



Micro Commercial Components



Micro Commercial Components  
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# SMA6F5.0A THRU SMA6F13A

## Features

- For surface mounted applications in order to optimize board space
- Glass passivated junction
- Excellent clamping capability
- High Temp Soldering: 260°C / 40 Seconds At Terminals
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

## 600 Watt Transient Voltage Suppressors 5.0 to 13 Volts

## Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by cathode band except bi-directional types

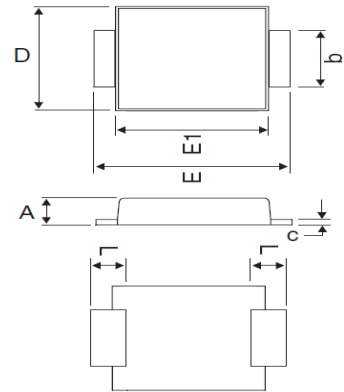
## Maximum Rating:

- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C

Peak Pulse Current on 10/1000µs Waveform	I <sub>PPM</sub>	See Table 1	Note 2
Peak Pulse Power Dissipation	P <sub>PPM</sub>	Min 600 W	Note 2, 4

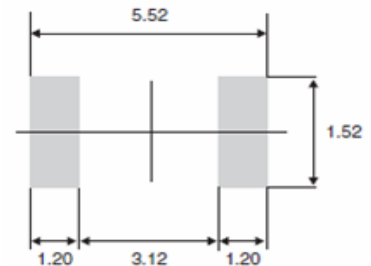
- Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.  
 2. Non-repetitive current pulse, per Fig.4 and derated above T<sub>A</sub>=25°C per Fig.1.  
 3. Lead temperature at T<sub>L</sub> = 75°C  
 4. Peak pulse power waveform is 10/1000µs.

## DO-221AC (SMA-FL)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.035	.059	0.90	1.50	
b	.049	.065	1.25	1.65	
C	.006	.016	0.15	0.40	
D	.089	.116	2.25	2.95	
E	.188	.220	4.80	5.60	
E1	.156	.181	3.95	4.60	
L	.030	.059	0.75	1.50	

## SUGGESTED SOLDER PAD LAYOUT



# SMA6F5.0A thru SMA6F13A

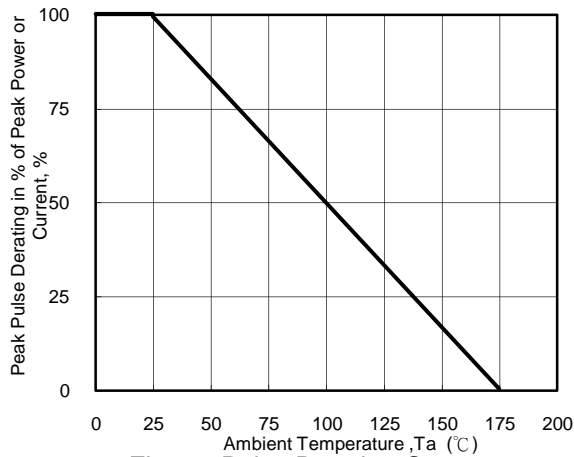


Fig. 1 - Pulse Derating Curve

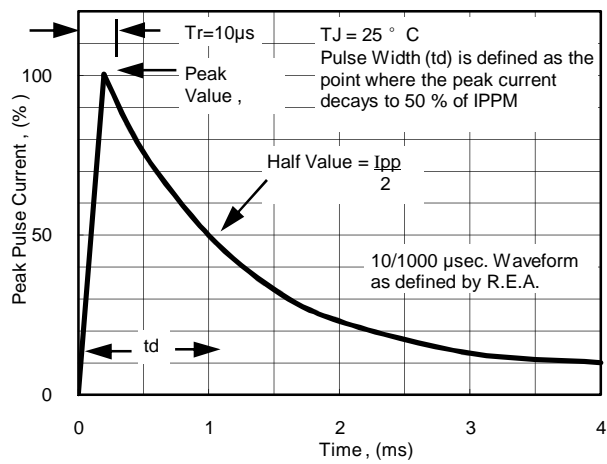


Fig. 2 - Pulse Waveform

# SMA6F5.0A thru SMA6F13A

SMA6F PART NUMBER	DEVICE MARKING CODE	REVERSE STAND- OFF VOLTAGE $V_{RWM}(V)$	BREAKDOWN VOLTAGE $V_{BR}(V) @ I_T$		TEST CURRENT $I_T (mA)$	MAXIMUM CLAMPING VOLTAGE $@ I_{pp} V_c(V)$	PEAK PULSE CURRENT $I_{pp} (A)$	REVERSE LEAKAGE $@ V_{RWM} I_R$ ( $\mu A$ )
			MIN	MAX				
SMA6F5.0A	SUA	5.0	6.40	7.07	10	9.2	68.0	800
SMA6F12A	SUJ	12	13.30	14.70	1	18.5	31.0	5.0
SMA6F13A	SUG	13	14.40	15.90	1	20.4	29.0	5.0



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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