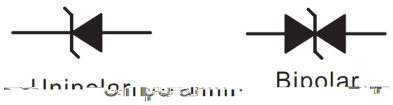
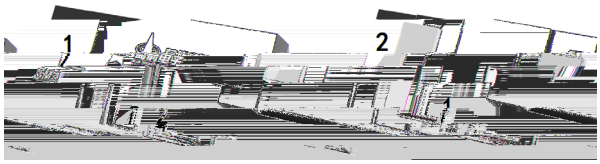
5.0V~440V SMA

Surface mount transient voltage suppressor power 400 watts,Stand-Off Voltage 5.0V~440V ,SMA package.

Glass passivated junction, Low inductance, For surface mounted applications,HF product.

General purpose.





PIN	DESCRIPTION
1	Cathode
2	Anode



See Marking Instructions.

Parameter		Symbol	Rating	Unit
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 4)		I_{FSM} (UNI)	60	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	V_{ESD1}	¤ 30	KV
	Air	V_{ESD2}	¤ 30	KV
Typical Thermal Resistance Junction to Ambient(Note 2)		$R_{\theta JA}$	100	N/W
Operating Junction Temperature and Storage Temperature Range		T_j, T_{stg}	-65 ~ +150	N

Note:

1. Non-repetitive current pulse, per Fig.3 and derated above T_A = 25°C per Fig. 2.
2. Mounted on 5mm^2 copper pads to each terminal.
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.

Type	Reverse Stand-off Voltage	Breakdown Voltage

Type		Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current	Package	
			V_{BR} @ I_T		I_T	I_R @ V_{RRM}	V_C @ I_{PP}	I_{PP}	SMA	
		V_{RRM}	Min	Max					Device Marking Ccode	
UNI	BI	V	V	V	mA	uA	V	A	UNI	BI
SMAJ45A	SMAJ45CA	45	50	55.3	1	1	72.7	5.5	CV	YV
SMAJ48A	SMAJ48CA	48	53.3	58.9	1	1	77.4	5.2	CX	YX
SMAJ51A	SMAJ51CA	51	56.7	62.7	1	1	82.4	4.9	CZ	YZ
SMAJ54A	SMAJ54CA	54	60	66.3	1	1	87.1	4.6	CE	YE

Fig.1 Peak Pulse Power Rating Curve

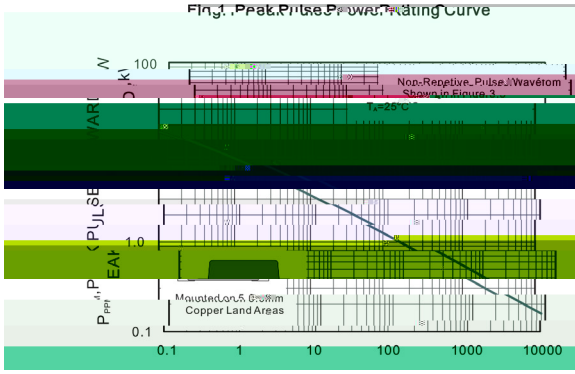


Fig.2 Forward Current Derating Curve

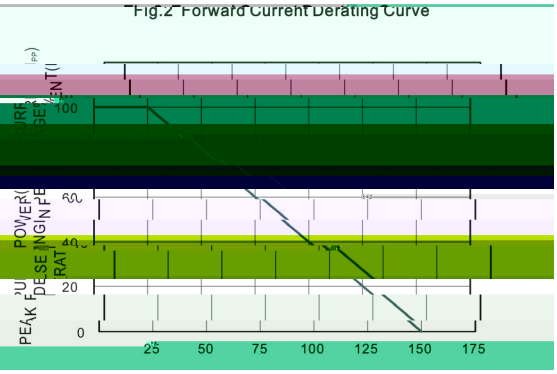


Fig.3 Pulse Waveform

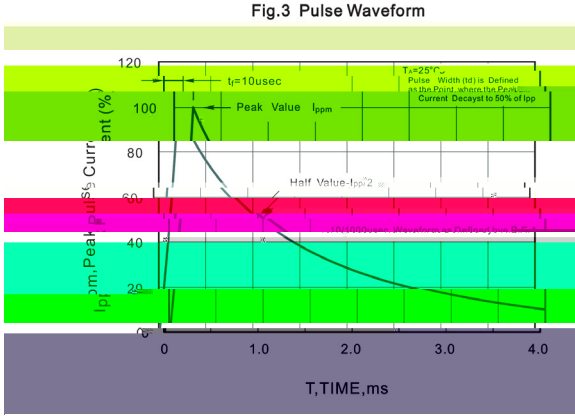
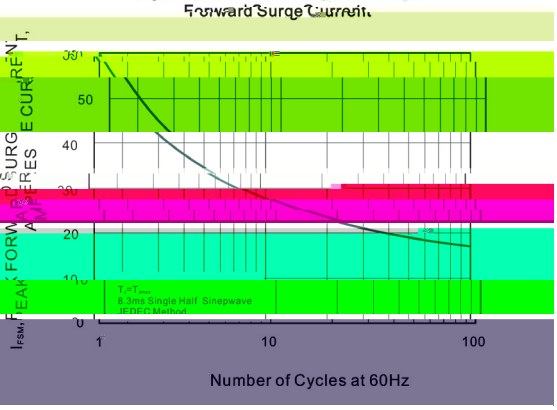
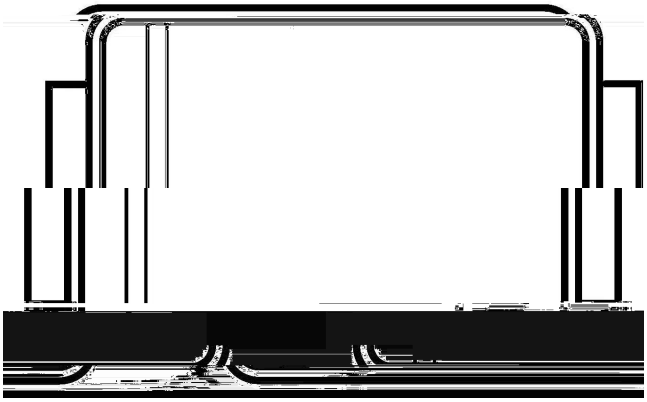


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current







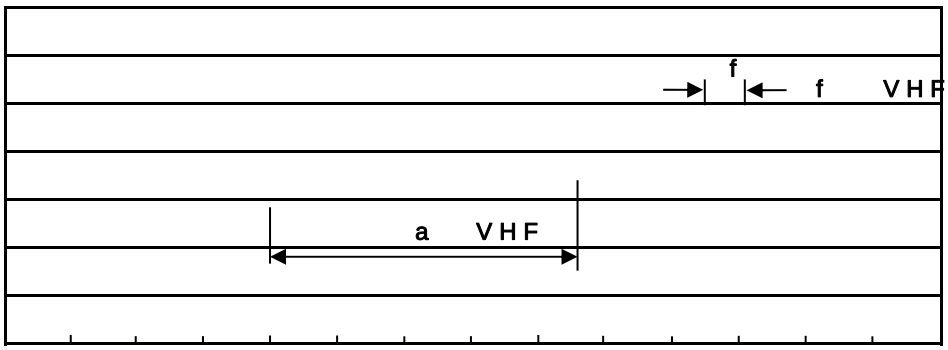


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Note:

WE	Product Type Code
****	Lot No. Code, code change with Lot No

Temperature Profile for IR Reflow Soldering(Pb-Free)



0 0 ` 7LPH VHF

Note:

1 150 180 60 90sec;
1.Preheating:150~180 , Time:60~90sec.

2 245 5 5 0.5sec;
2.Peak Temp.:245 5 , Duration:5 0.5sec.

3 2 10 /sec.
3. Cooling Speed: 2~10 /sec.

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

Package Type	Units					Dimension		(unit mm³)
SMA	5,000	2	10,000	7	70,000	13 ρ ×12	336×336×40	380×335×366