



Micro Commercial Components



Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

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

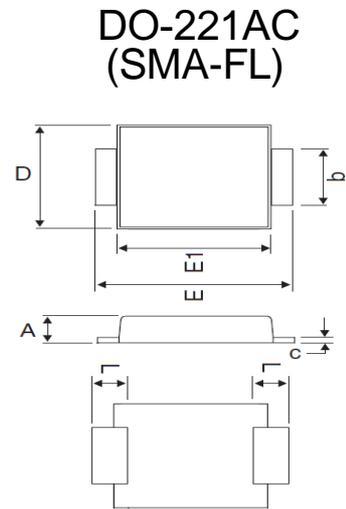
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by cathode band except bi-directional types

Maximum Rating:

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

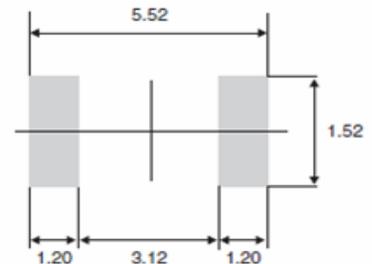
Peak Pulse Current on 10/1000µs Waveform	I _{PPM}	See Table 1	Note 2
Peak Pulse Power Dissipation	P _{PPM}	Min 600 W	Note 2, 4

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



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

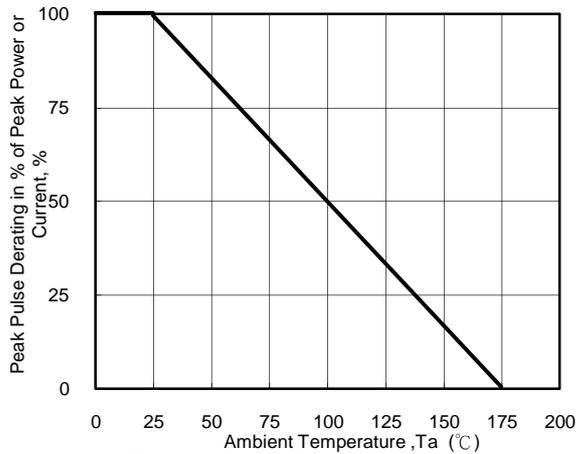


Fig. 1 - Pulse Derating Curve

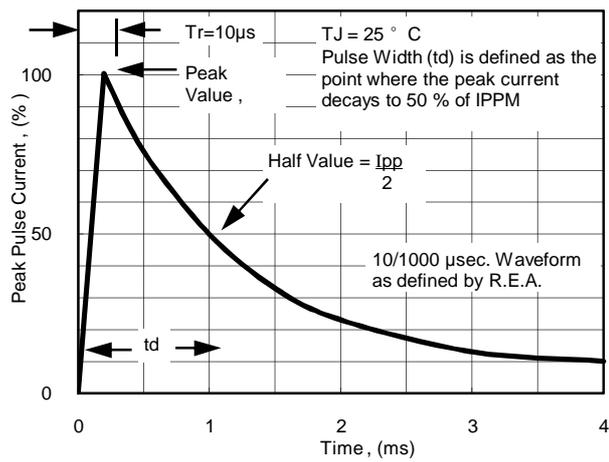


Fig. 2 - Pulse Waveform

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 $@ V_{RWM} I_R$ (μA)
			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



Micro Commercial Components

Ordering Information :

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

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

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.