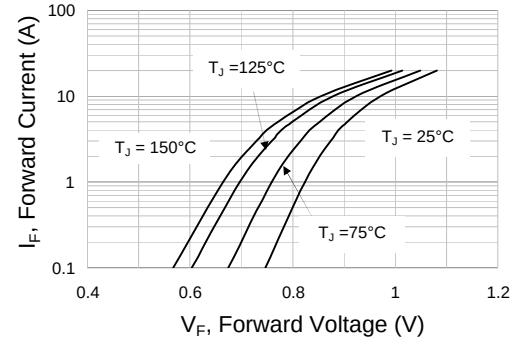

Fig.4 Typical Forward Characteristics

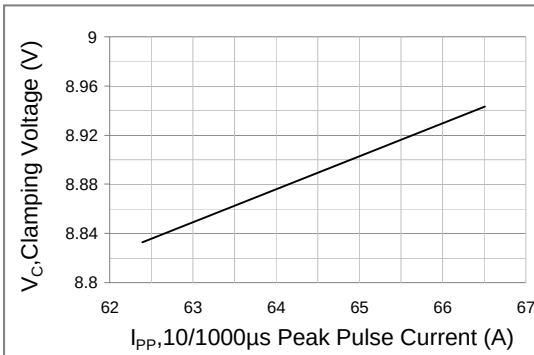

Fig.5 Typical Peak Clamping Voltage

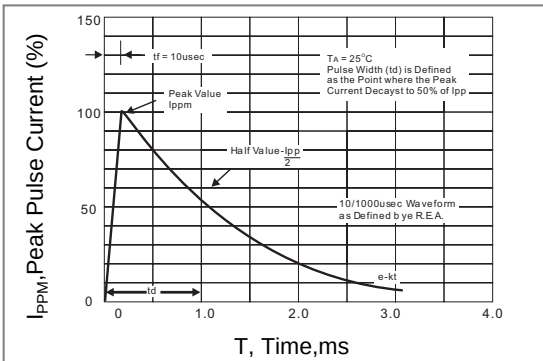

Fig.6 Pulse Waveform

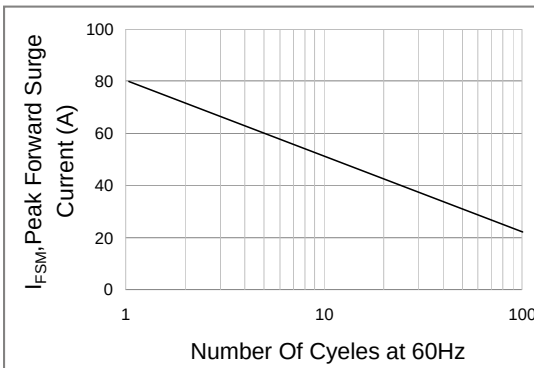

Fig.7 Maximum Non-Repetitive Peak Forward Surge Current

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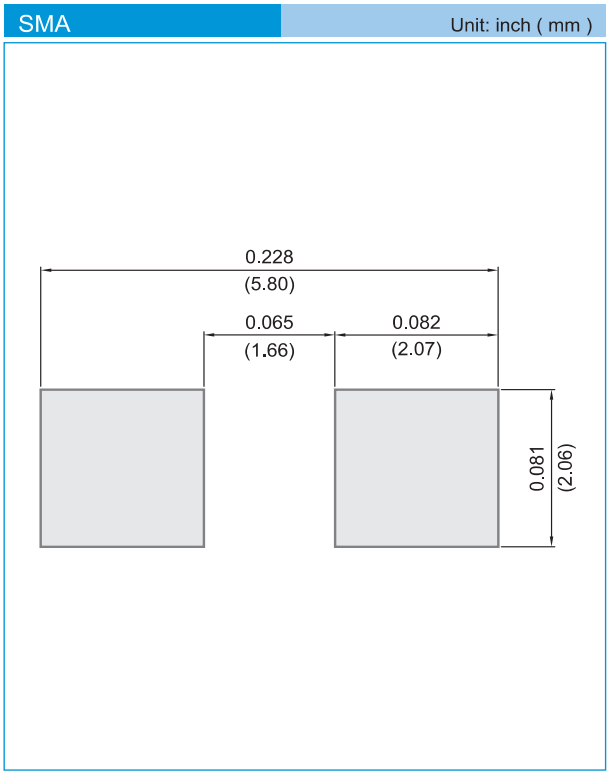
MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information

  T/R - 7.5K per 13" plastic Reel

  T/R - 1.8Kper 7" plastic Reel

LEGAL STATEMENT