

Micro Commercial Components



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### **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"

## **Mechanical Data**

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

### **Maximum Rating:**

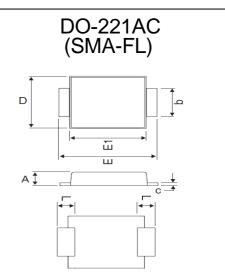
- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C

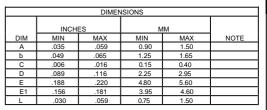
Peak Pulse Current on 10/1000µs Waveform	I <sub>PPM</sub>	See Table 1	Note 2
Peak Pulse Power Dissipation	P <sub>PPM</sub>	Min 600 W	Note 2, 4

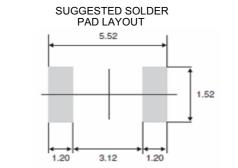
- Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
  - 2. Non-repetitive current pulse, per Fig.4 and derated above  $T_{A}{=}25^{\circ}\!\mathbb{C}$  per Fig.1.
  - 3. Lead temperature at  $T_L = 75^{\circ}C$
  - 4. Peak pulse power waveform is 10/1000µs.



## 600 Watt Transient Voltage Suppressors 5.0 to 13 Volts



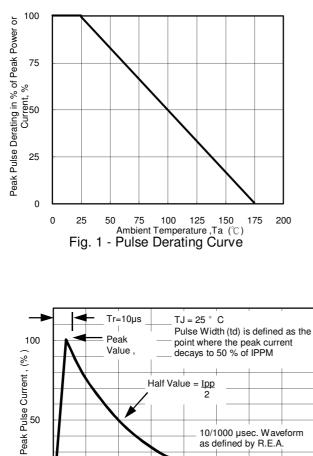




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### SMA6F5.0A thru SMA6F13A



Half Value = Ipp

2

Time, (ms)

2

10/1000 µsec. Waveform as defined by R.E.A.

3

4

Fig. 2 - Pulse Waveform

td -

1

0 0

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Revision: F
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2013/07/18

# SMA6F5.0A thru SMA6F13A



SMA6F PART NUMBER	DEVICE MARKING CODE	REVERSE STAND- OFF VOLTAGE VOLTAGE		CURRENT	MAXIMUM CLAMPING VOLTAGE	PEAK PULSE CURRENT	REVERSE LEAKAGE @ V <sub>RWM</sub> I <sub>R</sub>	
		V <sub>RWM</sub> (V)	MIN	MAX	I <sub>T</sub> (mA)	@Ipp Vc(V)		(μA)
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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**201**3/07/18



#### **Ordering Information :**

Device	Packing		
Part Number-TP	Tape&Reel 5 Kpcs/Reel		

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

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