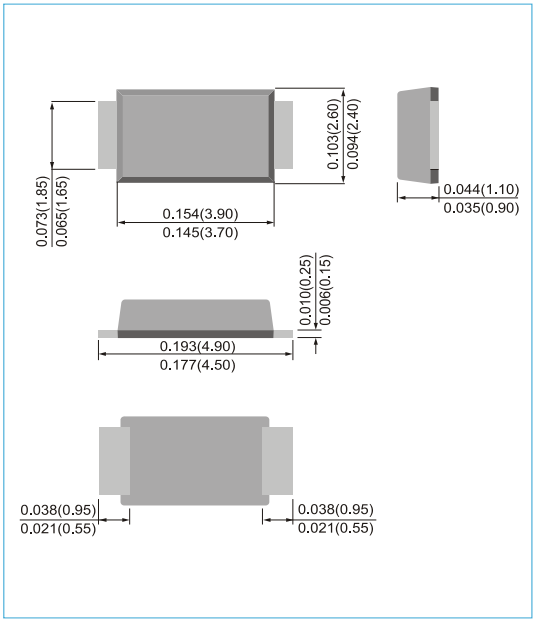
P4SMAFJ SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR POWER 400 Watts

STAND-OFF VOLTAGE | **8.5 to 170 Volts**

SMAF Unit : inch(mm)

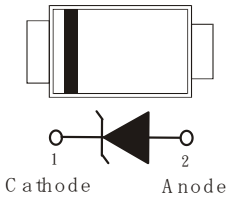


FEATURES

- 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-O
- High temperature soldering : 260°C /10 seconds at terminals
- Lead free in comply with EU RoHS 2002/95/EC directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SMAF, Plastic
- Terminals:Solder plated,solderable per MIL-STD-750,Method2026
- 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}	400	W
Peak Forward Surge Current (Note 3,Fig 5)	I_{FSM}	40	A
Peak Pulse Current on 10/1000 us waveform (Note 1, Fig 2)	I_{PPM}	see Table 1	A
Typical Junction capacitance at V_R=4V, f=1MHz	C_J	390	pF
ESD Voltage per IEC6100-4-2 Contact Air	V_{ESD} V_{ESD}	±8 ±15	kV
Typical Thermal Resistance Junction to Ambient(Note 2)	$R_{\Theta JA}$	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.

P4SMAFJ SERIES

Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current	Marking Code
	V_{RWM}	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**	
400W Transient Voltage Suppressor								
P4SMAFJ8.5A	8.50	9.44	10.82	1	10	14.4	27.7	HT
P4SMAFJ9.0A	9	10	11.5	1	5	15.4	26	HV
P4SMAFJ10A	10	11.1	12.8	1	5	17	23.5	HX
P4SMAFJ11A	11	12.2	14	1	1	18.2	22	HZ
P4SMAFJ12A	12	13.3	15.3	1	1	19.9	20.1	IE
P4SMAFJ13A	13	14.4	16.5	1	1	21.5	18.6	IG
P4SMAFJ14A	14	15.6	17.9	1	1	23.2	17.2	IK
P4SMAFJ15A	15	16.7	19.2	1	1	24.4	16.4	IM
P4SMAFJ16A	16	17.8	20.5	1	1	26	15.3	IP
P4SMAFJ17A	17	18.9	21.7	1	1	27.6	14.5	IR
P4SMAFJ18A	18	20	23.3	1	1	29.2	13.7	IT
P4SMAFJ20A	20	22.2	25.5	1	1	32.4	12.3	IV
P4SMAFJ22A	22	24.4	28	1	1	35.5	11.2	IX
P4SMAFJ24A	24	26.7	30.7	1	1	38.9	10.3	IZ
P4SMAFJ26A	26	28.9	33.2	1	1	42.1	9.5	JE
P4SMAFJ28A	28	31.1	35.8	1	1	45.4	8.8	JG
P4SMAFJ30A	30	33.3	38.3	1	1	48.4	8.3	JK
P4SMAFJ33A	33	36.7	42.2	1	1	53.3	7.5	JM
P4SMAFJ36A	36	40	46	1	1	58.1	6.9	JP
P4SMAFJ40A	40	44.4	51.1	1	1	64.5	6.2	JR
P4SMAFJ43A	43	47.8	54.9	1	1	69.4	5.7	JT
P4SMAFJ45A	45	50	57.5	1	1	72.7	5.5	JV
P4SMAFJ48A	48	53.3	61.3	1	1	77.4	5.2	JX
P4SMAFJ51A	51	56.7	65.2	1	1	82.4	4.9	JZ
P4SMAFJ54A	54	60	69	1	1	87.1	4.6	RE
P4SMAFJ58A	58	64.4	74.1	1	1	93.6	4.3	RG
P4SMAFJ60A	60	66.7	76.7	1	1	96.8	4.1	RK
P4SMAFJ64A	64	71.1	81.8	1	1	103	3.9	RM
P4SMAFJ70A	70	77.8	89.5	1	1	113	3.5	RP
P4SMAFJ75A	75	83.3	95.8	1	1	121	3.3	RR
P4SMAFJ78A	78	86.7	99.7	1	1	126	2.2	RT
P4SMAFJ85A	85	94.4	108.2	1	1	137	2.9	RV
P4SMAFJ90A	90	100	115.5	1	1	146	2.7	RX
P4SMAFJ100A	100	111	128	1	1	162	2.5	RZ
P4SMAFJ110A	110	122	140.5	1	1	177	2.3	SE
P4SMAFJ120A	120	133	153	1	1	193	2	SG
P4SMAFJ130A	130	144	165.5	1	1	209	1.9	SK
P4SMAFJ150A	150	167	192.5	1	1	243	1.6	SM
P4SMAFJ160A	160	178	205	1	1	259	1.5	SP
P4SMAFJ170A	170	189	217.5	1	1	275	1.4	SR

P4SMAFJ SERIES

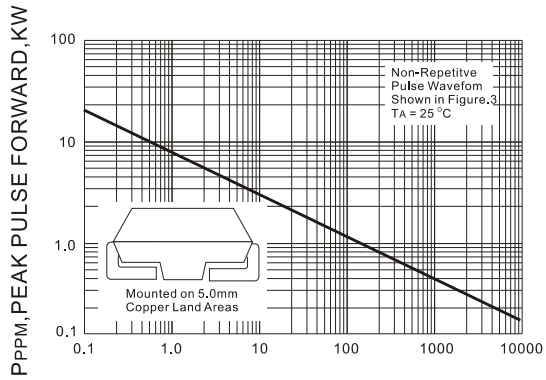


Fig.1 PEAK PULSE POWER RATING CURVE

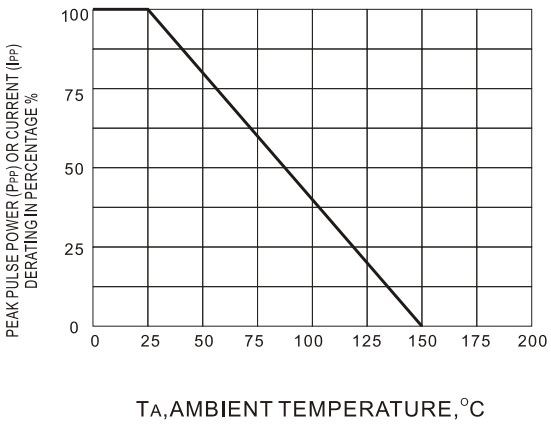


Fig.2 DERATING CURVE

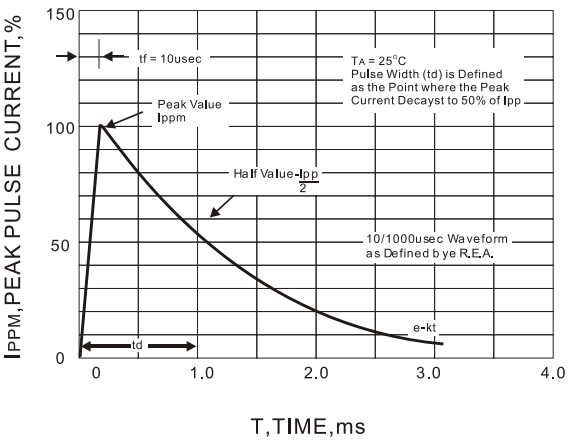


Fig.3 PULSE WAVEFORM

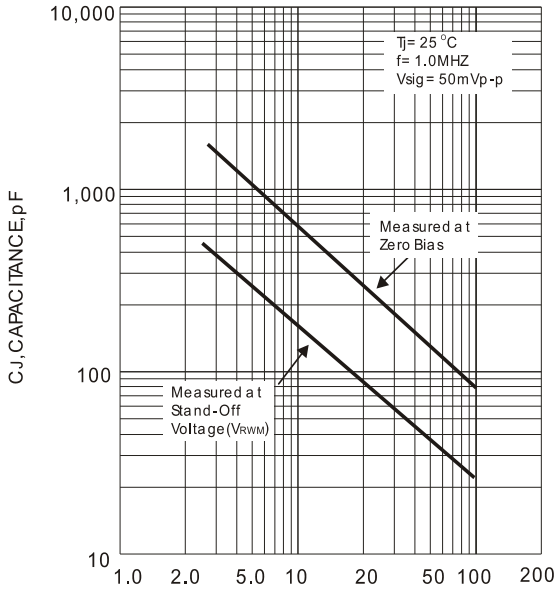


Fig.4 TYPICAL JUNCTION CAPACITANCE

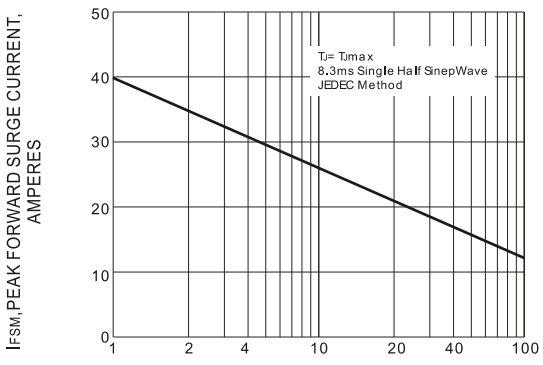
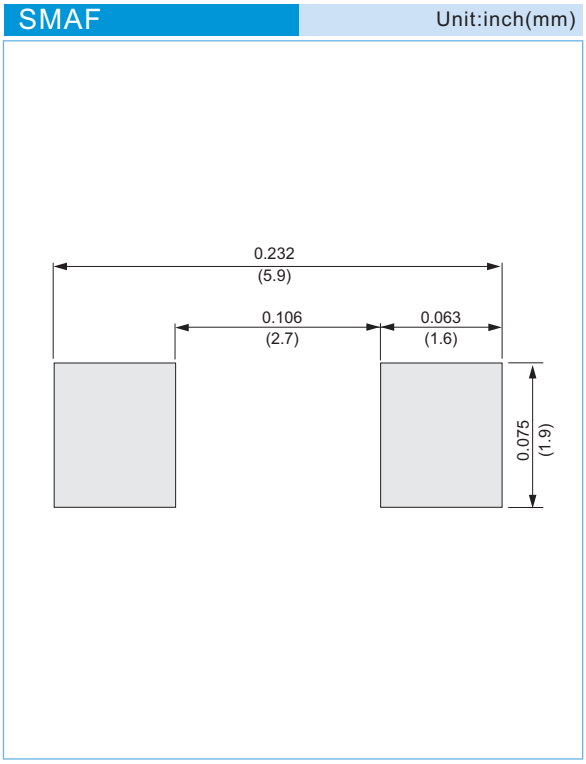


Fig.5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

P4SMAFJ SERIES

MOUNTING PAD LAYOUT

SMAF Unit:inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

P4SMAFJ SERIES

Part No_packing code_Version

P4SMAFJ8.5A_R1_00001
P4SMAFJ8.5A_R2_00001

For example :

RB500V-40_R2_00001

- Part No.
- Packing type means T/R
- Packing size code means 13"
- Version code means HF
- Serial number

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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			

P4SMAFJ SERIES

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