

Surface mount transient voltage suppressor power 400 watts

Stand-Off Voltage: 5.0V~220V

## FEATURES

- ◆For surface mounted applications in order to optimize board space.
- ◆Low profile package.
- ◆Glass passivated junction.
- ◆Low inductance.
- ◆Plastic package has Underwriters Laboratory Flammability.

## MECHANICAL DATA

- ◆Case: SMAF
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 27mg / 0.00095oz

## Maximum Ratings and Electrical characteristics

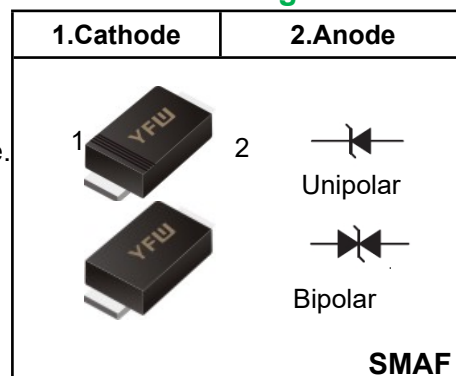
Ratings at 25 ambient temperature unless otherwise specified.

| Parameter                                                    |         | Symbol                            | Value       | Unit |
|--------------------------------------------------------------|---------|-----------------------------------|-------------|------|
| Peak Pulse Power Dissipation on TA=25°C (Note 1,2,5, Fig1)   |         | P <sub>PPM</sub>                  | 400         | W    |
| Peak Forward Surge Current (Note3, Note4)                    |         | I <sub>FSM</sub><br>(UNI)         | 40          | A    |
| Peak Pulse Current on 10/1000 us waveform (Note 1) Fig 3     |         | I <sub>PPM</sub>                  | see Table 1 | A    |
| ESD Voltage per IEC6100-4-2                                  | Contact | V <sub>ESD1</sub>                 | ±30         | kV   |
|                                                              | Air     | V <sub>ESD2</sub>                 | ±30         |      |
| Typical Junction Capacitance at VR=4V, f=1MHz                |         | C <sub>j</sub>                    | 390         | pF   |
| Typical Thermal Resistance Junction to Ambient(Note 2)       |         | R <sub>θJA</sub>                  | 70          | °C   |
| Operating Junction Temperature and Storage Temperature Range |         | T <sub>J</sub> , T <sub>STG</sub> | -55 to +150 | °C   |

## NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above T<sub>A</sub> = 25°C per Fig. 2.
2. Mounted on 5mm<sup>2</sup> copper pads to each terminal.
3. Peak Forward Surge Current : 8.3ms single half sine-wave Superimposed on rated load (JEDEC method).
4. Peak pulse power waveform is 10/1000μS.

## Pinning



Characteristics at Ta = 25°C

Table 1

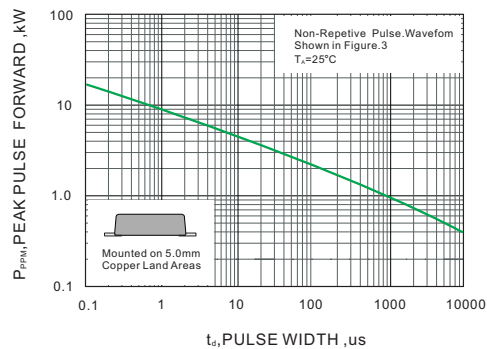
| Type        |              | Reverse Stand-off Voltage | Breakdown Voltage                |       | Test Current   | Reverse Leakage                   |      | Max. Clamp Voltage               | Peak Pulse Current | Package              |      |
|-------------|--------------|---------------------------|----------------------------------|-------|----------------|-----------------------------------|------|----------------------------------|--------------------|----------------------|------|
|             |              |                           | V <sub>BR</sub> @ I <sub>T</sub> |       |                | I <sub>R</sub> @ V <sub>RWM</sub> |      |                                  |                    | SMAF                 |      |
|             |              | V <sub>RWM</sub>          | Min                              | Max   | I <sub>T</sub> | UNI                               | BI   | V <sub>C</sub> @ I <sub>PP</sub> | I <sub>PP</sub>    | Device Marking Ccode |      |
| UNI         | BI           | V                         | V                                | V     | mA             | µA                                | µA   | V                                | A                  | UNI                  | BI   |
| P4SMAFJ5.0  | P4SMAFJ5.0C  | 5                         | 6.4                              | 7.55  | 10             | 800                               | 1600 | 9.6                              | 41.6               | 5.0V                 | 5.0C |
| P4SMAFJ5.0A | P4SMAFJ5.0CA | 5                         | 6.4                              | 7.25  | 10             | 800                               | 1600 | 9.2                              | 43.5               | 5.0A                 | 5.0D |
| P4SMAFJ6.0  | P4SMAFJ6.0C  | 6                         | 6.67                             | 8.45  | 10             | 800                               | 1600 | 11.4                             | 35.1               | 6.0V                 | 6.0C |
| P4SMAFJ6.0A | P4SMAFJ6.0CA | 6                         | 6.67                             | 7.67  | 10             | 800                               | 1600 | 10.3                             | 38.8               | 6.0A                 | 6.0D |
| P4SMAFJ6.5  | P4SMAFJ6.5C  | 6.5                       | 7.22                             | 9.14  | 10             | 500                               | 1000 | 12.3                             | 32.5               | 6.5V                 | 6.5C |
| P4SMAFJ6.5A | P4SMAFJ6.5CA | 6.5                       | 7.22                             | 8.3   | 10             | 500                               | 1000 | 11.2                             | 35.7               | 6.5A                 | 6.5D |
| P4SMAFJ7.0  | P4SMAFJ7.0C  | 7                         | 7.78                             | 9.86  | 10             | 200                               | 400  | 13.3                             | 30.1               | 7.0V                 | 7.0C |
| P4SMAFJ7.0A | P4SMAFJ7.0CA | 7                         | 7.78                             | 8.95  | 10             | 200                               | 400  | 12                               | 33.3               | 7.0A                 | 7.0D |
| P4SMAFJ7.5  | P4SMAFJ7.5C  | 7.5                       | 8.33                             | 10.67 | 1              | 100                               | 200  | 14.3                             | 28                 | 7.5V                 | 7.5C |
| P4SMAFJ7.5A | P4SMAFJ7.5CA | 7.5                       | 8.33                             | 9.58  | 1              | 100                               | 200  | 12.9                             | 31                 | 7.5A                 | 7.5D |
| P4SMAFJ8.0  | P4SMAFJ8.0C  | 8                         | 8.89                             | 11.3  | 1              | 50                                | 100  | 15                               | 26.5               | 8.0V                 | 8.0C |
| P4SMAFJ8.0A | P4SMAFJ8.0CA | 8                         | 8.89                             | 10.23 | 1              | 50                                | 100  | 13.6                             | 29.4               | 8.0A                 | 8.0D |
| P4SMAFJ8.5  | P4SMAFJ8.5C  | 8.5                       | 9.44                             | 11.92 | 1              | 10                                | 20   | 15.9                             | 25.1               | 8.5V                 | 8.5C |
| P4SMAFJ8.5A | P4SMAFJ8.5CA | 8.5                       | 9.44                             | 10.82 | 1              | 10                                | 20   | 14.4                             | 27.7               | 8.5A                 | 8.5D |
| P4SMAFJ9.0  | P4SMAFJ9.0C  | 9                         | 10                               | 12.6  | 1              | 5                                 | 5    | 16.9                             | 23.6               | 9.0V                 | 9.0C |
| P4SMAFJ9.0A | P4SMAFJ9.0CA | 9                         | 10                               | 11.5  | 1              | 5                                 | 5    | 15.4                             | 26                 | 9.0A                 | 9.0D |
| P4SMAFJ10   | P4SMAFJ10C   | 10                        | 11.1                             | 14.1  | 1              | 5                                 | 5    | 18.8                             | 21.2               | 10V                  | 10C  |
| P4SMAFJ10A  | P4SMAFJ10CA  | 10                        | 11.1                             | 12.8  | 1              | 5                                 | 5    | 17                               | 23.5               | 10A                  | 10D  |
| P4SMAFJ11   | P4SMAFJ11C   | 11                        | 12.2                             | 15.4  | 1              | 1                                 | 1    | 20.1                             | 20                 | 11V                  | 11C  |
| P4SMAFJ11A  | P4SMAFJ11CA  | 11                        | 12.2                             | 14    | 1              | 1                                 | 1    | 18.2                             | 22                 | 11A                  | 11D  |
| P4SMAFJ12   | P4SMAFJ12C   | 12                        | 13.3                             | 16.9  | 1              | 1                                 | 1    | 22                               | 18.1               | 12V                  | 12C  |
| P4SMAFJ12A  | P4SMAFJ12CA  | 12                        | 13.3                             | 15.3  | 1              | 1                                 | 1    | 19.9                             | 20.1               | 12A                  | 12D  |
| P4SMAFJ13   | P4SMAFJ13C   | 13                        | 14.4                             | 18.2  | 1              | 1                                 | 1    | 23.8                             | 16.8               | 13V                  | 13C  |
| P4SMAFJ13A  | P4SMAFJ13CA  | 13                        | 14.4                             | 16.5  | 1              | 1                                 | 1    | 21.5                             | 18.6               | 13A                  | 13D  |
| P4SMAFJ14   | P4SMAFJ14C   | 14                        | 15.6                             | 19.8  | 1              | 1                                 | 1    | 25.8                             | 15.5               | 14V                  | 14C  |
| P4SMAFJ14A  | P4SMAFJ14CA  | 14                        | 15.6                             | 17.9  | 1              | 1                                 | 1    | 23.2                             | 17.2               | 14A                  | 14D  |
| P4SMAFJ15   | P4SMAFJ15C   | 15                        | 16.7                             | 21.1  | 1              | 1                                 | 1    | 26.9                             | 14.8               | 15V                  | 15C  |
| P4SMAFJ15A  | P4SMAFJ15CA  | 15                        | 16.7                             | 19.2  | 1              | 1                                 | 1    | 24.4                             | 16.4               | 15A                  | 15D  |
| P4SMAFJ16   | P4SMAFJ16C   | 16                        | 17.8                             | 22.6  | 1              | 1                                 | 1    | 28.8                             | 13.8               | 16V                  | 16C  |
| P4SMAFJ16A  | P4SMAFJ16CA  | 16                        | 17.8                             | 20.5  | 1              | 1                                 | 1    | 26                               | 15.3               | 16A                  | 16D  |
| P4SMAFJ17   | P4SMAFJ17C   | 17                        | 18.9                             | 23.9  | 1              | 1                                 | 1    | 30.5                             | 13.1               | 17V                  | 17C  |
| P4SMAFJ17A  | P4SMAFJ17CA  | 17                        | 18.9                             | 21.7  | 1              | 1                                 | 1    | 27.6                             | 14.5               | 17A                  | 17D  |
| P4SMAFJ18   | P4SMAFJ18C   | 18                        | 20                               | 25.3  | 1              | 1                                 | 1    | 32.2                             | 12.4               | 18V                  | 18C  |
| P4SMAFJ18A  | P4SMAFJ18CA  | 18                        | 20                               | 23.3  | 1              | 1                                 | 1    | 29.2                             | 13.7               | 18A                  | 18D  |
| P4SMAFJ20   | P4SMAFJ20C   | 20                        | 22.2                             | 28.1  | 1              | 1                                 | 1    | 35.8                             | 11.1               | 20V                  | 20C  |
| P4SMAFJ20A  | P4SMAFJ20CA  | 20                        | 22.2                             | 25.5  | 1              | 1                                 | 1    | 32.4                             | 12.3               | 20A                  | 20D  |
| P4SMAFJ22   | P4SMAFJ22C   | 22                        | 24.4                             | 30.9  | 1              | 1                                 | 1    | 39.4                             | 10.1               | 22V                  | 22C  |
| P4SMAFJ22A  | P4SMAFJ22CA  | 22                        | 24.4                             | 28    | 1              | 1                                 | 1    | 35.5                             | 11.2               | 22A                  | 22D  |
| P4SMAFJ24   | P4SMAFJ24C   | 24                        | 26.7                             | 33.8  | 1              | 1                                 | 1    | 43                               | 9.3                | 24V                  | 24C  |
| P4SMAFJ24A  | P4SMAFJ24CA  | 24                        | 26.7                             | 30.7  | 1              | 1                                 | 1    | 38.9                             | 10.3               | 24A                  | 24D  |
| P4SMAFJ26   | P4SMAFJ26C   | 26                        | 28.9                             | 36.6  | 1              | 1                                 | 1    | 46.6                             | 8.6                | 26V                  | 26C  |
| P4SMAFJ26A  | P4SMAFJ26CA  | 26                        | 28.9                             | 33.2  | 1              | 1                                 | 1    | 42.1                             | 9.5                | 26A                  | 26D  |
| P4SMAFJ28   | P4SMAFJ28C   | 28                        | 31.1                             | 39.4  | 1              | 1                                 | 1    | 50                               | 8                  | 28V                  | 28C  |
| P4SMAFJ28A  | P4SMAFJ28CA  | 28                        | 31.1                             | 35.8  | 1              | 1                                 | 1    | 45.4                             | 8.8                | 28A                  | 28D  |
| P4SMAFJ30   | P4SMAFJ30C   | 30                        | 33.3                             | 42.2  | 1              | 1                                 | 1    | 53.5                             | 7.5                | 30V                  | 30C  |
| P4SMAFJ30A  | P4SMAFJ30CA  | 30                        | 33.3                             | 38.3  | 1              | 1                                 | 1    | 48.4                             | 8.3                | 30A                  | 30D  |
| P4SMAFJ33   | P4SMAFJ33C   | 33                        | 36.7                             | 46.5  | 1              | 1                                 | 1    | 59                               | 6.8                | 33V                  | 33C  |
| P4SMAFJ33A  | P4SMAFJ33CA  | 33                        | 36.7                             | 42.2  | 1              | 1                                 | 1    | 53.3                             | 7.5                | 33A                  | 33D  |
| P4SMAFJ36   | P4SMAFJ36C   | 36                        | 40                               | 50.7  | 1              | 1                                 | 1    | 64.3                             | 6.2                | 36V                  | 36C  |
| P4SMAFJ36A  | P4SMAFJ36CA  | 36                        | 40                               | 46    | 1              | 1                                 | 1    | 58.1                             | 6.9                | 36A                  | 36D  |
| P4SMAFJ40   | P4SMAFJ40C   | 40                        | 44.4                             | 56.3  | 1              | 1                                 | 1    | 71.4                             | 5.6                | 40V                  | 40C  |
| P4SMAFJ40A  | P4SMAFJ40CA  | 40                        | 44.4                             | 51.1  | 1              | 1                                 | 1    | 64.5                             | 6.2                | 40A                  | 40D  |
| P4SMAFJ43   | P4SMAFJ43C   | 43                        | 47.8                             | 60.5  | 1              | 1                                 | 1    | 76.7                             | 5.2                | 43V                  | 43C  |
| P4SMAFJ43A  | P4SMAFJ43CA  | 43                        | 47.8                             | 54.9  | 1              | 1                                 | 1    | 69.4                             | 5.7                | 43A                  | 43D  |
| P4SMAFJ45   | P4SMAFJ45C   | 45                        | 50                               | 63.3  | 1              | 1                                 | 1    | 80.3                             | 5                  | 45V                  | 45C  |

Characteristics at Ta = 25°C

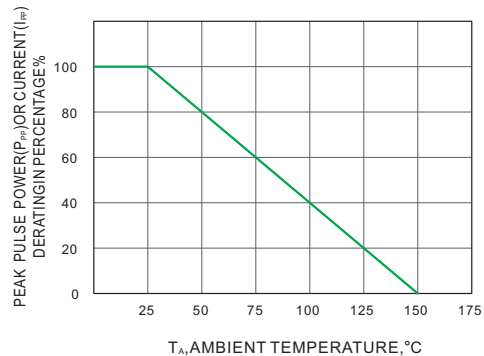
Table 1

| Type        |              | Reverse<br>Stand-off<br>Voltage | Breakdown<br>Voltage             |       | Test<br>Current | Reverse<br>Leakage                |     | Max. Clamp<br>Voltage | Peak Pulse<br>Current            | Package         |                      |
|-------------|--------------|---------------------------------|----------------------------------|-------|-----------------|-----------------------------------|-----|-----------------------|----------------------------------|-----------------|----------------------|
|             |              |                                 | V <sub>BR</sub> @ I <sub>T</sub> |       |                 | I <sub>R</sub> @ V <sub>RWM</sub> |     |                       |                                  | SMAF            |                      |
|             |              |                                 | V <sub>RWM</sub>                 | Min   | Max             | I <sub>T</sub>                    | UNI | BI                    | V <sub>C</sub> @ I <sub>PP</sub> | I <sub>PP</sub> | Device Marking Ccode |
| UNI         | BI           | V                               | V                                | V     | mA              | μA                                | μA  | V                     | A                                | UNI             | BI                   |
| P4SMAFJ45A  | P4SMAFJ45CA  | 45                              | 50                               | 57.5  | 1               | 5                                 | 5   | 72.7                  | 5.5                              | 45A             | 45D                  |
| P4SMAFJ48   | P4SMAFJ48C   | 48                              | 53.3                             | 67.5  | 1               | 5                                 | 5   | 85.5                  | 4.7                              | 48V             | 48C                  |
| P4SMAFJ48A  | P4SMAFJ48CA  | 48                              | 53.3                             | 61.3  | 1               | 5                                 | 5   | 77.4                  | 5.2                              | 48A             | 48D                  |
| P4SMAFJ51   | P4SMAFJ51C   | 51                              | 56.7                             | 71.8  | 1               | 5                                 | 5   | 91.1                  | 4.4                              | 51V             | 51C                  |
| P4SMAFJ51A  | P4SMAFJ51CA  | 51                              | 56.7                             | 65.2  | 1               | 5                                 | 5   | 82.4                  | 4.9                              | 51A             | 51D                  |
| P4SMAFJ54   | P4SMAFJ54C   | 54                              | 60                               | 76    | 1               | 5                                 | 5   | 96.3                  | 4.2                              | 54V             | 54C                  |
| P4SMAFJ54A  | P4SMAFJ54CA  | 54                              | 60                               | 69    | 1               | 5                                 | 5   | 87.1                  | 4.6                              | 54A             | 54D                  |
| P4SMAFJ58   | P4SMAFJ58C   | 58                              | 64.4                             | 81.6  | 1               | 5                                 | 5   | 103                   | 3.9                              | 58V             | 58C                  |
| P4SMAFJ58A  | P4SMAFJ58CA  | 58                              | 64.4                             | 74.1  | 1               | 5                                 | 5   | 93.6                  | 4.3                              | 58A             | 58D                  |
| P4SMAFJ60   | P4SMAFJ60C   | 60                              | 66.7                             | 84.5  | 1               | 5                                 | 5   | 107                   | 3.7                              | 60V             | 60C                  |
| P4SMAFJ60A  | P4SMAFJ60CA  | 60                              | 66.7                             | 76.7  | 1               | 5                                 | 5   | 96.8                  | 4.1                              | 60A             | 60D                  |
| P4SMAFJ64   | P4SMAFJ64C   | 64                              | 71.1                             | 90.1  | 1               | 5                                 | 5   | 114                   | 3.5                              | 64V             | 64C                  |
| P4SMAFJ64A  | P4SMAFJ64CA  | 64                              | 71.1                             | 81.8  | 1               | 5                                 | 5   | 103                   | 3.9                              | 64A             | 64D                  |
| P4SMAFJ70   | P4SMAFJ70C   | 70                              | 77.8                             | 98.6  | 1               | 5                                 | 5   | 125                   | 3.2                              | 70V             | 70C                  |
| P4SMAFJ70A  | P4SMAFJ70CA  | 70                              | 77.8                             | 89.5  | 1               | 5                                 | 5   | 113                   | 3.5                              | 70A             | 70D                  |
| P4SMAFJ75   | P4SMAFJ75C   | 75                              | 83.3                             | 105.7 | 1               | 5                                 | 5   | 134                   | 3                                | 75V             | 75C                  |
| P4SMAFJ75A  | P4SMAFJ75CA  | 75                              | 83.3                             | 95.8  | 1               | 5                                 | 5   | 121                   | 3.3                              | 75A             | 75D                  |
| P4SMAFJ78   | P4SMAFJ78C   | 78                              | 86.7                             | 109.8 | 1               | 5                                 | 5   | 139                   | 2.9                              | 78V             | 78C                  |
| P4SMAFJ78A  | P4SMAFJ78CA  | 78                              | 86.7                             | 99.7  | 1               | 5                                 | 5   | 126                   | 3.2                              | 78A             | 78D                  |
| P4SMAFJ85   | P4SMAFJ85C   | 85                              | 94.4                             | 119.2 | 1               | 5                                 | 5   | 151                   | 2.6                              | 85V             | 85C                  |
| P4SMAFJ85A  | P4SMAFJ85CA  | 85                              | 94.4                             | 108.2 | 1               | 5                                 | 5   | 137                   | 2.9                              | 85A             | 85D                  |
| P4SMAFJ90   | P4SMAFJ90C   | 90                              | 100                              | 126.5 | 1               | 5                                 | 5   | 160                   | 2.5                              | 90V             | 90C                  |
| P4SMAFJ90A  | P4SMAFJ90CA  | 90                              | 100                              | 115.5 | 1               | 5                                 | 5   | 146                   | 2.7                              | 90A             | 90D                  |
| P4SMAFJ100  | P4SMAFJ100C  | 100                             | 111                              | 141   | 1               | 5                                 | 5   | 179                   | 2.2                              | 100V            | 100C                 |
| P4SMAFJ100A | P4SMAFJ100CA | 100                             | 111                              | 128   | 1               | 5                                 | 5   | 162                   | 2.5                              | 100A            | 100D                 |
| P4SMAFJ110  | P4SMAFJ110C  | 110                             | 122                              | 154.5 | 1               | 5                                 | 5   | 196                   | 2                                | 110V            | 110C                 |
| P4SMAFJ110A | P4SMAFJ110CA | 110                             | 122                              | 140.5 | 1               | 5                                 | 5   | 177                   | 2.3                              | 110A            | 110D                 |
| P4SMAFJ120  | P4SMAFJ120C  | 120                             | 133                              | 169   | 1               | 5                                 | 5   | 214                   | 1.9                              | 120V            | 120C                 |
| P4SMAFJ120A | P4SMAFJ120CA | 120                             | 133                              | 153   | 1               | 5                                 | 5   | 193                   | 2                                | 120A            | 120D                 |
| P4SMAFJ130  | P4SMAFJ130C  | 130                             | 144                              | 182.5 | 1               | 5                                 | 5   | 231                   | 1.7                              | 130V            | 130C                 |
| P4SMAFJ130A | P4SMAFJ130CA | 130                             | 144                              | 165.5 | 1               | 5                                 | 5   | 209                   | 1.9                              | 130A            | 130D                 |
| P4SMAFJ150  | P4SMAFJ150C  | 150                             | 167                              | 211.5 | 1               | 5                                 | 5   | 268                   | 1.5                              | 150V            | 150C                 |
| P4SMAFJ150A | P4SMAFJ150CA | 150                             | 167                              | 192.5 | 1               | 5                                 | 5   | 243                   | 1.6                              | 150A            | 150D                 |
| P4SMAFJ160  | P4SMAFJ160C  | 160                             | 178                              | 226   | 1               | 5                                 | 5   | 287                   | 1.4                              | 160V            | 160C                 |
| P4SMAFJ160A | P4SMAFJ160CA | 160                             | 178                              | 205   | 1               | 5                                 | 5   | 259                   | 1.5                              | 160A            | 160D                 |
| P4SMAFJ170  | P4SMAFJ170C  | 170                             | 189                              | 239.5 | 1               | 5                                 | 5   | 304                   | 1.3                              | 170V            | 170C                 |
| P4SMAFJ170A | P4SMAFJ170CA | 170                             | 189                              | 217.5 | 1               | 5                                 | 5   | 275                   | 1.4                              | 170A            | 170D                 |
| P4SMAFJ180  | P4SMAFJ180C  | 180                             | 198                              | 253.8 | 1               | 5                                 | 5   | 322                   | 1.2                              | 180V            | 180C                 |
| P4SMAFJ180A | P4SMAFJ180CA | 180                             | 198                              | 230.4 | 1               | 5                                 | 5   | 292                   | 1.3                              | 180A            | 180D                 |
| P4SMAFJ190  | P4SMAFJ190C  | 190                             | 209                              | 267.9 | 1               | 5                                 | 5   | 340                   | 1.2                              | 190V            | 190C                 |
| P4SMAFJ190A | P4SMAFJ190CA | 190                             | 209                              | 243.2 | 1               | 5                                 | 5   | 308                   | 1.3                              | 190A            | 190D                 |
| P4SMAFJ200  | P4SMAFJ200C  | 200                             | 220                              | 282   | 1               | 5                                 | 5   | 358                   | 1.1                              | 200V            | 200C                 |
| P4SMAFJ200A | P4SMAFJ200CA | 200                             | 220                              | 256   | 1               | 5                                 | 5   | 324                   | 1.2                              | 200A            | 200D                 |
| P4SMAFJ210  | P4SMAFJ210C  | 210                             | 231                              | 296.1 | 1               | 5                                 | 5   | 376                   | 1.1                              | 210V            | 210C                 |
| P4SMAFJ210A | P4SMAFJ210CA | 210                             | 231                              | 268.8 | 1               | 5                                 | 5   | 340                   | 1.2                              | 210A            | 210D                 |
| P4SMAFJ220  | P4SMAFJ220C  | 220                             | 242                              | 310.2 | 1               | 5                                 | 5   | 394                   | 1                                | 220V            | 220C                 |
| P4SMAFJ220A | P4SMAFJ220CA | 220                             | 242                              | 281.6 | 1               | 5                                 | 5   | 356                   | 1.1                              | 220A            | 220D                 |

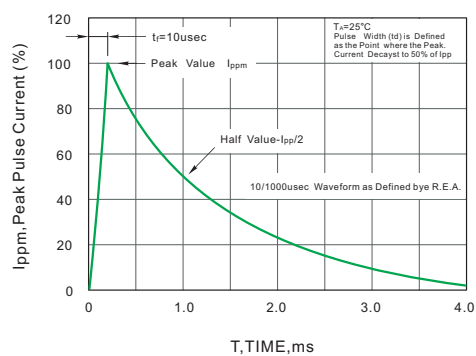
**Fig.1 Peak Pulse Power Rating Curve**



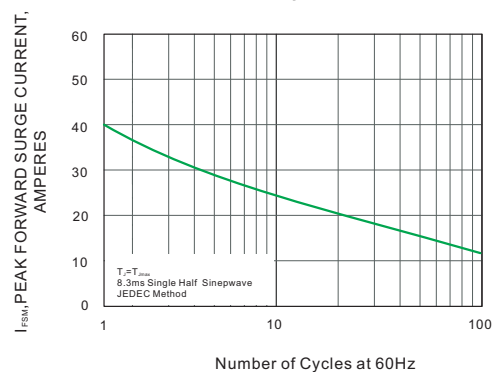
**Fig.2 Forward Current Derating Curve**



**Fig.3 Pulse Waveform**



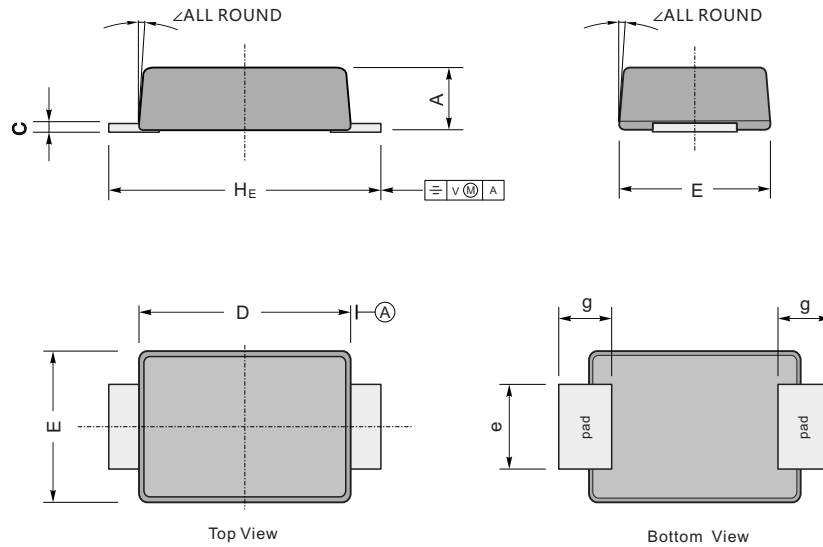
**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



## Package Outline

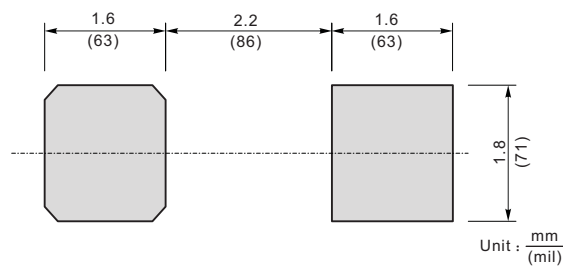
## SMAF

Plastic surface mounted package; 2 leads



| UNIT |     | A   | C    | D   | E   | e   | g   | H <sub>E</sub> | ∠  |
|------|-----|-----|------|-----|-----|-----|-----|----------------|----|
| mm   | max | 1.1 | 0.20 | 3.7 | 2.7 | 1.6 | 1.2 | 4.9            | 7° |
|      | min | 0.9 | 0.12 | 3.3 | 2.4 | 1.3 | 0.8 | 4.4            |    |
| mil  | max | 43  | 7.9  | 146 | 106 | 63  | 47  | 193            |    |
|      | min | 35  | 4.7  | 130 | 94  | 51  | 31  | 173            |    |

## The recommended mounting pad size



## Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| SMAF    | Tape/Reel, 13" reel | 10000            | EIA-481-1         |
|         | Tape/Reel, 7" reel  | 3000             | EIA-481-1         |