

Micro Commercial Components

COMPLIANT

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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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"

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

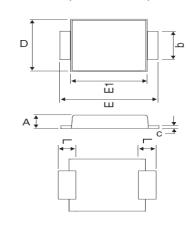
| Peak Pulse Current on 10/1000µs Waveform | I _{PPM} | See Table 1 | Note 2 |
|---|------------------|-------------|-----------|
| Peak Pulse Power Dissipation | P _{PPM} | Min 600 W | Note 2, 4 |

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

- 2. Non-repetitive current pulse, per Fig.4 and derated above $T_A \!\!=\!\! 25^\circ\! \text{C}$ per Fig.1.
- 3. Lead temperature at $T_L = 75^{\circ}$ C
- 4. Peak pulse power waveform is 10/1000µs.

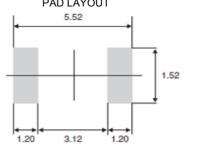
600 Watt Transient Voltage Suppressors 5.0 to 13 Volts

DO-221AC (SMA-FL)



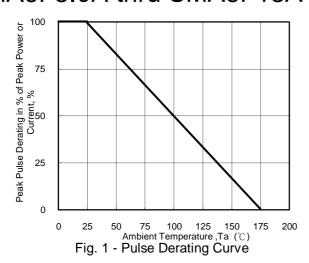
| DIMENSIONS | | | | | |
|------------|--------|------|------|------|------|
| | INCHES | | ММ | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| Α | .035 | .059 | 0.90 | 1.50 | |
| b | .049 | .065 | 1.25 | 1.65 | |
| С | .006 | .016 | 0.15 | 0.40 | |
| D | .089 | .116 | 2.25 | 2.95 | |
| E | .188 | .220 | 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



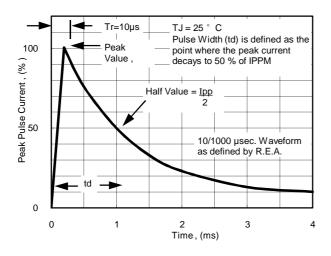


Fig. 2 - Pulse Waveform





| SMA6F PART NUMBER | DEVICE MARKING CODE | REVERSE STAND- OFF VOLTAGE | VOLT | BREAKDOWN VOLTAGE V _{BR} (V) @I _T | | MAXIMUM CLAMPING VOLTAGE | PEAK PULSE CURRENT | REVERSE LEAKAGE @ V _{RWM} I _R |
|----------------------|------------------------|----------------------------------|-------|---|---------------------|--------------------------------|--------------------------|---|
| TAINT NOWBER | | V _{RWM} (V) | MIN | MAX | I _T (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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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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