

## 400W, 5V - 188V Surface Mount Transient Voltage Suppressor

### FEATURES

- Ideal for automated placement
- Glass passivated junction
- Excellent clamping capability
- Fast response time: Typically less than 1.0ps from 0 V to BV min
- Typical  $I_R$  less than 1 $\mu$ A above 10V
- Moisture sensitivity level: level 1, per J-STD-020
- AEC-Q101 qualified available: ordering code with suffix "H"
- 400 W peak pulse power capability with a 10 / 1000  $\mu$ s waveform(300W above 78V)
- Compliant to RoHS directive 2011/65/EU and in accordance to WEEE 2002/96/EC

### KEY PARAMETERS

| PARAMETER                                   | VALUE          | UNIT |
|---------------------------------------------|----------------|------|
| $V_{WM}$                                    | 5 - 188        | V    |
| $V_{BR}$                                    | 6.4 - 255      | V    |
| $P_{PPM}$<br>$t_p = 10/1000 \mu s$ waveform | 400            | W    |
| $T_{J MAX}$                                 | 150            | °C   |
| Package                                     | DO-214AC (SMA) |      |
| Configuration                               | Single die     |      |



### APPLICATIONS

- Switching mode power supply (SMPS)
- Adapters
- Lighting application
- On-board DC/DC converter

### MECHANICAL DATA

- Case: DO-214AC (SMA)
- Molding compound meets UL 94V-0 flammability rating
- Matte tin plated leads, solderable per J-STD-002
- Meet JESD 201 class 2 whisker test
- Weight: 0.06g (approximately)



**DO-214AC (SMA)**

### ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

| PARAMETER                                                                           | SYMBOL    | VALUE       | UNIT |
|-------------------------------------------------------------------------------------|-----------|-------------|------|
| Peak power dissipation at $T_A=25^\circ\text{C}$ , $t_p=1\text{ms}$ (Note 1)        | $P_{PK}$  | 400         | W    |
| Steady state power dissipation                                                      | $P_D$     | 1           | W    |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 40          | A    |
| Maximum instantaneous forward voltage at 25 A for unidirectional only               | $V_F$     | 3.5         | V    |
| Operating junction temperature range                                                | $T_J$     | -55 to +150 | °C   |
| Storage temperature range                                                           | $T_{STG}$ | -55 to +150 | °C   |

#### Note:

1. Non-repetitive current pulse per Fig. 3 and derated above  $T_A=25^\circ\text{C}$  per Fig. 2

#### Devices for Bipolar Applications

1. For bidirectional use C or CA suffix for types SMAJ5.0 - Types SMAJ188
2. Electrical characteristics apply in both directions

**ELECTRICAL SPECIFICATIONS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

| Part number | Marking code | Breakdown voltage<br>$V_{BR}@I_T^{(1)}$<br>(V) |       | Test current<br>$I_T$<br>(mA) | Working stand-off voltage<br>$V_{WM}$<br>(V) | Maximum reverse leakage current<br>$I_R@V_{WM}^{(1)}$ ( $\mu\text{A}$ ) | Maximum peak impulse current<br>$I_{PPM}$ (A) <sup>(2)</sup> | Maximum clamping voltage<br>$V_C@I_{PPM}$ (V) <sup>(2)</sup> |
|-------------|--------------|------------------------------------------------|-------|-------------------------------|----------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
|             |              | Min.                                           | Max.  |                               |                                              |                                                                         |                                                              |                                                              |
| SMAJ5.0     | AD           | 6.4                                            | 7.30  | 10                            | 5                                            | 800                                                                     | 41.7                                                         | 9.6                                                          |
| SMAJ5.0A    | AE           | 6.4                                            | 7.00  | 10                            | 5                                            | 800                                                                     | 43.5                                                         | 9.2                                                          |
| SMAJ6.0     | AF           | 6.67                                           | 8.15  | 10                            | 6                                            | 800                                                                     | 35.1                                                         | 11.4                                                         |
| SMAJ6.0A    | AG           | 6.67                                           | 7.37  | 10                            | 6                                            | 800                                                                     | 38.8                                                         | 10.3                                                         |
| SMAJ6.5     | AH           | 7.22                                           | 8.82  | 10                            | 6.5                                          | 500                                                                     | 32.5                                                         | 12.3                                                         |
| SMAJ6.5A    | AK           | 7.22                                           | 7.98  | 10                            | 6.5                                          | 500                                                                     | 35.7                                                         | 11.2                                                         |
| SMAJ7.0     | AL           | 7.78                                           | 9.51  | 10                            | 7                                            | 200                                                                     | 30.1                                                         | 13.3                                                         |
| SMAJ7.0A    | AM           | 7.78                                           | 8.60  | 10                            | 7                                            | 200                                                                     | 33.3                                                         | 12.0                                                         |
| SMAJ7.5     | AN           | 8.33                                           | 10.30 | 1                             | 7.5                                          | 100                                                                     | 28.0                                                         | 14.3                                                         |
| SMAJ7.5A    | AP           | 8.33                                           | 9.21  | 1                             | 7.5                                          | 100                                                                     | 31.0                                                         | 12.9                                                         |
| SMAJ8.0     | AQ           | 8.89                                           | 10.90 | 1                             | 8                                            | 50                                                                      | 26.7                                                         | 15.0                                                         |
| SMAJ8.0A    | AR           | 8.89                                           | 9.83  | 1                             | 8                                            | 50                                                                      | 29.4                                                         | 13.6                                                         |
| SMAJ8.5     | AS           | 9.44                                           | 11.50 | 1                             | 8.5                                          | 10                                                                      | 25.2                                                         | 15.9                                                         |
| SMAJ8.5A    | AT           | 9.44                                           | 10.40 | 1                             | 8.5                                          | 10                                                                      | 27.8                                                         | 14.4                                                         |
| SMAJ9.0     | AU           | 10.0                                           | 12.20 | 1                             | 9                                            | 5                                                                       | 23.7                                                         | 16.9                                                         |
| SMAJ9.0A    | AV           | 10.0                                           | 11.10 | 1                             | 9                                            | 5                                                                       | 26.0                                                         | 15.4                                                         |
| SMAJ10      | AW           | 11.1                                           | 13.60 | 1                             | 10                                           | 5                                                                       | 21.3                                                         | 18.8                                                         |
| SMAJ10A     | AX           | 11.1                                           | 12.30 | 1                             | 10                                           | 5                                                                       | 23.5                                                         | 17.0                                                         |
| SMAJ11      | AY           | 12.2                                           | 14.90 | 1                             | 11                                           | 1                                                                       | 19.9                                                         | 20.1                                                         |
| SMAJ11A     | AZ           | 12.2                                           | 13.50 | 1                             | 11                                           | 1                                                                       | 22.0                                                         | 18.2                                                         |
| SMAJ12      | BD           | 13.3                                           | 16.30 | 1                             | 12                                           | 1                                                                       | 18.2                                                         | 22.0                                                         |
| SMAJ12A     | BE           | 13.3                                           | 14.70 | 1                             | 12                                           | 1                                                                       | 20.1                                                         | 19.9                                                         |
| SMAJ13      | BF           | 14.4                                           | 17.60 | 1                             | 13                                           | 1                                                                       | 16.8                                                         | 23.8                                                         |
| SMAJ13A     | BG           | 14.4                                           | 15.90 | 1                             | 13                                           | 1                                                                       | 18.6                                                         | 21.5                                                         |
| SMAJ14      | BH           | 15.6                                           | 19.10 | 1                             | 14                                           | 1                                                                       | 15.5                                                         | 25.8                                                         |
| SMAJ14A     | BK           | 15.6                                           | 17.20 | 1                             | 14                                           | 1                                                                       | 17.2                                                         | 23.2                                                         |
| SMAJ15      | BL           | 16.7                                           | 20.40 | 1                             | 15                                           | 1                                                                       | 14.9                                                         | 26.9                                                         |
| SMAJ15A     | BM           | 16.7                                           | 18.50 | 1                             | 15                                           | 1                                                                       | 16.4                                                         | 24.4                                                         |
| SMAJ16      | BN           | 17.8                                           | 21.80 | 1                             | 16                                           | 1                                                                       | 13.9                                                         | 28.8                                                         |
| SMAJ16A     | BP           | 17.8                                           | 19.70 | 1                             | 16                                           | 1                                                                       | 15.4                                                         | 26.0                                                         |
| SMAJ17      | BQ           | 18.9                                           | 23.10 | 1                             | 17                                           | 1                                                                       | 13.1                                                         | 30.5                                                         |
| SMAJ17A     | BR           | 18.9                                           | 20.90 | 1                             | 17                                           | 1                                                                       | 14.5                                                         | 27.6                                                         |
| SMAJ18      | BS           | 20.0                                           | 24.40 | 1                             | 18                                           | 1                                                                       | 12.4                                                         | 32.2                                                         |
| SMAJ18A     | BT           | 20.0                                           | 22.10 | 1                             | 18                                           | 1                                                                       | 13.7                                                         | 29.2                                                         |
| SMAJ20      | BU           | 22.2                                           | 27.10 | 1                             | 20                                           | 1                                                                       | 11.2                                                         | 35.8                                                         |
| SMAJ20A     | BV           | 22.2                                           | 24.50 | 1                             | 20                                           | 1                                                                       | 12.3                                                         | 32.4                                                         |
| SMAJ22      | BW           | 24.4                                           | 29.80 | 1                             | 22                                           | 1                                                                       | 10.2                                                         | 39.4                                                         |
| SMAJ22A     | BX           | 24.4                                           | 26.90 | 1                             | 22                                           | 1                                                                       | 11.3                                                         | 35.5                                                         |
| SMAJ24      | BY           | 26.7                                           | 32.60 | 1                             | 24                                           | 1                                                                       | 9.3                                                          | 43.0                                                         |
| SMAJ24A     | BZ           | 26.7                                           | 29.50 | 1                             | 24                                           | 1                                                                       | 10.3                                                         | 38.9                                                         |
| SMAJ26      | CD           | 28.9                                           | 35.30 | 1                             | 26                                           | 1                                                                       | 8.6                                                          | 46.6                                                         |
| SMAJ26A     | CE           | 28.9                                           | 31.90 | 1                             | 26                                           | 1                                                                       | 9.5                                                          | 42.1                                                         |
| SMAJ28      | CF           | 31.1                                           | 38.00 | 1                             | 28                                           | 1                                                                       | 8.0                                                          | 50.0                                                         |
| SMAJ28A     | CG           | 31.1                                           | 34.40 | 1                             | 28                                           | 1                                                                       | 8.8                                                          | 45.4                                                         |
| SMAJ30      | CH           | 33.3                                           | 40.7  | 1                             | 30                                           | 1                                                                       | 7.5                                                          | 53.5                                                         |
| SMAJ30A     | CK           | 33.3                                           | 36.8  | 1                             | 30                                           | 1                                                                       | 8.3                                                          | 48.4                                                         |
| SMAJ33      | CL           | 36.7                                           | 44.9  | 1                             | 33                                           | 1                                                                       | 6.8                                                          | 59.0                                                         |
| SMAJ33A     | CM           | 36.7                                           | 40.6  | 1                             | 33                                           | 1                                                                       | 7.5                                                          | 53.3                                                         |

**ELECTRICAL SPECIFICATIONS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

| Part number | Marking code | Breakdown voltage<br>$V_{BR}@I_T^{(1)}$<br>(V) |      | Test current<br>$I_T$<br>(mA) | Working stand-off voltage<br>$V_{WM}$<br>(V) | Maximum reverse leakage current<br>$I_R@V_{WM}^{(1)}$ ( $\mu\text{A}$ ) | Maximum peak impulse current<br>$I_{PPM} (A)^{(2)}$ | Maximum clamping voltage<br>$V_C@I_{PPM} (V)^{(2)}$ |
|-------------|--------------|------------------------------------------------|------|-------------------------------|----------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
|             |              | Min.                                           | Max. |                               |                                              |                                                                         |                                                     |                                                     |
| SMAJ36      | CN           | 40.0                                           | 48.9 | 1                             | 36                                           | 1                                                                       | 6.2                                                 | 64.3                                                |
| SMAJ36A     | CP           | 40.0                                           | 44.2 | 1                             | 36                                           | 1                                                                       | 6.9                                                 | 58.1                                                |
| SMAJ40      | CQ           | 44.4                                           | 54.3 | 1                             | 40                                           | 1                                                                       | 5.6                                                 | 71.4                                                |
| SMAJ40A     | CR           | 44.4                                           | 49.1 | 1                             | 40                                           | 1                                                                       | 6.2                                                 | 64.5                                                |
| SMAJ43      | CS           | 47.8                                           | 58.4 | 1                             | 43                                           | 1                                                                       | 5.2                                                 | 76.7                                                |
| SMAJ43A     | CT           | 47.8                                           | 52.8 | 1                             | 43                                           | 1                                                                       | 5.8                                                 | 69.4                                                |
| SMAJ45      | CU           | 50.0                                           | 61.1 | 1                             | 45                                           | 1                                                                       | 5.0                                                 | 80.3                                                |
| SMAJ45A     | CV           | 50.0                                           | 55.3 | 1                             | 45                                           | 1                                                                       | 5.5                                                 | 72.7                                                |
| SMAJ48      | CW           | 53.3                                           | 65.1 | 1                             | 48                                           | 1                                                                       | 4.7                                                 | 85.5                                                |
| SMAJ48A     | CX           | 53.3                                           | 58.9 | 1                             | 48                                           | 1                                                                       | 5.2                                                 | 77.4                                                |
| SMAJ51      | CY           | 56.7                                           | 69.3 | 1                             | 51                                           | 1                                                                       | 4.4                                                 | 91.1                                                |
| SMAJ51A     | CZ           | 56.7                                           | 62.7 | 1                             | 51                                           | 1                                                                       | 4.9                                                 | 82.4                                                |
| SMAJ54      | RD           | 60.0                                           | 73.3 | 1                             | 54                                           | 1                                                                       | 4.2                                                 | 96.3                                                |
| SMAJ54A     | RE           | 60.0                                           | 66.3 | 1                             | 54                                           | 1                                                                       | 4.6                                                 | 87.1                                                |
| SMAJ58      | RF           | 64.4                                           | 78.7 | 1                             | 58                                           | 1                                                                       | 3.9                                                 | 103                                                 |
| SMAJ58A     | RG           | 64.4                                           | 71.2 | 1                             | 58                                           | 1                                                                       | 4.3                                                 | 93.6                                                |
| SMAJ60      | RH           | 66.7                                           | 81.5 | 1                             | 60                                           | 1                                                                       | 3.7                                                 | 107                                                 |
| SMAJ60A     | RK           | 66.7                                           | 73.7 | 1                             | 60                                           | 1                                                                       | 4.1                                                 | 96.8                                                |
| SMAJ64      | RL           | 71.1                                           | 86.9 | 1                             | 64                                           | 1                                                                       | 3.5                                                 | 114                                                 |
| SMAJ64A     | RM           | 71.1                                           | 78.6 | 1                             | 64                                           | 1                                                                       | 3.9                                                 | 103                                                 |
| SMAJ70      | RN           | 77.8                                           | 95.1 | 1                             | 70                                           | 1                                                                       | 3.2                                                 | 125                                                 |
| SMAJ70A     | RP           | 77.8                                           | 86   | 1                             | 70                                           | 1                                                                       | 3.5                                                 | 113                                                 |
| SMAJ75      | RQ           | 83.3                                           | 102  | 1                             | 75                                           | 1                                                                       | 3.0                                                 | 134                                                 |
| SMAJ75A     | RR           | 83.3                                           | 92.1 | 1                             | 75                                           | 1                                                                       | 3.3                                                 | 121                                                 |
| SMAJ78      | RS           | 86.7                                           | 106  | 1                             | 78                                           | 1                                                                       | 2.9                                                 | 139                                                 |
| SMAJ78A     | RT           | 86.7                                           | 95.8 | 1                             | 78                                           | 1                                                                       | 3.2                                                 | 126                                                 |
| SMAJ85      | RU           | 94.4                                           | 115  | 1                             | 85                                           | 1                                                                       | 2.0                                                 | 151                                                 |
| SMAJ85A     | RV           | 94.4                                           | 104  | 1                             | 85                                           | 1                                                                       | 2.2                                                 | 137                                                 |
| SMAJ90      | RW           | 100                                            | 122  | 1                             | 90                                           | 1                                                                       | 1.9                                                 | 160                                                 |
| SMAJ90A     | RX           | 100                                            | 111  | 1                             | 90                                           | 1                                                                       | 2.1                                                 | 146                                                 |
| SMAJ100     | RY           | 111                                            | 136  | 1                             | 100                                          | 1                                                                       | 1.7                                                 | 179                                                 |
| SMAJ100A    | RZ           | 111                                            | 123  | 1                             | 100                                          | 1                                                                       | 1.9                                                 | 162                                                 |
| SMAJ110     | SD           | 122                                            | 149  | 1                             | 110                                          | 1                                                                       | 1.6                                                 | 196                                                 |
| SMAJ110A    | SE           | 122                                            | 135  | 1                             | 110                                          | 1                                                                       | 1.7                                                 | 177                                                 |
| SMAJ120     | SF           | 133                                            | 163  | 1                             | 120                                          | 1                                                                       | 1.4                                                 | 214                                                 |
| SMAJ120A    | SG           | 133                                            | 147  | 1                             | 120                                          | 1                                                                       | 1.6                                                 | 193                                                 |
| SMAJ130     | SH           | 144                                            | 176  | 1                             | 130                                          | 1                                                                       | 1.3                                                 | 231                                                 |
| SMAJ130A    | SK           | 144                                            | 159  | 1                             | 130                                          | 1                                                                       | 1.5                                                 | 209                                                 |
| SMAJ150     | SL           | 167                                            | 204  | 1                             | 150                                          | 1                                                                       | 1.1                                                 | 266                                                 |
| SMAJ150A    | SM           | 167                                            | 185  | 1                             | 150                                          | 1                                                                       | 1.3                                                 | 243                                                 |
| SMAJ160     | SN           | 178                                            | 218  | 1                             | 160                                          | 1                                                                       | 1.0                                                 | 287                                                 |
| SMAJ160A    | SP           | 178                                            | 197  | 1                             | 160                                          | 1                                                                       | 1.2                                                 | 259                                                 |
| SMAJ170     | SQ           | 189                                            | 231  | 1                             | 170                                          | 1                                                                       | 1.0                                                 | 304                                                 |
| SMAJ170A    | SR           | 189                                            | 209  | 1                             | 170                                          | 1                                                                       | 1.1                                                 | 275                                                 |
| SMAJ188     | ST           | 209                                            | 255  | 1                             | 188                                          | 1                                                                       | 0.9                                                 | 344                                                 |
| SMAJ188A    | SS           | 209                                            | 231  | 1                             | 188                                          | 1                                                                       | 0.9                                                 | 328                                                 |

**Notes:**

1. Pulse test with  $PW=30\text{ ms}$
2. Non-repetitive current pulse, per Fig. 3 and derated above  $T_A=25^\circ\text{C}$  per Fig. 2
3. Peak pulse power waveform is  $10/1000\mu\text{s}$
4. For bi-directional devices having  $V_R$  of 10 V and under, the  $I_R$  limit is double.

**ORDERING INFORMATION**

| <b>ORDERING CODE</b><br>(Note 1,2,3) | <b>PACKAGE</b> | <b>PACKING</b>           |
|--------------------------------------|----------------|--------------------------|
| SMAJxxxAHR3G                         | SMA            | 1,800 / 7" Plastic reel  |
| SMAJxxxAHR2G                         | SMA            | 7,500 / 13" Paper reel   |
| SMAJxxxAHM2G                         | SMA            | 7,500 / 13" Plastic reel |
| SMAJxxxAHF3G                         | Folded SMA     | 1,800 / 7" Plastic reel  |
| SMAJxxxAHF2G                         | Folded SMA     | 7,500 / 13" Paper reel   |
| SMAJxxxAHF4G                         | Folded SMA     | 7,500 / 13" Plastic reel |
| SMAJxxxAHE3G                         | Clip SMA       | 1,800 / 7" Plastic reel  |
| SMAJxxxAHE2G                         | Clip SMA       | 7,500 / 13" Plastic reel |
| SMAJxxxA R3G                         | SMA            | 1,800 / 7" Plastic reel  |
| SMAJxxxA R2G                         | SMA            | 7,500 / 13" Paper reel   |
| SMAJxxxA M2G                         | SMA            | 7,500 / 13" Plastic reel |
| SMAJxxxA F3G                         | Folded SMA     | 1,800 / 7" Plastic reel  |
| SMAJxxxA F2G                         | Folded SMA     | 7,500 / 13" Paper reel   |
| SMAJxxxA F4G                         | Folded SMA     | 7,500 / 13" Plastic reel |
| SMAJxxxA E3G                         | Clip SMA       | 1,800 / 7" Plastic reel  |
| SMAJxxxA E2G                         | Clip SMA       | 7,500 / 13" Plastic reel |
| SMAJxxxAHR3                          | SMA            | 1,800 / 7" Plastic reel  |
| SMAJxxxAHR2                          | SMA            | 7,500 / 13" Paper reel   |
| SMAJxxxAHM2                          | SMA            | 7,500 / 13" Plastic reel |
| SMAJxxxAHF3                          | Folded SMA     | 1,800 / 7" Plastic reel  |
| SMAJxxxAHF2                          | Folded SMA     | 7,500 / 13" Paper reel   |
| SMAJxxxAHF4                          | Folded SMA     | 7,500 / 13" Plastic reel |
| SMAJxxxAHE3                          | Clip SMA       | 1,800 / 7" Plastic reel  |
| SMAJxxxAHE2                          | Clip SMA       | 7,500 / 13" Plastic reel |
| SMAJxxxA R3                          | SMA            | 1,800 / 7" Plastic reel  |
| SMAJxxxA R2                          | SMA            | 7,500 / 13" Paper reel   |
| SMAJxxxA M2                          | SMA            | 7,500 / 13" Plastic reel |
| SMAJxxxA F3                          | Folded SMA     | 1,800 / 7" Plastic reel  |
| SMAJxxxA F2                          | Folded SMA     | 7,500 / 13" Paper reel   |
| SMAJxxxA F4                          | Folded SMA     | 7,500 / 13" Plastic reel |
| SMAJxxxA E3                          | Clip SMA       | 1,800 / 7" Plastic reel  |
| SMAJxxxA E2                          | Clip SMA       | 7,500 / 13" Plastic reel |

**Note 1:**

"xxx" defines voltage from 5V (SMAJ5.0) to 188V (SMAJ188)

**Note 2:**

"H" means AEC-Q101 qualified

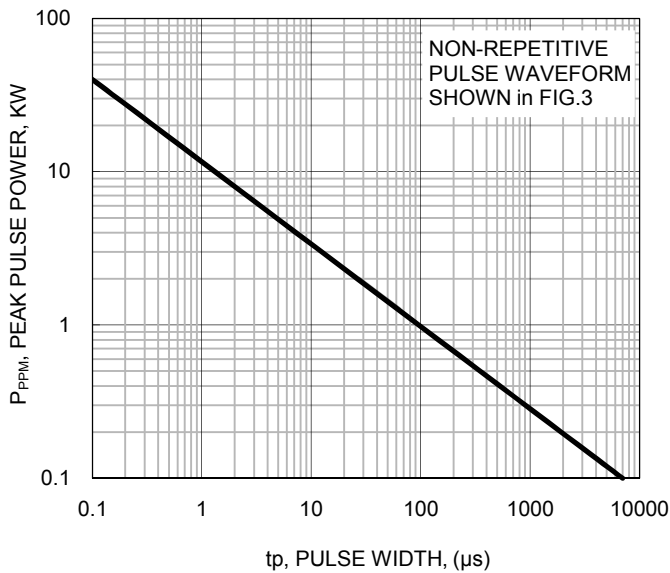
**Note 3:**

"G" means green compound (halogen free)

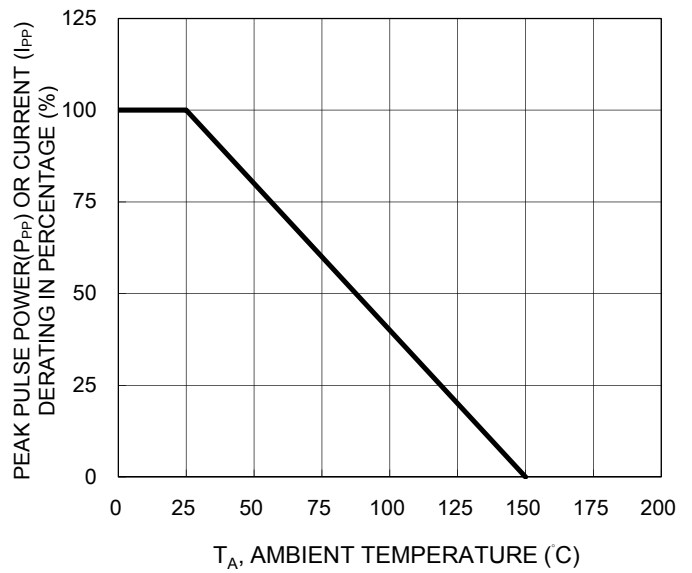
## CHARACTERISTICS CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

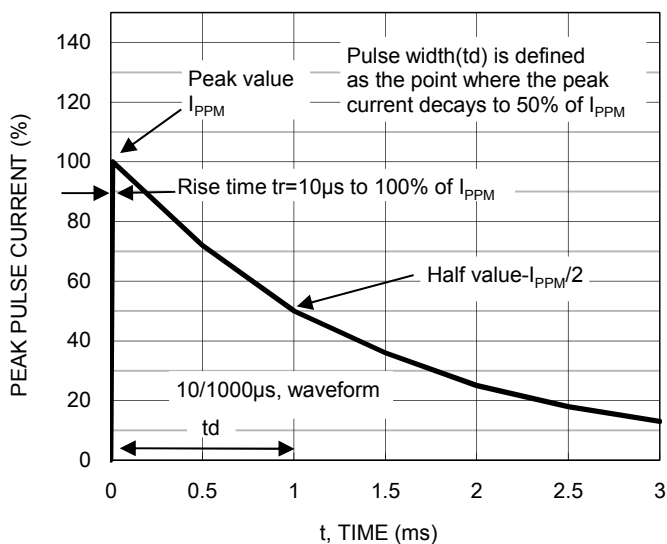
**Fig.1 Peak Pulse Power Rating Curve**



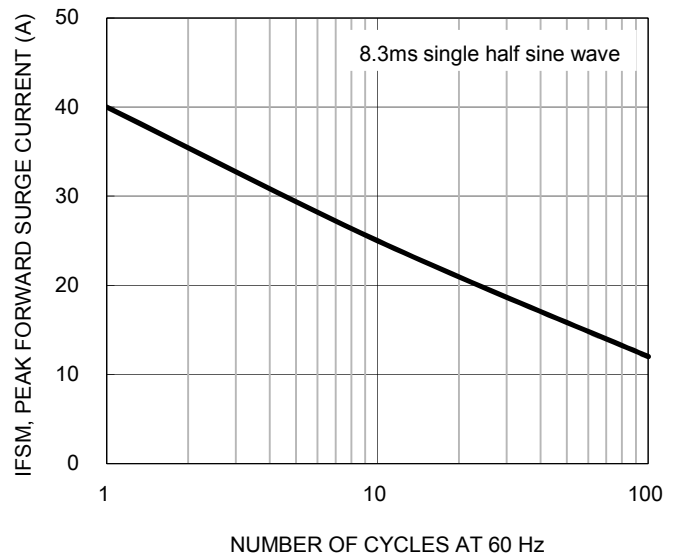
**Fig.2 Pulse Derating Curve**



**Fig.3 Clamping Power Pulse Waveform**



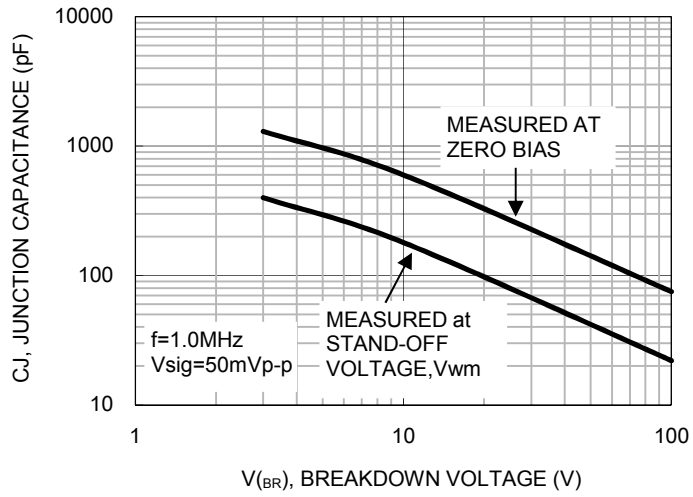
**Fig.4 Maximum Non-repetitive Forward Surge Current**



## CHARACTERISTICS CURVES

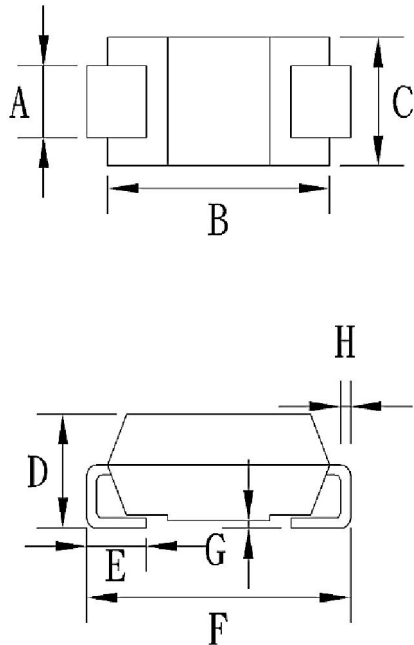
( $T_A = 25^\circ\text{C}$  unless otherwise noted)

**Fig.5 Typical Junction Capacitance**



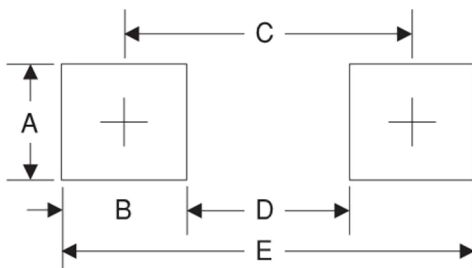
## PACKAGE OUTLINE DIMENSIONS

DO-214AC (SMA)



| DIM | Unit (mm) |      | Unit (inch) |       |
|-----|-----------|------|-------------|-------|
|     | Min       | Max  | Min         | Max   |
| A   | 1.27      | 1.58 | 0.050       | 0.062 |
| B   | 4.06      | 4.60 | 0.160       | 0.181 |
| C   | 2.29      | 2.83 | 0.090       | 0.111 |
| D   | 1.99      | 2.50 | 0.078       | 0.098 |
| E   | 0.90      | 1.41 | 0.035       | 0.056 |
| F   | 4.95      | 5.33 | 0.195       | 0.210 |
| G   | 0.10      | 0.20 | 0.004       | 0.008 |
| H   | 0.15      | 0.31 | 0.006       | 0.012 |

## SUGGESTED PAD LAYOUT



| Symbol | Unit (mm) | Unit (inch) |
|--------|-----------|-------------|
| A      | 1.68      | 0.066       |
| B      | 1.52      | 0.060       |
| C      | 3.93      | 0.155       |
| D      | 2.41      | 0.095       |
| E      | 5.45      | 0.215       |

## MARKING DIAGRAM



P/N = Marking Code  
G = Green Compound  
YW = Date Code  
F = Factory Code

Note: Cathode band for uni-directional products only

## Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.