



P6SMAFJ5.0A SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR POWER 600 Watts

STAND-OFF VOLTAGE

5-8 Volts

SMAF

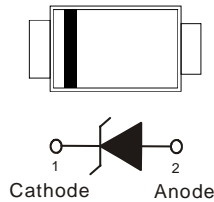
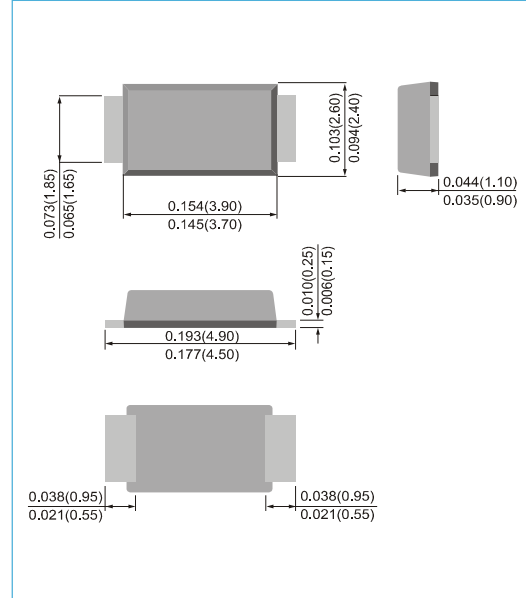
Unit : inch(mm)

FEATURES

- For surface mounted applications in order to optimize board space.
- Low profile package
- Glass passivated junction
- Low inductance
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering : 260°C /10 seconds at terminals
- Ultra Thin Profile Package for Space Constrained Utilization
- Package suitable for Automated Handling
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : SMAF, Plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.0011 ounces, 0.0328grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on T _A =25°C (Note 1,2,4, Fig1)	P _{PPM}	600	W
Peak Forward Surge Current (Note 2,3)	I _{FSM}	100	A
Peak Pulse Current on 10/1000 us waveform (Note 1, Fig 3)	I _{PPM}	see Table 1	A
ESD Voltage per IEC6100-4-2	Contact	+8	kV
	Air	±15	
Typical Thermal Resistance Junction to Ambient(Note 2)	R _{θJA}	150	°C/W
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-55 to +150	°C

NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above T_A = 25 °C per Fig. 2.
2. Mounted on FR-4 PCB single-sided copper, mini pad.
3. Peak Forward Surge Current : 8.3ms single half sine-wave Superimposed on rated load (JEDEC method).
4. Peak pulse power waveform is 10/1000µS.
5. A transient suppressor is selected according to the working peak reverse voltage (V_{RWM}), which should be equal to or greater than the DC or continuous peak operating voltage level.



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Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current	Marking Code
	V _{RWM} (Note 5)	V _{BR} @ I _T		I _T	I _R @ V _{RWM}	V _C @ I _{PP}	I _{PP}	
		Min.	Max.					
	V	V	V	mA	μA	V	A	
P6SMAFJ5.0A	5	6.4	7.25	10	800	9.2	65.2	FKES
P6SMAFJ6.0A	6	6.67	7.67	10	800	10.3	58.3	FKGS
P6SMAFJ6.5A	6.5	7.22	8.3	10	500	11.2	53.6	FKKS
P6SMAFJ7.0A	7	7.78	8.95	10	200	12	50	FKMS
P6SMAFJ7.5A	7.5	8.33	9.58	1	100	12.9	46.5	FKPS
P6SMAFJ8.0A	8	8.89	10.23	1	50	13.6	44.1	FKRS



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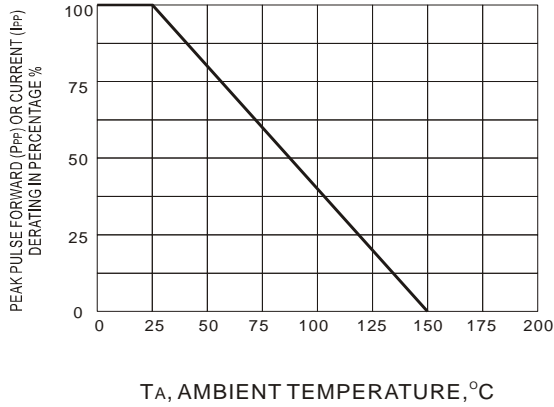


Fig.1 DERATING CURVE

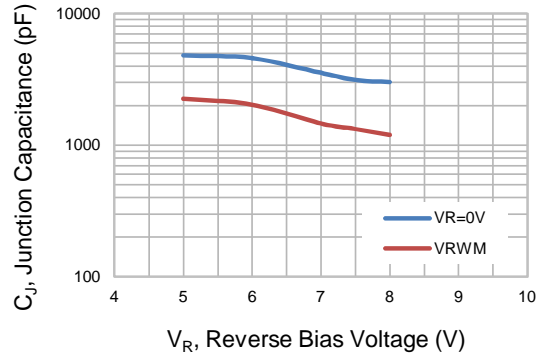


Fig.2 TYPICAL JUNCTION CAPACITANCE

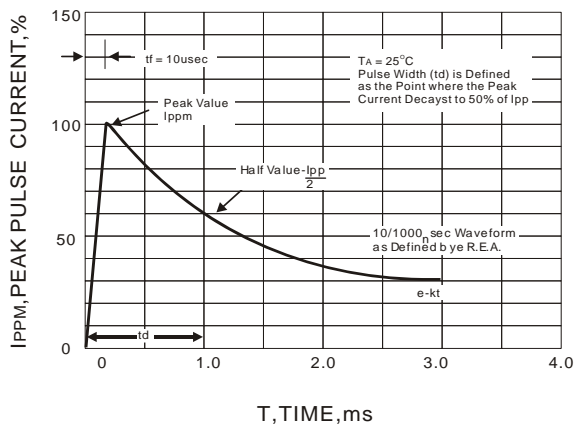


Fig.3 PULSE WAVEFORM

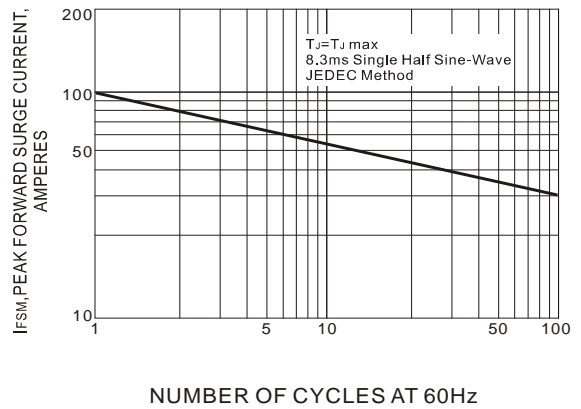


Fig.4 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

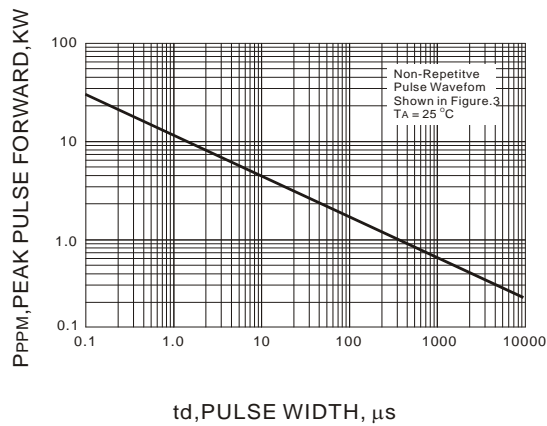
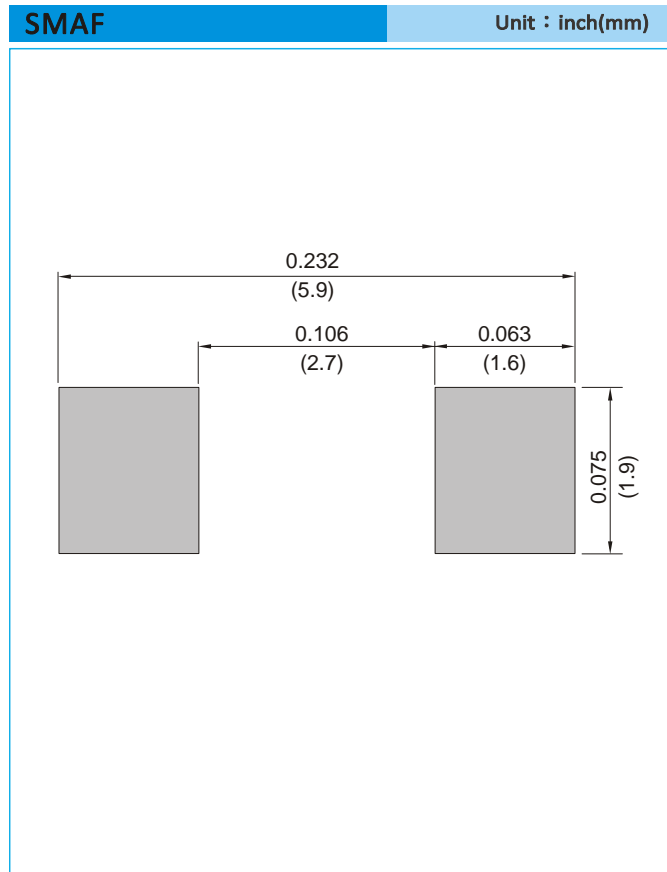


Fig.5 PEAK PULSE POWER RATING CURVE



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 10K per 13" plastic Reel
T/R - 3K per 7" plastic Reel



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Part No_packing code_Version

P6SMAFJ5.0A_R1_00001

P6SMAFJ5.0A_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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