

**Transient Voltage Suppressor power 400 watts**

**Stand-Off Voltage: 3.3V**

**Description**

SMAJ Series transient voltage suppressors are excellent overvoltage protective devices.

The Series is designed specifically to protect sensitive electronic equipment from voltage transients induced by lightning and other transient voltage events.

**Features**

- ◆Excellent clamping capability
- ◆Low leakage current
- ◆High surge capability
- ◆Glass passivated chip
- ◆Epoxy resin package
- ◆Built-in strain relief
- ◆Will not fatigue
- ◆RoHS Compliant
- ◆Fast response time: typically less than 1.0ps from 0 Volts to VBR min

**Mechanical Characteristics**

- ◆Package: SMA plastic package.
- ◆Lead Finish: Matte Tin
- ◆Case Material: Epoxy Molding Compound.
- ◆UL Flammability Classification Rating 94V-0
- ◆Moisture Sensitivity: Level 1 per J-STD-020

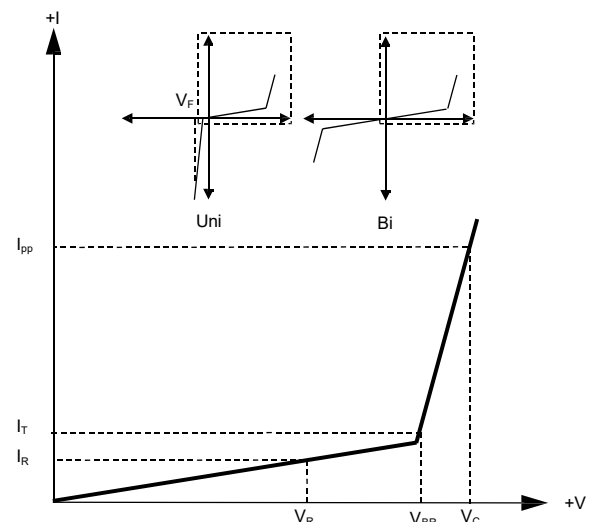
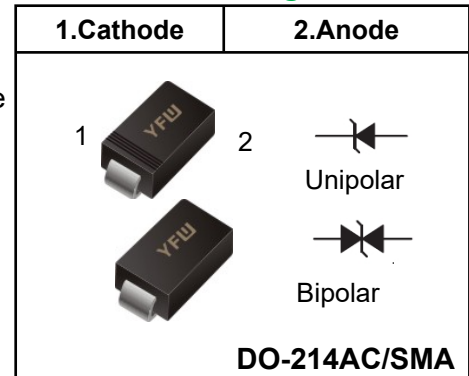
**Applications**

- ◆Telecom
- ◆Computer
- ◆Industrial electronic
- ◆Consumer electronic

**Electrical Parameters**

| Parameter | Definition   |
|-----------|--|
| $C_J$     | Junction Capacitance - typical capacitance measured with 0V or $V_R$ bias                                      |
| $I_{PP}$  | Peak Pulse Current - maximum rated peak impulse current  |
| $V_C$     | Clamping Voltage - Peak voltage measured across the suppressor at a specified $I_{ppm}$ (peak impulse current) |
| $V_{BR}$  | Breakdown Voltage - Maximum voltage that flows through the TVS at a specified test current ( $I_T$ )           |
| $I_R$     | Leakage Current - maximum peak off-state current measured at $V_R$   |
| $V_R$     | Peak Off-state Voltage - maximum voltage that can be applied while maintaining off state                       |

**Pinning**



**Absolute Maximum Ratings (TA=25°C unless otherwise noted)**

| Parameter                                      | Symbol           | Value      | Units | Remarks        |
|--|------------------|------------|-------|----------------|
| Peak Pulse Power Dissipation                   | P <sub>PPM</sub> | 400        | W     | (Note1)(Note2) |
| Steady State Power Dissipation                 | P <sub>D</sub>   | 3.3        | W     | (Note3)        |
| Peak Forward Surge Current                     | I <sub>FSM</sub> | 40         | A     | (Note4)        |
| Maximum Instantaneous Forward Voltage at 50A   | V <sub>FM</sub>  | 3.5/6.5    | V     | (Note5)        |
| Typical Thermal Resistance Junction to Lead    | R <sub>θJL</sub> | 30         | °C/W  |                |
| Typical Thermal Resistance Junction to Ambient | R <sub>θJA</sub> | 120        | °C/W  |                |
| Operating Temperature Range                    | T <sub>J</sub>   | -55 to 150 | °C    |                |
| Storage Temperature Range                      | T <sub>STG</sub> | -55 to 150 | °C    |                |

Notes1: Non-repetitive current pulse , 10/1000us Waveform.

Notes2: Mounted on copper pad area of 5×5mm to each terminal.

Notes3: Infinite HeatS ink at TL=50°C

Notes4: Measured on 8.3ms single half sine wave or equivalent square wave, duty cycle=4 perm inute maximum.

Notes5: For UnidirectionalOnly, V<sub>FM</sub><3.5V for V<sub>BR</sub> ≤ 200V and V<sub>FM</sub><5.0V for V<sub>BR</sub> ≥ 201V.

**Electrical Characteristics (TA=25°C unless otherwise noted)**

| Type Number | Device Marking Code | Reverse Stand off Voltage | Breakdown Voltage        |     | Test Current        | Maximum Clamping Voltage@I <sub>PP</sub> | Peak Pulse Current  | Reverse Leakage@V <sub>RWM</sub> |
|-------------|---------------------|---------------------------|--------------------------|-----|---------------------|--|---------------------|----------------------------------|
|             |                     | V <sub>RWM</sub> (V)      | V <sub>BR MIN.</sub> (V) | (V) | I <sub>T</sub> (mA) | VC(V)                                    | I <sub>PP</sub> (A) | I <sub>R</sub> (μA)              |
| SMAJ3.3A    | 3.3A                | 3.3                       | 5.2                      | 6.0 | 10                  | 7.3                                      | 54.8                | 200                              |
| SMAJ3.3CA   | 3.3CA               | 3.3                       | 5.2                      | 6.5 | 10                  | 7.3                                      | 54.8                | 200                              |

Rating And Characteristic Curves (TA=25°C unless otherwise noted)

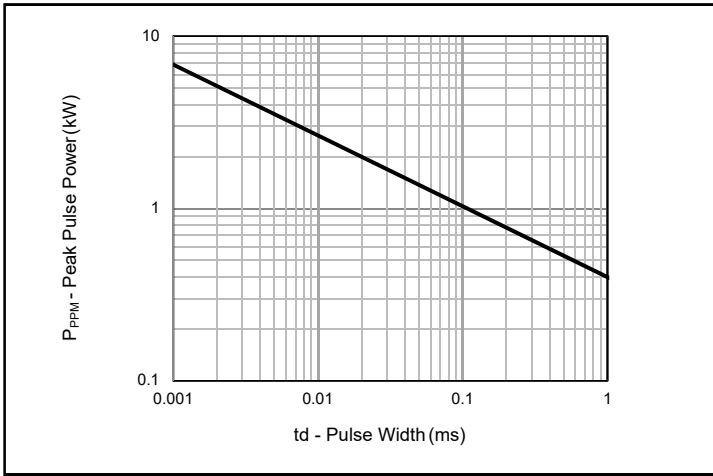


Fig.1 - Peak Pulse Power Rating

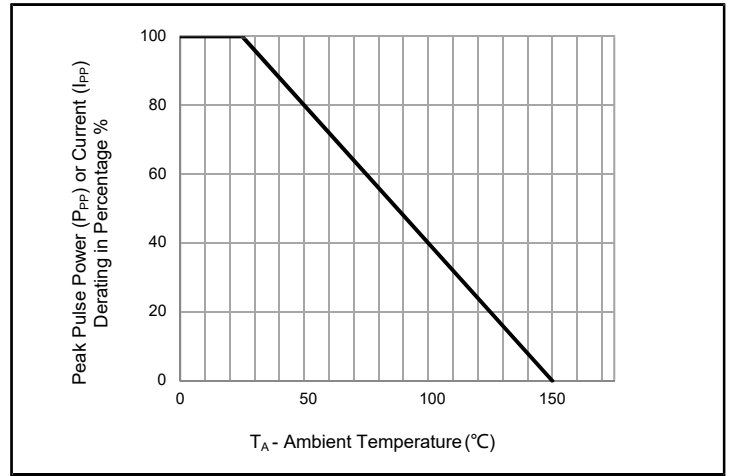


Fig.2 - Pulse Derating Curve

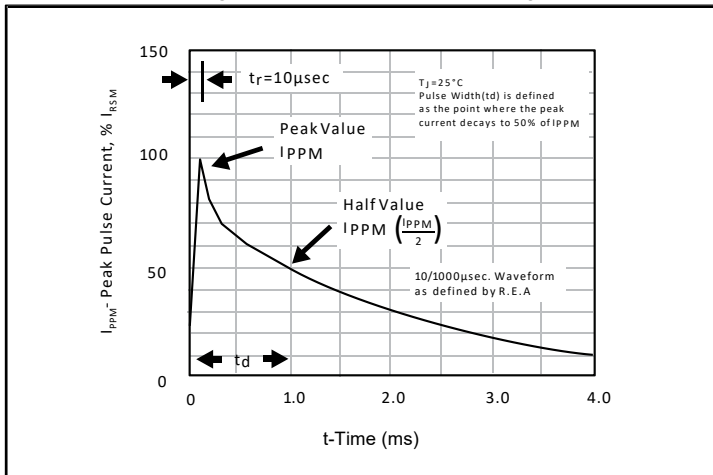


Fig.3 - Pulse Waveform

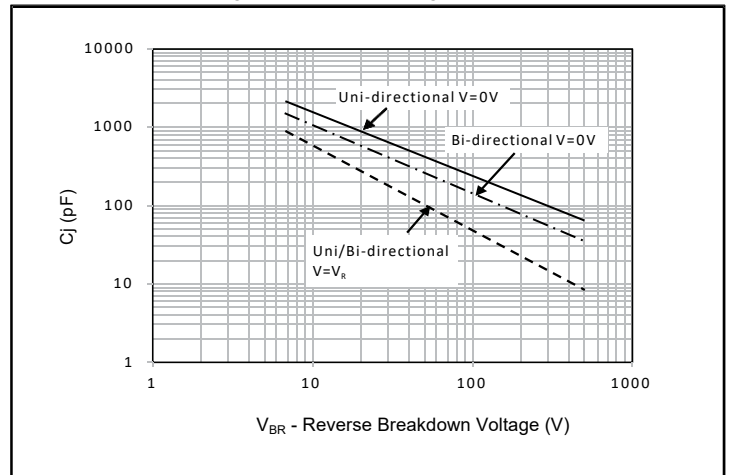


Fig.4 - Typical Junction Capacitance

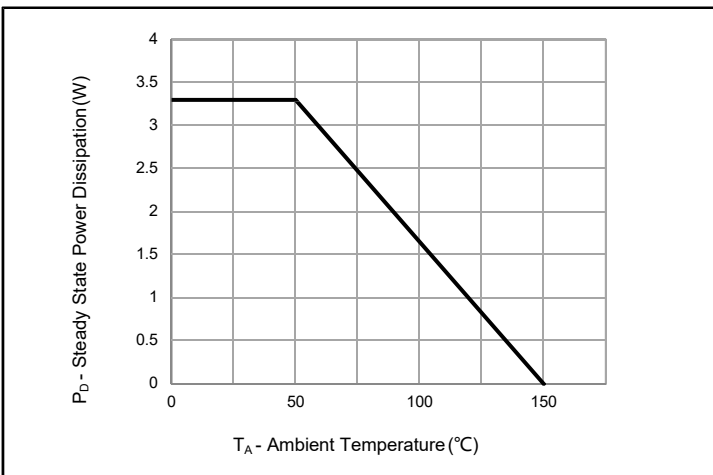


Fig.5 - Steady State Power Dissipation Derating Curve

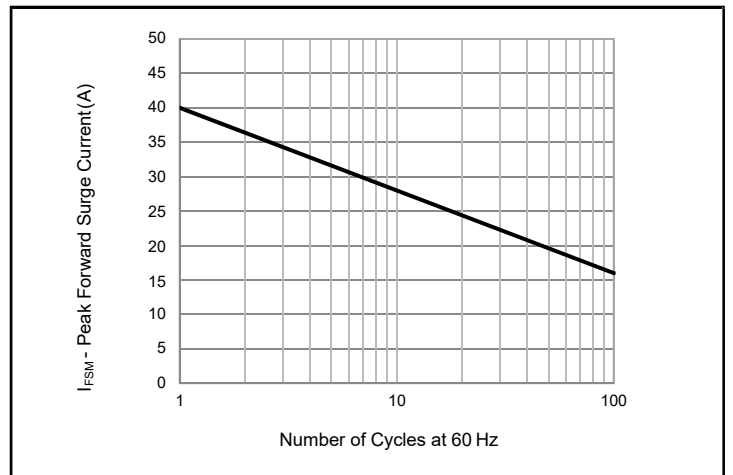
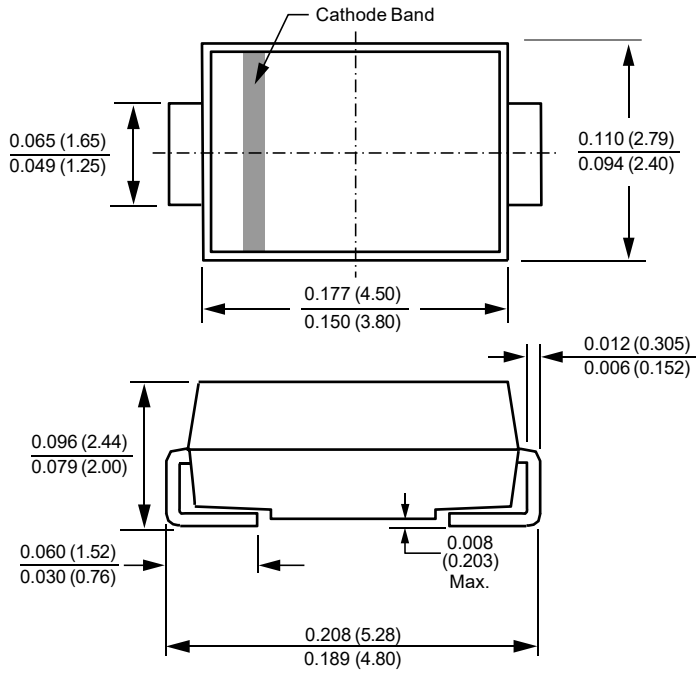


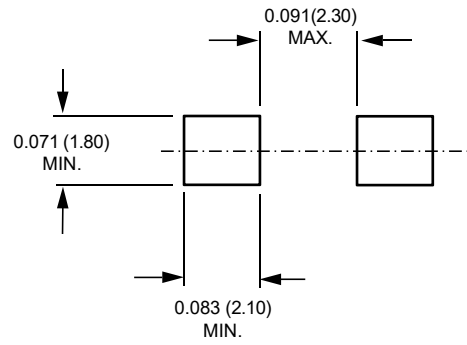
Fig.6 - Maximum Non-Repetitive Peak Forward Surge Current  
Uni-Directional Only

**Package Outline**

**DO-214AC SMA**



**Mounting Pad Layout**



**Summary of Packing Options**

| Package      | Packing Description | Packing Quantity | Industry Standard |
|--------------|---------------------|------------------|-------------------|
| DO-214AC SMA | Tape/Reel, 11" reel | 5000             | EIA-481-1         |
|              | Tape/Reel, 7" reel  | 2000             | EIA-481-1         |

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)