



DO-214AB PACKAGE

### APPLICATIONS

- Power Supply
- AC/DC Applications
- Telecom

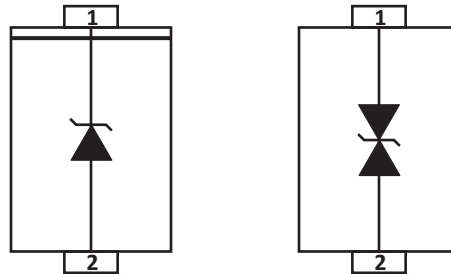
### FEATURES

- RTCA DO-160G COMPLIANT PRODUCT
- UL Registered
- Compatible with IEC 61000-4-2 (ESD): Level 4 - Air 15kV, Contact 8kV
- Compatible with IEC 61000-4-4 (EFT): 40A, 5/50ns
- Compatible with IEC 61000-4-5 (Surge): 8/20 $\mu$ s Waveform
- Glass Passivated Chip
- 1500 Watts Peak Pulse Power per Line ( $t_p = 10/1000\mu$ s)
- Low Leakage Current
- Bidirectional and Unidirectional Configurations
- Excellent Clamping Capability
- Very Fast Response Time
- Available in Multiple Voltages
- RoHS Compliant
- REACH Compliant

### MECHANICAL CHARACTERISTICS

- Molded JEDEC DO-214AB Package
- Approximate Weight: 0.248 grams
- Lead-Free Pure-Tin Plating (Annealed)
- Solder Reflow Temperature:  
Pure-Tin - Sn, 100: 260-270°C
- 16mm Tape and Reel Per EIA Standard 481
- Terminal: Solderable per MIL-STD-750, Method 2026
- Flammability Rating UL 94V-0

### PIN CONFIGURATIONS



## TYPICAL DEVICE CHARACTERISTICS

## RTCA DO-160G COMPLIANT PRODUCT

## MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

| PARAMETER   | SYMBOL    | VALUE      | UNITS |
|---|-----------|------------|-------|
| Operating Temperature   | $T_A$     | -55 to 150 | °C    |
| Storage Temperature   | $T_{STG}$ | -55 to 150 | °C    |
| Peak Pulse Power (tp =10/1000µs) - See Figure 1 and Note 2                            | $P_{PP}$  | 1500       | Watts |
| Power Dissipation on Infinite Heatsink at $T_L = 75^\circ\text{C}$                    | $P_D$     | 6.5        | Watts |
| Peak Forward Surge Current, 8.3ms single half sinewave - Unidirectional Only (Note 2) | $I_{FSM}$ | 200        | Amps  |
| Maximum Instantaneous Forward Voltage at 100A - Unidirectional Only (Note 3)          | $V_F$     | 3.5/5.0    | V     |

## NOTE

1. Non-repetitive current pulse per Figure 2 and derated above  $T_A = 25^\circ\text{C}$  per Figure 2.
2. Measured on 8.3ms single half sinewave or equivalent square wave, duty cycle = 4 pulses per minute maximum.
3.  $V_F < 3.5\text{V}$ .

## ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

| PART NUMBER<br>(Notes 1-3) | DEVICE MARKING |     | REVERSE STAND-OFF VOLTAGE<br><br>$V_{RWM}$<br>VOLTS | BREAKDOWN VOLTAGE<br><br>$V_{(BR)} @ I_T$<br>VOLTS |       | TEST CURRENT<br><br>@ $I_T$<br>mA | MAXIMUM CLAMPING VOLTAGE<br>(Fig. 2)<br><br>@ $I_P$<br>$V_C$<br>VOLTS | MAXIMUM REVERSE SURGE CURRENT<br><br>@ $I_{PP}$<br>AMPS | MAXIMUM REVERSE LEAKAGE CURRENT<br><br>@ $V_{RWM}$<br>$I_R$<br>µA |
|----------------------------|----------------|-----|---|--|-------|-----------------------------------|---|---|---|
|                            | UNI            | BI  |   | MIN  | MAX   |                                   |   |   |   |
| SMCJ5.0                    | GDD            | BDD | 5.0   | 6.40   | 7.30  | 10                                | 9.6   | 156   | 800   |
| SMCJ5.0A                   | GDE            | BDE | 5.0   | 6.40   | 7.00  | 10                                | 9.2   | 163   | 800   |
| SMCJ6.0                    | GDF            | BDF | 6.0   | 6.67   | 8.15  | 10                                | 11.4  | 132   | 800   |
| SMCJ6.0A                   | GDG            | BDG | 6.0   | 6.67   | 7.37  | 10                                | 10.3  | 146   | 800   |
| SMCJ6.5                    | GDH            | BDH | 6.5   | 7.22   | 8.82  | 10                                | 12.3  | 122   | 500   |
| SMCJ6.5A                   | GDK            | BDK | 6.5   | 7.22   | 7.98  | 10                                | 11.2  | 134   | 500   |
| SMCJ7.0                    | GDL            | BDL | 7.0   | 7.78   | 9.51  | 10                                | 13.3  | 113   | 200   |
| SMCJ7.0A                   | GDM            | BDM | 7.0   | 7.78   | 8.60  | 10                                | 12.0  | 125   | 200   |
| SMCJ7.5                    | GDN            | BDN | 7.5   | 8.33   | 10.20 | 1                                 | 14.3  | 105   | 100   |
| SMCJ7.5A                   | GDP            | BDP | 7.5   | 8.33   | 9.21  | 1                                 | 12.9  | 116   | 100   |
| SMCJ8.0                    | GDQ            | BDQ | 8.0   | 8.89   | 10.90 | 1                                 | 15.0  | 100   | 50  |
| SMCJ8.0A                   | GDR            | BDR | 8.0   | 8.89   | 9.83  | 1                                 | 13.6  | 110   | 50  |
| SMCJ8.5                    | GDS            | BDS | 8.5   | 9.44   | 11.50 | 1                                 | 15.9  | 94.3  | 20  |
| SMCJ8.5A                   | GDT            | BDT | 8.5   | 9.44   | 10.40 | 1                                 | 14.4  | 104   | 20  |
| SMCJ9.0                    | GDU            | BDU | 9.0   | 10.00  | 12.20 | 1                                 | 16.9  | 88.8  | 10  |
| SMCJ9.0A                   | GDV            | BDV | 9.0   | 10.00  | 11.10 | 1                                 | 15.4  | 97.4  | 10  |
| SMCJ10                     | GDW            | BDW | 10.0  | 11.10  | 13.60 | 1                                 | 18.8  | 79.8  | 5   |
| SMCJ10A                    | GDX            | BDX | 10.0  | 11.10  | 12.30 | 1                                 | 17.0  | 88.2  | 5   |
| SMCJ11                     | GDY            | BDY | 11.0  | 12.20  | 14.90 | 1                                 | 20.1  | 74.6  | 1   |
| SMCJ11A                    | GDZ            | BDZ | 11.0  | 12.20  | 13.50 | 1                                 | 18.2  | 82.4  | 1   |
| SMCJ12                     | GED            | BED | 12.0  | 13.30  | 16.30 | 1                                 | 22.0  | 68.2  | 1   |
| SMCJ12A                    | GEE            | BEE | 12.0  | 13.30  | 14.70 | 1                                 | 19.9  | 75.4  | 1   |

## TYPICAL DEVICE CHARACTERISTICS

## RTCA DO-160G COMPLIANT PRODUCT

## ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

| PART NUMBER<br>(Notes 1-3) | DEVICE MARKING |     | REVERSE STAND-OFF VOLTAGE<br><br>$V_{RWM}$<br>VOLTS | BREAKDOWN VOLTAGE<br><br>$V_{(BR)} @ I_T$<br>VOLTS |       | TEST CURRENT<br><br>@ $I_T$<br>mA | MAXIMUM CLAMPING VOLTAGE<br>(Fig. 2)<br><br>@ $I_p$<br>$V_c$<br>VOLTS | MAXIMUM REVERSE SURGE CURRENT<br><br>@ $I_{PP}$<br>AMPS | MAXIMUM REVERSE LEAKAGE CURRENT<br><br>@ $V_{RWM}$<br>$I_R$<br>$\mu A$ |
|----------------------------|----------------|-----|---|--|-------|-----------------------------------|---|---|--|
|                            | UNI            | BI  |   | MIN  | MAX   |                                   |   |   |  |
|                            | SMCJ13         | GEF | BEF   | 13.0   | 14.40 | 17.60                             | 1   | 23.8  | 63.0   |
| SMCJ13A                    | GEG            | BEG | 13.0  | 14.40  | 15.90 | 1                                 | 21.5  | 69.8  | 1  |
| SMCJ14                     | GEH            | BEH | 14.0  | 15.60  | 19.10 | 1                                 | 25.8  | 58.1  | 1  |
| SMCJ14A                    | GEK            | BEK | 14.0  | 15.60  | 17.20 | 1                                 | 23.2  | 64.7  | 1  |
| SMCJ15                     | GEL            | BEL | 15.0  | 16.70  | 20.40 | 1                                 | 26.9  | 55.8  | 1  |
| SMCJ15A                    | GEM            | BEM | 15.0  | 16.70  | 18.50 | 1                                 | 24.4  | 61.5  | 1  |
| SMCJ16                     | GEN            | BEN | 16.0  | 17.80  | 21.80 | 1                                 | 28.8  | 52.1  | 1  |
| SMCJ16A                    | GEP            | BEP | 16.0  | 17.80  | 19.70 | 1                                 | 26.0  | 57.7  | 1  |
| SMCJ17                     | GEQ            | BEQ | 17.0  | 18.90  | 23.10 | 1                                 | 30.5  | 49.2  | 1  |
| SMCJ17A                    | GER            | BER | 17.0  | 18.90  | 20.90 | 1                                 | 27.6  | 54.4  | 1  |
| SMCJ18                     | GES            | BES | 18.0  | 20.00  | 24.40 | 1                                 | 32.2  | 46.6  | 1  |
| SMCJ18A                    | GET            | BET | 18.0  | 20.00  | 22.10 | 1                                 | 29.2  | 51.4  | 1  |
| SMCJ19                     | GEA            | BEA | 19.0  | 21.13  | 25.76 | 1                                 | 34.0  | 44.1  | 1  |
| SMCJ19A                    | GEB            | BEB | 19.0  | 21.10  | 23.30 | 1                                 | 30.8  | 48.7  | 1  |
| SMCJ20                     | GEU            | BEU | 20.0  | 22.20  | 27.10 | 1                                 | 35.8  | 42.0  | 1  |
| SMCJ20A                    | GEV            | BEV | 20.0  | 22.20  | 24.50 | 1                                 | 32.4  | 46.3  | 1  |
| SMCJ22                     | GEW            | BEW | 22.0  | 24.40  | 29.80 | 1                                 | 39.4  | 38.1  | 1  |
| SMCJ22A                    | GEX            | BEX | 22.0  | 24.40  | 26.90 | 1                                 | 35.5  | 42.3  | 1  |
| SMCJ24                     | GEY            | BEY | 24.0  | 26.70  | 32.60 | 1                                 | 43.0  | 34.9  | 1  |
| SMCJ24A                    | GEZ            | BEZ | 24.0  | 26.70  | 29.50 | 1                                 | 38.9  | 38.6  | 1  |
| SMCJ26                     | GFD            | BFD | 26.0  | 28.90  | 35.30 | 1                                 | 46.6  | 32.2  | 1  |
| SMCJ26A                    | GFE            | BFE | 26.0  | 28.90  | 31.90 | 1                                 | 42.1  | 35.6  | 1  |
| SMCJ28                     | GFF            | BFF | 28.0  | 31.10  | 38.00 | 1                                 | 50.0  | 30.0  | 1  |
| SMCJ28A                    | GFG            | BFG | 28.0  | 31.10  | 34.40 | 1                                 | 45.4  | 33.0  | 1  |
| SMCJ30                     | GFH            | BFH | 30.0  | 33.30  | 40.70 | 1                                 | 53.5  | 28.0  | 1  |
| SMCJ30A                    | GFK            | BFK | 30.0  | 33.30  | 36.80 | 1                                 | 48.4  | 31.0  | 1  |
| SMCJ33                     | GFL            | BFL | 33.0  | 36.70  | 44.90 | 1                                 | 59.0  | 25.4  | 1  |
| SMCJ33A                    | GFM            | BFM | 33.0  | 36.70  | 40.60 | 1                                 | 53.3  | 28.1  | 1  |
| SMCJ36                     | GFN            | BFN | 36.0  | 40.00  | 48.90 | 1                                 | 64.3  | 23.3  | 1  |
| SMCJ36A                    | GFP            | BFP | 36.0  | 40.00  | 44.20 | 1                                 | 58.1  | 25.8  | 1  |
| SMCJ40                     | GFQ            | BFQ | 40.0  | 44.40  | 54.30 | 1                                 | 71.4  | 21.0  | 1  |
| SMCJ40A                    | GFR            | BFR | 40.0  | 44.40  | 49.10 | 1                                 | 64.5  | 23.3  | 1  |
| SMCJ43                     | GFS            | BFS | 43.0  | 47.80  | 58.40 | 1                                 | 76.7  | 19.6  | 1  |
| SMCJ43A                    | GFT            | BFT | 43.0  | 47.80  | 52.80 | 1                                 | 69.4  | 21.6  | 1  |

## TYPICAL DEVICE CHARACTERISTICS

## RTCA DO-160G COMPLIANT PRODUCT

## ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

| PART NUMBER<br>(Notes 1-3) | DEVICE MARKING |     | REVERSE STAND-OFF VOLTAGE<br><br>$V_{RWM}$<br>VOLTS | BREAKDOWN VOLTAGE<br><br>$V_{(BR)} @ I_T$<br>VOLTS |        | TEST CURRENT<br><br>@ $I_T$<br>mA | MAXIMUM CLAMPING VOLTAGE<br>(Fig. 2)<br><br>@ $I_p$<br>$V_c$<br>VOLTS | MAXIMUM REVERSE SURGE CURRENT<br><br>@ $I_{PP}$<br>AMPS | MAXIMUM REVERSE LEAKAGE CURRENT<br><br>@ $V_{RWM}$<br>$I_R$<br>$\mu A$ |
|----------------------------|----------------|-----|---|--|--------|-----------------------------------|---|---|--|
|                            | UNI            | BI  |   | MIN  | MAX    |                                   |   |   |  |
|                            | SMCJ45         | GFU | BFU   | 45.0   | 50.0   | 61.10                             | 1   | 80.3  | 18.7   |
| SMCJ45A                    | GFV            | BFV | 45.0  | 50.0   | 55.30  | 1                                 | 72.7  | 20.6  | 1  |
| SMCJ48                     | GFW            | BFW | 48.0  | 53.30  | 65.10  | 1                                 | 85.5  | 17.5  | 1  |
| SMCJ48A                    | GFY            | BFY | 48.0  | 53.30  | 58.90  | 1                                 | 77.4  | 19.4  | 1  |
| SMCJ51                     | GFY            | GFY | 51.0  | 56.70  | 69.30  | 1                                 | 91.1  | 16.5  | 1  |
| SMCJ51A                    | GFZ            | BFZ | 51.0  | 56.70  | 62.70  | 1                                 | 82.4  | 18.2  | 1  |
| SMCJ54                     | GGD            | BGD | 54.0  | 60.00  | 73.30  | 1                                 | 96.3  | 15.6  | 1  |
| SMCJ54A                    | GGE            | BGE | 54.0  | 60.00  | 66.30  | 1                                 | 87.1  | 17.2  | 1  |
| SMCJ58                     | GGF            | BGF | 58.0  | 64.40  | 78.70  | 1                                 | 103.0   | 14.6  | 1  |
| SMCJ58A                    | GGG            | BGG | 58.0  | 64.40  | 71.20  | 1                                 | 93.6  | 16.0  | 1  |
| SMCJ60                     | GGH            | BGH | 60.0  | 66.70  | 81.50  | 1                                 | 107.0   | 14.0  | 1  |
| SMCJ60A                    | GGK            | BGK | 60.0  | 66.70  | 73.70  | 1                                 | 96.8  | 15.5  | 1  |
| SMCJ64                     | GGL            | BGL | 64.0  | 71.10  | 86.90  | 1                                 | 114.0   | 13.2  | 1  |
| SMCJ64A                    | GGM            | BGM | 64.0  | 71.10  | 78.60  | 1                                 | 103.0   | 14.6  | 1  |
| SMCJ70                     | GGN            | BGN | 70.0  | 77.80  | 95.10  | 1                                 | 125.0   | 12.0  | 1  |
| SMCJ70A                    | GGP            | BGP | 70.0  | 77.80  | 86.00  | 1                                 | 113.0   | 13.3  | 1  |
| SMCJ75                     | GGQ            | BGQ | 75.0  | 83.30  | 102.00 | 1                                 | 134.0   | 11.2  | 1  |
| SMCJ75A                    | GGR            | BGR | 75.0  | 83.30  | 92.10  | 1                                 | 121.0   | 12.4  | 1  |
| SMCJ78                     | GGS            | BGS | 78.0  | 86.70  | 106.00 | 1                                 | 139.0   | 10.8  | 1  |
| SMCJ78A                    | GGT            | BGT | 78.0  | 86.70  | 95.80  | 1                                 | 126.0   | 11.9  | 1  |
| SMCJ80                     | GGA            | BGA | 80.0  | 88.96  | 108.80 | 1                                 | 143.2   | 10.5  | 1  |
| SMCJ80A                    | GGB            | BGB | 80.0  | 88.80  | 97.60  | 1                                 | 129.6   | 11.6  | 1  |
| SMCJ85                     | GGU            | BGU | 85.0  | 94.40  | 115.00 | 1                                 | 151.0   | 9.9   | 1  |
| SMCJ85A                    | GGV            | BGV | 85.0  | 94.40  | 104.00 | 1                                 | 137.0   | 11.0  | 1  |
| SMCJ90                     | GGW            | BGW | 90.0  | 100.00   | 122.00 | 1                                 | 160.0   | 9.4   | 1  |
| SMCJ90A                    | GGX            | BGX | 90.0  | 100.00   | 111.00 | 1                                 | 146.0   | 10.3  | 1  |
| SMCJ100                    | GGY            | BGY | 100.0   | 111.00   | 136.00 | 1                                 | 179.0   | 8.4   | 1  |
| SMCJ100A                   | GGZ            | BGZ | 100.0   | 111.00   | 123.00 | 1                                 | 162.0   | 9.3   | 1  |
| SMCJ110                    | GHD            | BHD | 110.0   | 122.00   | 149.00 | 1                                 | 196.0   | 7.7   | 1  |
| SMCJ110A                   | GHE            | BHE | 110.0   | 122.00   | 135.00 | 1                                 | 177.0   | 8.5   | 1  |
| SMCJ120                    | GHF            | BHF | 120.0   | 133.00   | 163.00 | 1                                 | 214.0   | 7.0   | 1  |
| SMCJ120A                   | GHG            | BHG | 120.0   | 133.00   | 147.00 | 1                                 | 193.0   | 7.8   | 1  |
| SMCJ130                    | GHH            | BHH | 130.0   | 144.00   | 176.00 | 1                                 | 231.0   | 6.5   | 1  |
| SMCJ130A                   | GHK            | BHK | 130.0   | 144.00   | 159.00 | 1                                 | 209.0   | 7.2   | 1  |

## TYPICAL DEVICE CHARACTERISTICS

## RTCA DO-160G COMPLIANT PRODUCT

## ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

| PART NUMBER<br>(Notes 1-3) | DEVICE MARKING |     | REVERSE STAND-OFF VOLTAGE<br><br>$V_{RWM}$<br>VOLTS | BREAKDOWN VOLTAGE<br><br>$V_{(BR)} @ I_T$<br>VOLTS |        | TEST CURRENT<br><br>@ $I_T$<br>mA | MAXIMUM CLAMPING VOLTAGE (Fig. 2)<br><br>@ $I_P$<br>$V_C$<br>VOLTS | MAXIMUM REVERSE SURGE CURRENT<br><br>@ $I_{PP}$<br>AMPS | MAXIMUM REVERSE LEAKAGE CURRENT<br><br>@ $V_{RWM}$<br>$I_R$<br>$\mu A$ |
|----------------------------|----------------|-----|---|--|--------|-----------------------------------|--|---|--|
|                            | UNI            | BI  |   | MIN  | MAX    |                                   |  |   |  |
|                            | SMCJ140        | GHA | BHA   | 140.0  | 155.68 | 190.40                            | 1  | 250.6   | 6.0  |
| SMCJ140A                   | GHB            | BHB | 140.0   | 155.00   | 171.00 | 1                                 | 226.8  | 6.6   | 1  |
| SMCJ150                    | GHL            | BHL | 150.0   | 167.00   | 204.00 | 1                                 | 268.0  | 5.6   | 1  |
| SMCJ150A                   | GHM            | BHM | 150.0   | 167.00   | 185.00 | 1                                 | 243.0  | 6.2   | 1  |
| SMCJ160                    | GHN            | BHN | 160.0   | 178.00   | 218.00 | 1                                 | 287.0  | 5.2   | 1  |
| SMCJ160A                   | GHP            | BHP | 160.0   | 178.00   | 197.00 | 1                                 | 259.0  | 5.8   | 1  |
| SMCJ170                    | GHQ            | BHQ | 170.0   | 189.00   | 231.00 | 1                                 | 304.0  | 4.9   | 1  |
| SMCJ170A                   | GHR            | BHR | 170.0   | 189.00   | 209.00 | 1                                 | 275.0  | 5.5   | 1  |
| SMCJ180                    | GHS            | BHS | 180.0   | 200.16   | 244.80 | 1                                 | 322.2  | 4.7   | 1  |
| SMCJ180A                   | GHT            | BHT | 180.0   | 200.00   | 220.00 | 1                                 | 291.6  | 5.1   | 1  |
| SMCJ190                    | GHU            | BHU | 190.0   | 211.28   | 258.40 | 1                                 | 340.1  | 4.4   | 1  |
| SMCJ190A                   | GHV            | BHV | 190.0   | 211.00   | 232.00 | 1                                 | 307.8  | 4.9   | 1  |
| SMCJ200A                   | GHW            | BHW | 200.0   | 224.00   | 247.00 | 1                                 | 324.0  | 4.6   | 1  |
| SMCJ220A                   | GHX            | BHX | 220.0   | 246.00   | 272.00 | 1                                 | 356.0  | 4.2   | 1  |
| SMCJ250A                   | GHZ            | BHZ | 250.0   | 279.00   | 309.00 | 1                                 | 405.0  | 3.7   | 1  |
| SMCJ300A                   | GJE            | BJE | 300.0   | 335.00   | 371.00 | 1                                 | 486.0  | 3.1   | 1  |
| SMCJ350A                   | GJG            | BJG | 350.0   | 391.00   | 432.00 | 1                                 | 567.0  | 2.6   | 1  |
| SMCJ376A                   | GJH            | BJH | 376.00  | 418.00   | 462.00 | 1                                 | 602.0  | 2.5   | 1  |
| SMCJ400A                   | GJK            | BJK | 400.0   | 447.00   | 494.00 | 1                                 | 648.0  | 2.5   | 1  |
| SMCJ408A                   | GJL            | BJL | 408.0   | 456.0  | 504.00 | 1                                 | 658.0  | 2.15  | 1  |
| SMCJ440A                   | GJM            | BJM | 440.0   | 492.00   | 543.00 | 1                                 | 713.0  | 2.1   | 1  |

## NOTE

1. Suffix 'A' denotes 5% tolerance, without 'A' denotes 10% tolerance.
2. Add suffix 'C' or 'CA' after part number to specify a bidirectional device.
3. For bidirectional devices having a  $V_{RWM}$  of 10 Volts and under, the  $I_R$  limit is double.

FIGURE 1

PEAK PULSE POWER VS PULSE TIME

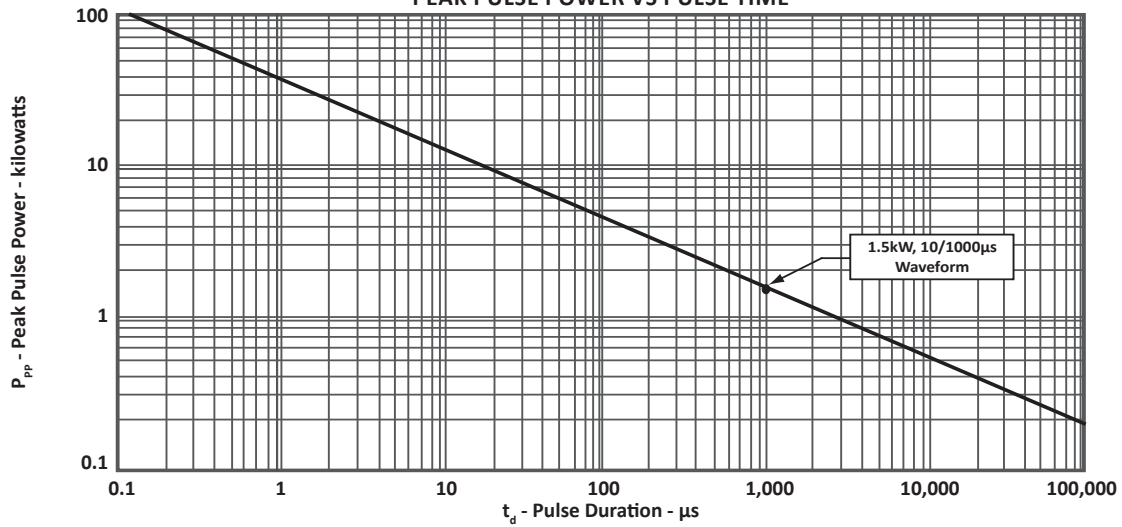


FIGURE 2  
PULSE WAVEFORM

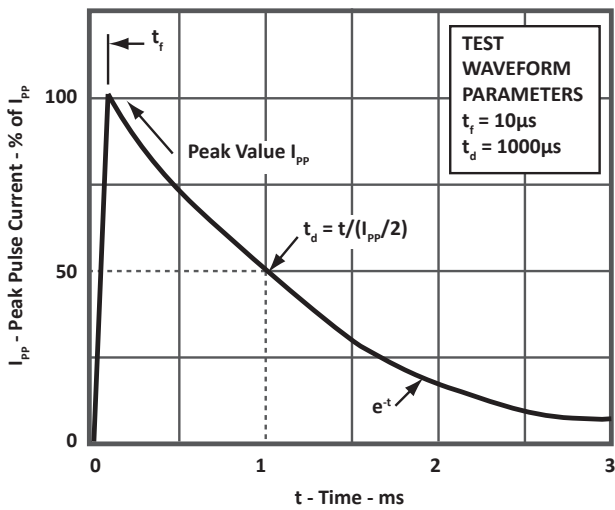
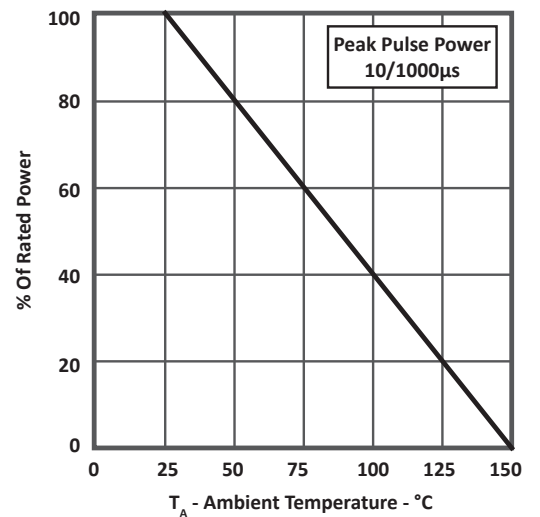
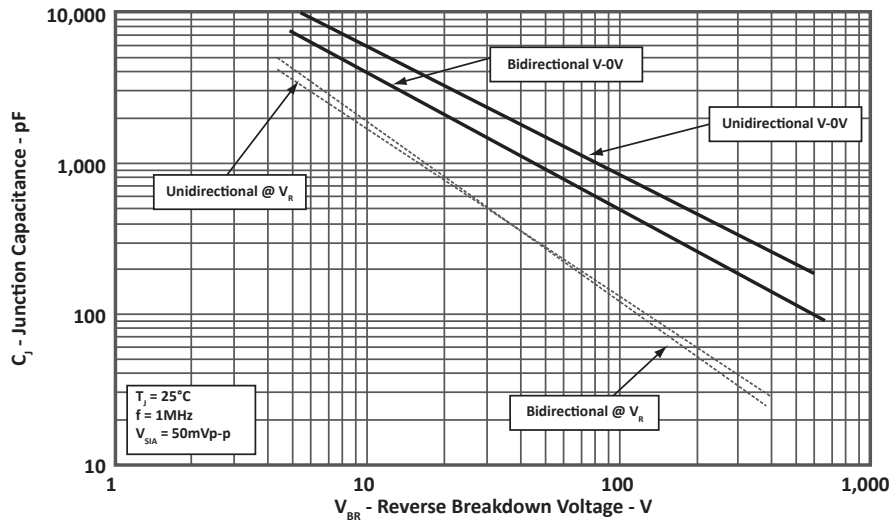


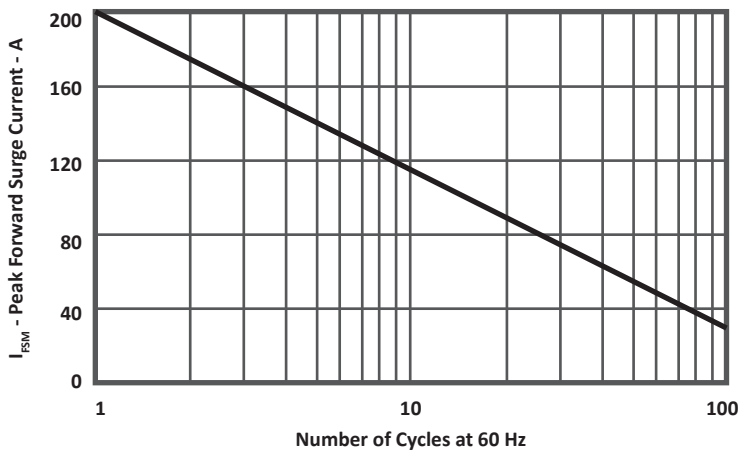
FIGURE 3  
POWER DERATING CURVE



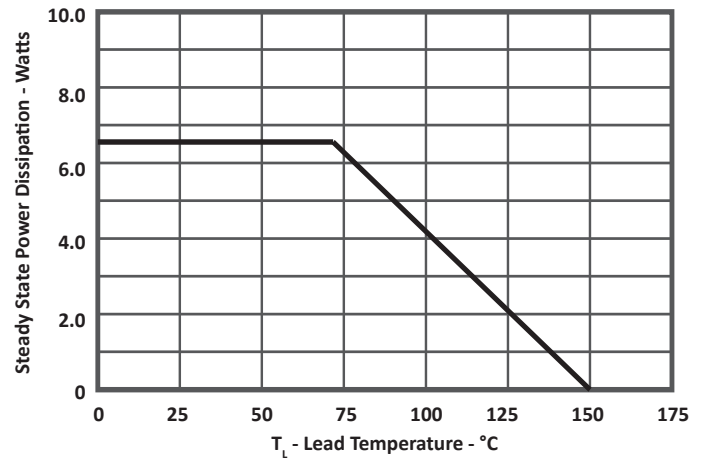
**FIGURE 4**  
TYPICAL JUNCTION CAPACITANCE



**FIGURE 5**  
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



**FIGURE 6**  
STEADY STATE POWER DERATING CURVE



## DO-214AB PACKAGE INFORMATION

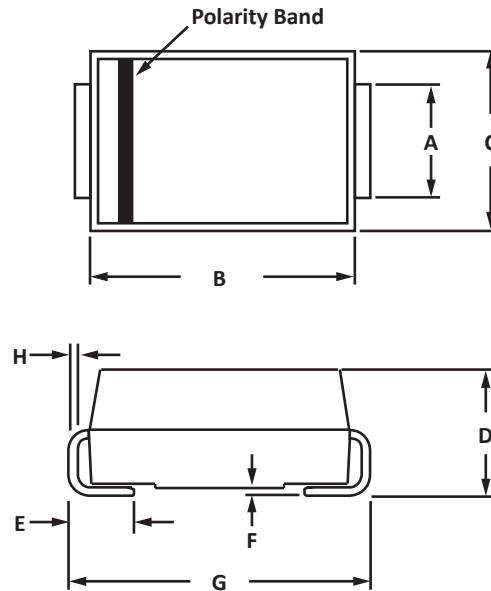
## RTCA DO-160G COMPLIANT PRODUCT

## OUTLINE DIMENSIONS

| DIM | MILLIMETERS |      | INCHES |       |
|-----|-------------|------|--------|-------|
|     | MIN         | MAX  | MIN    | MAX   |
| A   | 2.86        | 3.16 | 0.114  | 0.126 |
| B   | 6.52        | 7.02 | 0.260  | 0.280 |
| C   | 5.52        | 6.15 | 0.220  | 0.245 |
| D   | 1.98        | 2.59 | 0.079  | 0.103 |
| E   | 0.75        | 1.51 | 0.030  | 0.060 |
| F   | 0.00        | 0.20 | 0.000  | 0.008 |
| G   | 7.64        | 8.02 | 0.305  | 0.320 |
| H   | 0.15        | 0.30 | 0.006  | 0.012 |

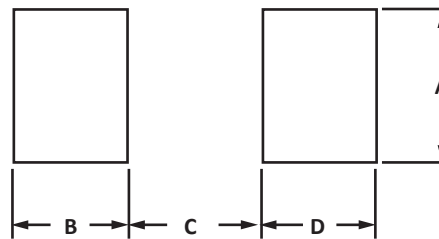
## NOTES

1. Dimensions are exclusive of mold flash and metal burrs.



## PAD LAYOUT DIMENSIONS

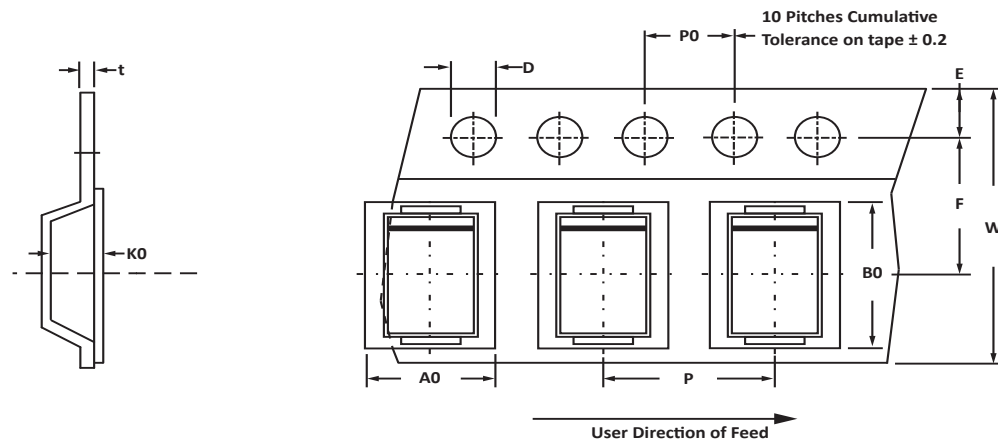
| DIM | MILLIMETERS |      | INCHES |       |
|-----|-------------|------|--------|-------|
|     | MIN         | MAX  | MIN    | MAX   |
| A   | 3.17        | -    | 0.124  | -     |
| B   | 1.49        | -    | 0.059  | -     |
| C   | -           | 4.60 | -      | 0.180 |
| D   | 1.49        | -    | 0.059  | -     |





## TAPE AND REEL

## RTCA DO-160G COMPLIANT PRODUCT



## SPECIFICATIONS

| REEL DIA.   | TAPE WIDTH | A0          | B0          | K0          | D           | E           | F          | W            | P0          | P           | tmax |
|-------------|------------|-------------|-------------|-------------|-------------|-------------|------------|--------------|-------------|-------------|------|
| 330mm (13") | 16mm       | 6.05 ± 0.10 | 8.31 ± 0.10 | 2.54 ± 0.10 | 1.55 ± 0.05 | 1.75 ± 0.10 | 7.5 ± 0.10 | 16.00 ± 0.30 | 4.00 ± 0.10 | 8.00 ± 0.10 | 0.4  |

## NOTES

- Dimensions are in millimeters.
- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix - T13 = 13" Reel - 3,000 pieces and T500 = 7" Reel - 500 pieces per 16mm tape.
- Marking on Part - marking code (see page 2), date code, logo and cathode defined by polarity band.

## ORDERING INFORMATION

| BASE PART NUMBER<br>(Voltage = xx) | LEADFREE SUFFIX | TAPE SUFFIX | QTY/REEL | REEL SIZE | TUBE QTY |
|------------------------------------|-----------------|-------------|----------|-----------|----------|
| SMCJxx                             | N/A             | -T13        | 3,000    | 13"       | N/A      |
| SMCJxxA                            | N/A             | -T13        | 3,000    | 13"       | N/A      |
| SMCJxxC                            | N/A             | -T13        | 3,000    | 13"       | N/A      |
| SMCJxxCA                           | N/A             | -T13        | 3,000    | 13"       | N/A      |
| SMCJxx                             | N/A             | -T500       | 500      | 7"        | N/A      |
| SMCJxxA                            | N/A             | -T500       | 500      | 7"        | N/A      |
| SMCJxxC                            | N/A             | -T500       | 500      | 7"        | N/A      |
| SMCJxxCA                           | N/A             | -T500       | 500      | 7"        | N/A      |

This device is only available in a Lead-Free configuration.

**COMPANY INFORMATION****RTCA DO-160G COMPLIANT PRODUCT****COMPANY PROFILE**

In business more than 25 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of overvoltage protection and overcurrent protection components. These include transient voltage suppressor array (TVS arrays) avalanche breakdown diode, steering diode TVS array and electronics SMD chip fuses. These components deliver circuit protection in electronic systems from numerous overvoltage and overcurrent events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices also offers LED wafer die for ESD protection and related high frequency products. ProTek Devices is ISO 9001:2015 certified.

**CONTACT US****Corporate Headquarters**

2929 South Fair Lane  
Tempe, Arizona 85282  
USA

**By Telephone**

General: 602-431-8101  
Sales: & Marketing: 602-414-5109  
Customer Service: 602-414-5114  
Product Technical Support: 602-414-5107

**By Fax**

General: 602-431-2288

**By E-mail:**

Asia Sales: [asiasales@protekdevices.com](mailto:asiasales@protekdevices.com)  
Europe Sales: [europesales@protekdevices.com](mailto:europesales@protekdevices.com)  
U.S. Sales: [ussales@protekdevices.com](mailto:ussales@protekdevices.com)  
Distributor Sales: [distysales@protekdevices.com](mailto:distysales@protekdevices.com)  
Customer Service: [service@protekdevices.com](mailto:service@protekdevices.com)  
Technical Support: [support@protekdevices.com](mailto:support@protekdevices.com)

**ProTek Devices (Asia Pacific) Pte. Ltd.**

8 Ubi Road 2, #06-19  
Zervex  
Singapore - 408538  
Tel: +65-67488312  
Fax: +65-67488313

**Web**

[www.protekdevices.com](http://www.protekdevices.com)

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