## Features

- Ideal for Automated Placement
- High Surge Current Capability
- Bi-directional TVS
- Glass Passivated Junction
- Low Clamping Voltage Under Surge
- Vacuum Soldering Process Minimize the Solder Voids
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)


## Maximum Ratings

- Operating Junction Temperature Range: $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$
- Storage Temperature Range: $-55^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$

| Peak Pulse Current(8/20 $\mu \mathrm{s})$ | $\mathrm{I}_{\mathrm{PP}}$ | 10000 A |
| :--- | :--- | :--- |

## Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine ( $<1500 \mathrm{ppm}$ total $\mathrm{Br}+\mathrm{Cl}$ ) and <1000ppm antimony compounds.


## Surface Mount Transient Voltage Suppressor



| DIMENSIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DIM | INCHES |  | MM |  | NOTE |
|  | MIN | MAX | MIN | MAX |  |
| A | 0.518 | 0.542 | 13.16 | 13.76 |  |
| B | 0.415 | 0.435 | 10.55 | 11.05 |  |
| C | 0.098 | 0.114 | 2.50 | 2.90 |  |
| D | 0.203 | 0.222 | 5.15 | 5.65 |  |
| F | 0.047 | 0.055 | 1.20 | 1.40 |  |
| F1 | 0.047 | 0.055 | 1.20 | 1.40 |  |
| G | 0.530 | 0.575 | 13.45 | 14.60 |  |
| H | 0.610 | 0.632 | 15.50 | 16.05 |  |
| J | 0.273 | 0.285 | 6.94 | 7.24 |  |
| K | 0.713 | 0.728 | 18.10 | 18.50 |  |
| L | 0.075 | 0.083 | 1.90 | 2.10 |  |
| M | 0.016 | 0.024 | 0.40 | 0.60 |  |
| N | 0.055 | 0.063 | 1.40 | 1.60 |  |
| T | 0.013 | 0.017 | 0.33 | 0.43 |  |
| S | 0.014 | 0.018 | 0.35 | 0.45 |  |

Suggested Solder Pad Layout


Electrical Characteristics @ $25^{\circ} \mathrm{C}$ (Unless Otherwise Specified)

| Part Number | Breakdown Voltage$V_{B R}(V)$ |  | Test Current | Maximum Reverse Leakage @ $\mathrm{V}_{\text {RWm }}$ | Working Peak Reverse Voltage | Typical. Capacitance OV Bias 10 kHz | Maximum Clamping Voltage (8/20 s ) @ $l_{\text {PP }}$ | Peak <br> Pulse Current ( $8 / 20 \mu \mathrm{~s}$ ) | Marking Code |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Min. | Max. | $\mathrm{I}_{\mathrm{T}}(\mathrm{mA})$ | $\mathrm{I}_{\mathrm{R}}(\mu \mathrm{A})$ | $\mathrm{V}_{\text {RWM }}(\mathrm{V})$ | $\mathrm{C}(\mathrm{nF})$ | $\mathrm{V}_{\mathrm{C}}(\mathrm{V})$ | $1 \mathrm{lp}(\mathrm{A})$ |  |
| SMEJ58CA | 64 | 70 | 10 | 5 | 58 | 6.5 | 110 | 10000 | 58CA |
| SMEJ66CA | 72 | 80 | 10 | 5 | 66 | 6.5 | 120 | 10000 | 66CA |
| SMEJ76CA | 85 | 95 | 10 | 5 | 76 | 6.5 | 135 | 10000 | 76CA |
| SMEJ86CA | 96 | 107 | 10 | 5 | 86 | 6.0 | 157 | 10000 | 86CA |

## Curve Characteristics

Fig. 1 - Pulse Derating Curve


Fig. 3 - Typical VBR vs. Junction Temperature


Fig. 2-8 X $20 \mu \mathrm{~s}$ Pulse Waveform


## Ordering Information

| Device | Packing |
| :---: | :---: |
| Part Number-TP | Tape\&Reel: 400pcs/Reel |

## ***IMPORTANT NOTICE***

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes . Micro Commercial Components Corp . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp . and all the companies whose products are represented on our website, harmless against all damages. Micro Commercial Components Corp. products are sold subject to the general terms and conditions of commercial sale, as published at
https://www.mccsemi.com/Home/TermsAndConditions.

## ***LIFE SUPPORT***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.
***CUSTOMER AWARENESS***
Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for ESD Suppressors / TVS Diodes category:
Click to view products by Micro Commercial Components (MCC) manufacturer:

Other Similar products are found below :
60KS200C D12V0H1U2WS-7 D18V0L1B2LP-7B 82356050220 D5V0M5U6V-7 NTE4902 P4KE27CA P6KE11CA P6KE39CA-TP
P6KE8.2A SA110CA SA60CA SA64CA SMBJ12CATR SMBJ8.0A SMLJ30CA-TP ESD112-B1-02EL E6327
ESD119B1W01005E6327XTSA1 ESD5V0J4-TP ESD5V0L1B02VH6327XTSA1 ESD7451N2T5G 19180-510 CPDT-5V0USP-HF
3.0SMCJ33CA-F 3.0SMCJ36A-F HSPC16701B02TP D3V3Q1B2DLP3-7 D55V0M1B2WS-7 DESD5V0U1BL-7B DRTR5V0U4SL-7

SCM1293A-04SO ESD203-B1-02EL E6327 SM12-7 SMF8.0A-TP SMLJ45CA-TP CEN955 W/DATA 8235012056082356240030
VESD12A1A-HD1-GS08 CPDUR5V0R-HF CPDUR24V-HF CPDQC5V0U-HF CPDQC5V0USP-HF CPDQC5V0-HF D1213A-01LP4-7B
D1213A-02WL-7 ESDLIN1524BJ-HQ 5KP100A 5KP15A 5KP18A

