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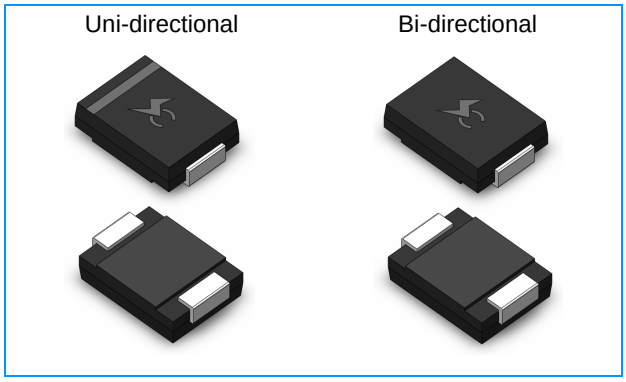
HF RoHS

# Surface Mount Transient Voltage Suppressors (TVS)

## 5.0SMDJ Series 11 To 440 V 5000W

### Description

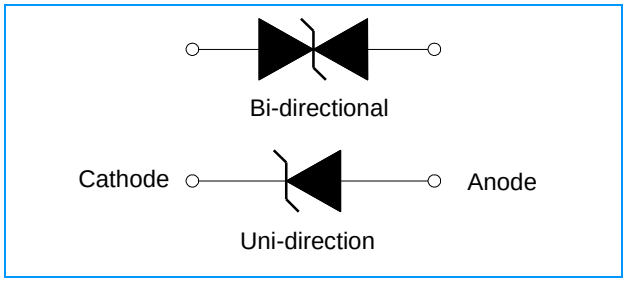
The 5.0SMDJ series is designed specifically to protect sensitive electronic equipment from voltage transients induced by lightning and other transient voltage events.




### Features

- For surface mounted applications in order to optimize board space
- Low leakage
- Uni and Bidirectional unit
- Glass passivated junction
- Low inductance
- Excellent clamping capability
- 5000W Peak power capability at 10 × 1000μs waveform Repetition rate (duty cycle):0.01%
- Fast response time: typically less than 1.0ps from 0 Volts to $V_{BR}$ min
- Typical $I_R$ less than 5μA above 25V.
- High Temperature soldering: 260°C/40 seconds at terminals
- Typical maximum temperature coefficient $\Delta V_{BR}$ = 0.1% × $V_{BR}$@25°C× ΔT
- Plastic package has Underwriters Laboratory Flammability 94V-0
- Matte tin lead–free Plated
- Halogen free and RoHS compliant
- Typical failure mode is short from over-specified voltage or current
- Whisker test is conducted based on JEDEC JESD201A per its table 4a and 4c
- IEC-61000-4-2 ESD 15kV(Air), 8kV (Contact)
- ESD protection of data lines in accordance with IEC 61000-4-2 (IEC801-2)
- EFT protection of data lines in accordance with IEC 61000-4-4 (IEC801-4)

### Functional Diagram




### Applications

TVS devices are ideal for the protection of I/O interfaces, $V_{CC}$ bus and other vulnerable circuits used in Telecom, Computer, Industrial and Consumer electronic applications.

### Maximum Ratings ($T_A$=25℃ unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Peak Pulse Power Dissipation with a 10/1000μs waveform (Fig.1)(Note 1), (Note 2) | $P_{PPM}$ | 5000 | Watts |
| Peak Pulse Current with a 10/1000μs waveform.(Note1,Fig.3) | $I_{PP}$ | See Next Table | Amps |
| Power Dissipation on Infinite Heat Sink at $T_L$=75°C | $P_{M(AV)}$ | 6.5 | Watt |
| Peak Forward Surge Current, 8.3ms Single Half Sine Wave (Note 3) | $I_{FSM}$ | 300 | Amps |
| Maximum Instantaneous Forward Voltage at 25A for Unidirectional Only (Note 4) | $V_F$ | 3.5/5.0 | Voltage |
| Operating junction and Storage Temperature Range. | $T_J$ , $T_{STG}$ | -55 to +150 | °C |

**Notes:**

1. Non-repetitive current pulse, per Fig. 3 and derated above $T_A$ = 25°C per Fig. 2.
2. Mounted on 5.0mm x 5.0mm (0.03mm thick) Copper Pads to each terminal.
3. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.
4. $V_F$ < 3.5V for $V_{BR}$ < 200V and $V_F$< 6.5V for $V_{BR}$ > 201V.



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# Surface Mount Transient Voltage Suppressors (TVS)

## 5.0SMDJ Series 11 To 440 V 5000W

### Electrical Characteristics ($T_A$=25℃ unless otherwise noted)

| Part Number | | Marking | | Reverse Stand-Off Voltage $V_{RWM}$ (V) | Breakdown Voltage $V_{BR}$ (V) @$I_T$ | | Test Current $I_T$ (mA) | Maximum Clamping Voltage $V_C$ @$I_{PP}$ (V) | Maximum Peak Pulse Current $I_{PP}$ (A) | Maximum Reverse Leakage $I_R$ @$V_{RWM}$ (μA) |
|---|---|---|---|---|---|---|---|---|---|---|
| Uni | Bi | Uni | Bi | | MIN | MAX | | | | |
| 5.0SMDJ11 | 5.0SMDJ11C | 5PDW | 5BDW | 11.0 | 12.20 | 14.90 | 1 | 20.1 | 251.24 | 800 |
| 5.0SMDJ11A | 5.0SMDJ11CA | 5PDX | 5BDX | 11.0 | 12.20 | 13.50 | 1 | 18.2 | 277.47 | 800 |
| 5.0SMDJ12 | 5.0SMDJ12C | 5PDY | 5BDY | 12.0 | 13.30 | 16.30 | 1 | 22.0 | 229.55 | 800 |
| 5.0SMDJ12A | 5.0SMDJ12CA | 5PDZ | 5BDZ | 12.0 | 13.30 | 14.70 | 1 | 19.9 | 253.77 | 800 |
| 5.0SMDJ13 | 5.0SMDJ13C | 5PED | 5BED | 13.0 | 14.40 | 17.60 | 1 | 23.8 | 212.18 | 500 |
| 5.0SMDJ13A | 5.0SMDJ13CA | 5PEE | 5BEE | 13.0 | 14.40 | 15.90 | 1 | 21.5 | 234.88 | 500 |
| 5.0SMDJ14 | 5.0SMDJ14C | 5PEF | 5BEF | 14.0 | 15.60 | 19.10 | 1 | 25.8 | 195.74 | 200 |
| 5.0SMDJ14A | 5.0SMDJ14CA | 5PEG | 5BEG | 14.0 | 15.60 | 17.20 | 1 | 23.2 | 217.67 | 200 |
| 5.0SMDJ15 | 5.0SMDJ15C | 5PEH | 5BEH | 15.0 | 16.70 | 20.40 | 1 | 26.9 | 187.73 | 100 |
| 5.0SMDJ15A | 5.0SMDJ15CA | 5PEK | 5BEK | 15.0 | 16.70 | 18.50 | 1 | 24.4 | 206.97 | 100 |
| 5.0SMDJ16 | 5.0SMDJ16C | 5PEL | 5BEL | 16.0 | 17.80 | 21.80 | 1 | 28.8 | 175.35 | 50 |
| 5.0SMDJ16A | 5.0SMDJ16CA | 5PEM | 5BEM | 16.0 | 17.80 | 19.70 | 1 | 26.0 | 194.23 | 50 |
| 5.0SMDJ17 | 5.0SMDJ17C | 5PEN | 5BEN | 17.0 | 18.90 | 23.10 | 1 | 30.5 | 165.57 | 20 |
| 5.0SMDJ17A | 5.0SMDJ17CA | 5PEP | 5BEP | 17.0 | 18.90 | 20.90 | 1 | 27.6 | 182.97 | 20 |
| 5.0SMDJ18 | 5.0SMDJ18C | 5PEQ | 5BEQ | 18.0 | 20.00 | 24.40 | 1 | 32.2 | 156.83 | 10 |
| 5.0SMDJ18A | 5.0SMDJ18CA | 5PER | 5BER | 18.0 | 20.00 | 22.10 | 1 | 29.2 | 172.95 | 10 |
| 5.0SMDJ19 | 5.0SMDJ19C | 5PES | 5BES | 19.0 | 21.13 | 25.76 | 1 | 34.0 | 148.49 | 10 |
| 5.0SMDJ19A | 5.0SMDJ19CA | 5PET | 5BET | 19.0 | 21.10 | 23.30 | 1 | 30.8 | 164.07 | 10 |
| 5.0SMDJ20 | 5.0SMDJ20C | 5PEU | 5BEU | 20.0 | 22.20 | 27.10 | 1 | 35.8 | 141.06 | 5 |
| 5.0SMDJ20A | 5.0SMDJ20CA | 5PEV | 5BEV | 20.0 | 22.20 | 24.50 | 1 | 32.4 | 155.86 | 5 |
| 5.0SMDJ22 | 5.0SMDJ22C | 5PEW | 5BEW | 22.0 | 24.40 | 29.80 | 1 | 39.4 | 128.17 | 5 |
| 5.0SMDJ22A | 5.0SMDJ22CA | 5PEX | 5BEX | 22.0 | 24.40 | 26.90 | 1 | 35.5 | 142.25 | 5 |
| 5.0SMDJ24 | 5.0SMDJ24C | 5PEY | 5BEY | 24.0 | 26.70 | 32.60 | 1 | 43.0 | 117.44 | 5 |
| 5.0SMDJ24A | 5.0SMDJ24CA | 5PEZ | 5BEZ | 24.0 | 26.70 | 29.50 | 1 | 38.9 | 129.82 | 5 |
| 5.0SMDJ26 | 5.0SMDJ26C | 5PFD | 5BFD | 26.0 | 28.90 | 35.30 | 1 | 46.6 | 108.37 | 5 |
| 5.0SMDJ26A | 5.0SMDJ26CA | 5PFE | 5BFE | 26.0 | 28.90 | 31.90 | 1 | 42.1 | 119.95 | 5 |
| 5.0SMDJ28 | 5.0SMDJ28C | 5PFF | 5BFF | 28.0 | 31.10 | 38.00 | 1 | 50.0 | 101.00 | 5 |
| 5.0SMDJ28A | 5.0SMDJ28CA | 5PFG | 5BFG | 28.0 | 31.10 | 34.40 | 1 | 45.4 | 111.23 | 5 |
| 5.0SMDJ30 | 5.0SMDJ30C | 5PFH | 5BFH | 30.0 | 33.30 | 40.70 | 1 | 53.5 | 94.39 | 5 |
| 5.0SMDJ30A | 5.0SMDJ30CA | 5PFK | 5BFK | 30.0 | 33.30 | 36.80 | 1 | 48.4 | 104.34 | 5 |
| 5.0SMDJ33 | 5.0SMDJ33C | 5PFL | 5BFL | 33.0 | 36.70 | 44.90 | 1 | 59.0 | 85.59 | 5 |
| 5.0SMDJ33A | 5.0SMDJ33CA | 5PFM | 5BFM | 33.0 | 36.70 | 40.60 | 1 | 53.3 | 94.75 | 5 |
| 5.0SMDJ36 | 5.0SMDJ36C | 5PFN | 5BFN | 36.0 | 40.00 | 48.90 | 1 | 64.3 | 78.54 | 5 |
| 5.0SMDJ36A | 5.0SMDJ36CA | 5PFP | 5BFP | 36.0 | 40.00 | 44.20 | 1 | 58.1 | 86.92 | 5 |
| 5.0SMDJ40 | 5.0SMDJ40C | 5PFQ | 5BFQ | 40.0 | 44.40 | 54.30 | 1 | 71.4 | 70.73 | 5 |
| 5.0SMDJ40A | 5.0SMDJ40CA | 5PFR | 5BFR | 40.0 | 44.40 | 49.10 | 1 | 64.5 | 78.29 | 5 |
| 5.0SMDJ43 | 5.0SMDJ43C | 5PFS | 5BFS | 43.0 | 47.80 | 58.40 | 1 | 76.7 | 65.84 | 5 |
| 5.0SMDJ43A | 5.0SMDJ43CA | 5PFT | 5BFT | 43.0 | 47.80 | 52.80 | 1 | 69.4 | 72.77 | 5 |
| 5.0SMDJ45 | 5.0SMDJ45C | 5PFU | 5BFU | 45.0 | 50.00 | 61.10 | 1 | 80.3 | 62.89 | 5 |
| 5.0SMDJ45A | 5.0SMDJ45CA | 5PFV | 5BFV | 45.0 | 50.00 | 55.30 | 1 | 72.7 | 69.46 | 5 |
| 5.0SMDJ48 | 5.0SMDJ48C | 5PFW | 5BFW | 48.0 | 53.30 | 65.10 | 1 | 85.5 | 59.06 | 5 |
| 5.0SMDJ48A | 5.0SMDJ48CA | 5PFX | 5BFX | 48.0 | 53.30 | 58.90 | 1 | 77.4 | 65.25 | 5 |
| 5.0SMDJ51 | 5.0SMDJ51C | 5PFY | 5BFY | 51.0 | 56.70 | 69.30 | 1 | 91.1 | 55.43 | 5 |
| 5.0SMDJ51A | 5.0SMDJ51CA | 5PFZ | 5BFZ | 51.0 | 56.70 | 62.70 | 1 | 82.4 | 61.29 | 5 |
| 5.0SMDJ54 | 5.0SMDJ54C | 5PGD | 5BGD | 54.0 | 60.00 | 73.30 | 1 | 96.3 | 52.44 | 5 |
| 5.0SMDJ54A | 5.0SMDJ54CA | 5PGE | 5BGE | 54.0 | 60.00 | 66.30 | 1 | 87.1 | 57.98 | 5 |
| 5.0SMDJ58 | 5.0SMDJ58C | 5PGF | 5BGF | 58.0 | 64.40 | 78.70 | 1 | 103.0 | 49.03 | 5 |
| 5.0SMDJ58A | 5.0SMDJ58CA | 5PGG | 5BGG | 58.0 | 64.40 | 71.20 | 1 | 93.6 | 53.95 | 5 |



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# Surface Mount Transient Voltage Suppressors (TVS)

## 5.0SMDJ Series 11 To 440 V 5000W

### Electrical Characteristics ($T_A$=25℃ unless otherwise noted) (Continue)

| Part Number | | Marking | | Reverse Stand-Off Voltage $V_{RWM}$ (V) | Breakdown Voltage $V_{BR}$ (V) @$I_T$ | | Test Current $I_T$ (mA) | Maximum Clamping Voltage $V_C$ @$I_{PP}$ (V) | Maximum Peak Pulse Current $I_{PP}$ (A) | Maximum Reverse Leakage $I_R$ @$V_{RWM}$ (μA) |
|---|---|---|---|---|---|---|---|---|---|---|
| Uni | Bi | Uni | Bi | | MIN | MAX | | | | |
| 5.0SMDJ60 | 5.0SMDJ60C | 5PGH | 5BGH | 60.0 | 66.70 | 81.50 | 1 | 107.0 | 47.20 | 5 |
| 5.0SMDJ60A | 5.0SMDJ60CA | 5PGK | 5BGK | 60.0 | 66.70 | 73.70 | 1 | 96.8 | 52.17 | 5 |
| 5.0SMDJ64 | 5.0SMDJ64C | 5PGL | 5BGL | 64.0 | 71.10 | 86.90 | 1 | 114.0 | 44.30 | 5 |
| 5.0SMDJ64A | 5.0SMDJ64CA | 5PGM | 5BGM | 64.0 | 71.10 | 78.60 | 1 | 103.0 | 49.03 | 5 |
| 5.0SMDJ70 | 5.0SMDJ70C | 5PGN | 5BGN | 70.0 | 77.80 | 95.10 | 1 | 125.0 | 40.40 | 5 |
| 5.0SMDJ70A | 5.0SMDJ70CA | 5PGP | 5BGP | 70.0 | 77.80 | 86.00 | 1 | 113.0 | 44.69 | 5 |
| 5.0SMDJ75 | 5.0SMDJ75C | 5PGQ | 5BGQ | 75.0 | 83.30 | 102.00 | 1 | 134.0 | 37.69 | 5 |
| 5.0SMDJ75A | 5.0SMDJ75CA | 5PGR | 5BGR | 75.0 | 83.30 | 92.10 | 1 | 121.0 | 41.74 | 5 |
| 5.0SMDJ78 | 5.0SMDJ78C | 5PGS | 5BGS | 78.0 | 86.70 | 106.00 | 1 | 139.0 | 36.33 | 5 |
| 5.0SMDJ78A | 5.0SMDJ78CA | 5PGT | 5BGT | 78.0 | 86.70 | 95.80 | 1 | 126.0 | 40.08 | 5 |
| 5.0SMDJ80 | 5.0SMDJ80C | 5PGA | 5BGA | 80.0 | 88.96 | 108.80 | 1 | 143.2 | 35.27 | 5 |
| 5.0SMDJ80A | 5.0SMDJ80CA | 5PGB | 5BGB | 80.0 | 88.80 | 97.60 | 1 | 129.6 | 38.97 | 5 |
| 5.0SMDJ85 | 5.0SMDJ85C | 5PGU | 5BGU | 85.0 | 94.40 | 115.00 | 1 | 151.0 | 33.44 | 5 |
| 5.0SMDJ85A | 5.0SMDJ85CA | 5PGV | 5BGV | 85.0 | 94.40 | 104.00 | 1 | 137.0 | 36.86 | 5 |
| 5.0SMDJ90 | 5.0SMDJ90C | 5PGW | 5BGW | 90.0 | 100.00 | 122.00 | 1 | 160.0 | 31.56 | 5 |
| 5.0SMDJ90A | 5.0SMDJ90CA | 5PGX | 5BGX | 90.0 | 100.00 | 111.00 | 1 | 146.0 | 34.59 | 5 |
| 5.0SMDJ100 | 5.0SMDJ100C | 5PGY | 5BGY | 100.0 | 111.00 | 136.00 | 1 | 179.0 | 28.21 | 5 |
| 5.0SMDJ100A | 5.0SMDJ100CA | 5PGZ | 5BGZ | 100.0 | 111.00 | 123.00 | 1 | 162.0 | 31.17 | 5 |
| 5.0SMDJ110 | 5.0SMDJ110C | 5PHD | 5BHD | 110.0 | 122.00 | 149.00 | 1 | 196.0 | 25.77 | 5 |
| 5.0SMDJ110A | 5.0SMDJ110CA | 5PHE | 5BHE | 110.0 | 122.00 | 135.00 | 1 | 177.0 | 28.53 | 5 |
| 5.0SMDJ120 | 5.0SMDJ120C | 5PHF | 5BHF | 120.0 | 133.00 | 163.00 | 1 | 214.0 | 23.60 | 5 |
| 5.0SMDJ120A | 5.0SMDJ120CA | 5PHG | 5BHG | 120.0 | 133.00 | 147.00 | 1 | 193.0 | 26.17 | 5 |
| 5.0SMDJ130 | 5.0SMDJ130C | 5PHH | 5BHH | 130.0 | 144.00 | 176.00 | 1 | 231.0 | 21.86 | 5 |
| 5.0SMDJ130A | 5.0SMDJ130CA | 5PHK | 5BHK | 130.0 | 144.00 | 159.00 | 1 | 209.0 | 24.16 | 5 |
| 5.0SMDJ140 | 5.0SMDJ140C | 5PHA | 5BHA | 140.0 | 155.68 | 190.40 | 1 | 250.6 | 20.15 | 5 |
| 5.0SMDJ140A | 5.0SMDJ140CA | 5PHB | 5BHB | 140.0 | 155.00 | 171.00 | 1 | 226.8 | 22.27 | 5 |
| 5.0SMDJ150 | 5.0SMDJ150C | 5PHL | 5BHL | 150.0 | 167.00 | 204.00 | 1 | 268.0 | 18.84 | 5 |
| 5.0SMDJ150A | 5.0SMDJ150CA | 5PHM | 5BHM | 150.0 | 167.00 | 185.00 | 1 | 243.0 | 20.78 | 5 |
| 5.0SMDJ160 | 5.0SMDJ160C | 5PHN | 5BHN | 160.0 | 178.00 | 218.00 | 1 | 287.0 | 17.60 | 5 |
| 5.0SMDJ160A | 5.0SMDJ160CA | 5PHP | 5BHP | 160.0 | 178.00 | 197.00 | 1 | 259.0 | 19.50 | 5 |
| 5.0SMDJ170 | 5.0SMDJ170C | 5PHQ | 5BHQ | 170.0 | 189.00 | 231.00 | 1 | 304.0 | 16.61 | 5 |
| 5.0SMDJ170A | 5.0SMDJ170CA | 5PHR | 5BHR | 170.0 | 189.00 | 209.00 | 1 | 275.0 | 18.36 | 5 |
| 5.0SMDJ180 | 5.0SMDJ180C | 5PHS | 5BHS | 180.0 | 201.00 | 244.80 | 1 | 322.2 | 15.67 | 5 |
| 5.0SMDJ180A | 5.0SMDJ180CA | 5PHT | 5BHT | 180.0 | 201.00 | 220.00 | 1 | 291.6 | 17.32 | 5 |
| 5.0SMDJ190 | 5.0SMDJ190C | 5PHU | 5BHU | 190.0 | 211.21 | 258.40 | 1 | 340.1 | 14.85 | 5 |
| 5.0SMDJ190A | 5.0SMDJ190CA | 5PHV | 5BHV | 190.0 | 211.00 | 232.00 | 1 | 307.8 | 16.41 | 5 |
| 5.0SMDJ200A | 5.0SMDJ200CA | 5PHW | 5BHW | 200.0 | 224.00 | 247.00 | 1 | 324.0 | 9.26 | 5 |
| 5.0SMDJ220A | 5.0SMDJ220CA | 5PHX | 5BHX | 220.0 | 246.00 | 272.00 | 1 | 356.0 | 8.43 | 5 |
| 5.0SMDJ250A | 5.0SMDJ250CA | 5PHZ | 5BHZ | 250.0 | 279.00 | 309.00 | 1 | 405.0 | 7.41 | 5 |
| 5.0SMDJ300A | 5.0SMDJ300CA | 5PJE | 5BJE | 300.0 | 335.00 | 371.00 | 1 | 486.0 | 6.17 | 5 |
| 5.0SMDJ350A | 5.0SMDJ350CA | 5PJG | 5BJG | 350.0 | 391.00 | 432.00 | 1 | 567.0 | 5.29 | 5 |
| 5.0SMDJ400A | 5.0SMDJ400CA | 5PJK | 5BJK | 400.0 | 447.00 | 494.00 | 1 | 648.0 | 4.63 | 5 |
| 5.0SMDJ440A | 5.0SMDJ440CA | 5PJM | 5BJM | 440.0 | 492.00 | 543.00 | 1 | 713.0 | 4.21 | 5 |

**Note:**

1. Suffix 'A ' denotes 5% tolerance device. Without 'A' denotes 10% tolerance device
2. Add suffix 'C 'or ' CA ' after part number to specify Bi-directional devices
3. For Bi-Directional devices having $V_R$ of 10 volts and under, the $I_R$ limit is double



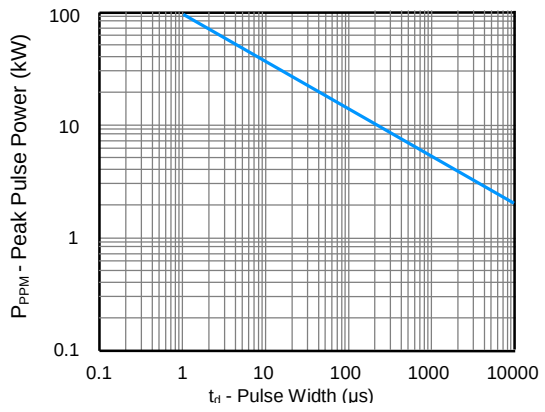
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# Surface Mount Transient Voltage Suppressors (TVS)

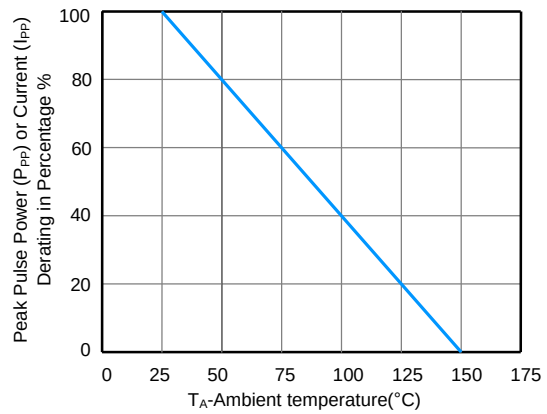
## 5.0SMDJ Series 11 To 440 V 5000W

## Ratings and Characteristic Curves ($T_A$=25°C unless otherwise noted)

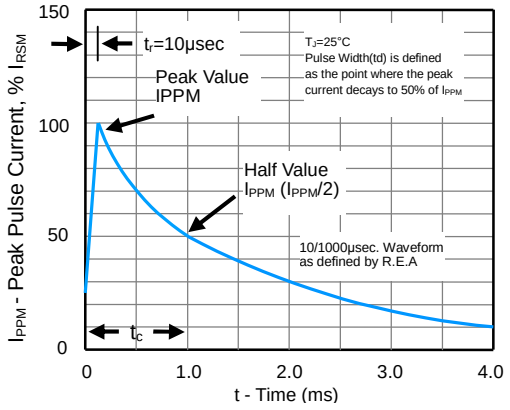
### Figure 1 - Peak Pulse Power Rating Curve



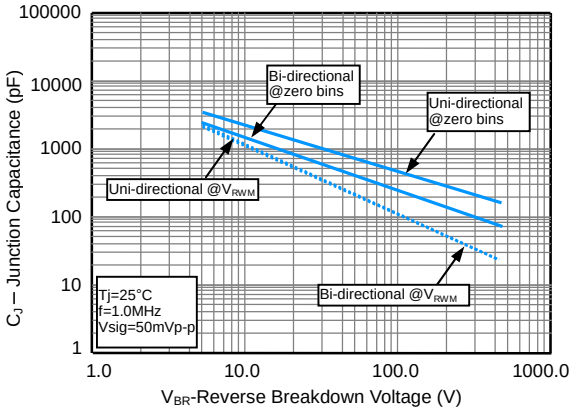

### Figure 2 - Pulse Derating Curve



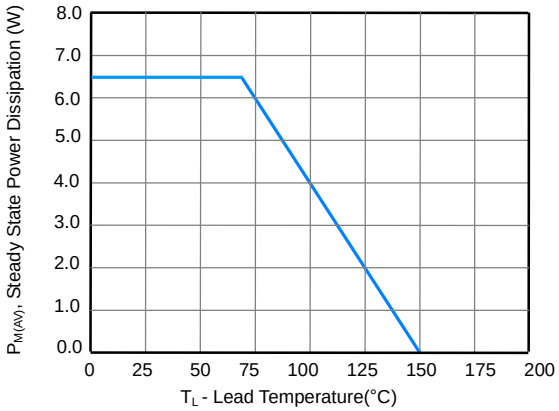

### Figure 3 - Pulse Waveform



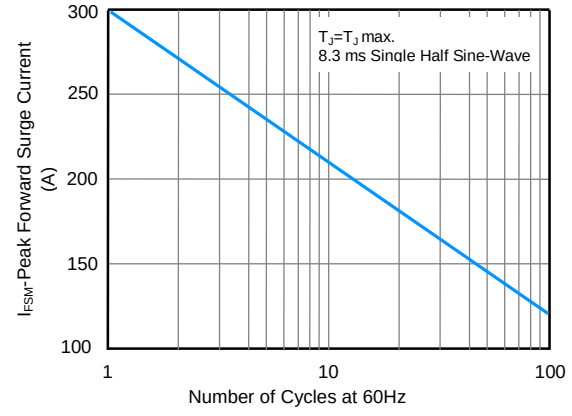

### Figure 4 - Typical Junction Capacitance




### Figure 5 - Steady State Power Derating Curve




### Figure 6 - Maximum Non-Repetitive Surge Current



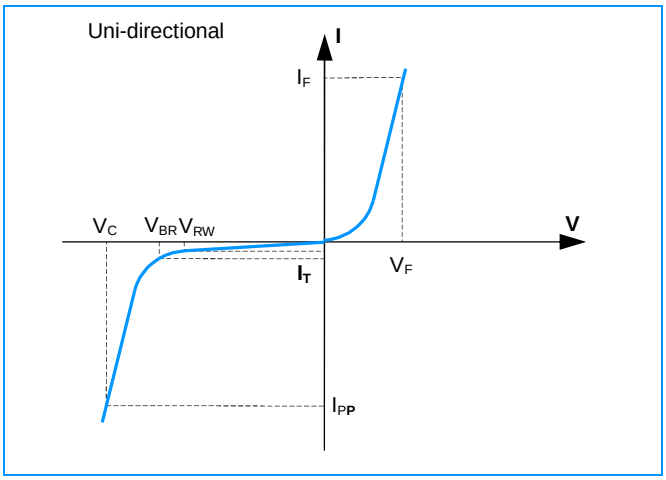


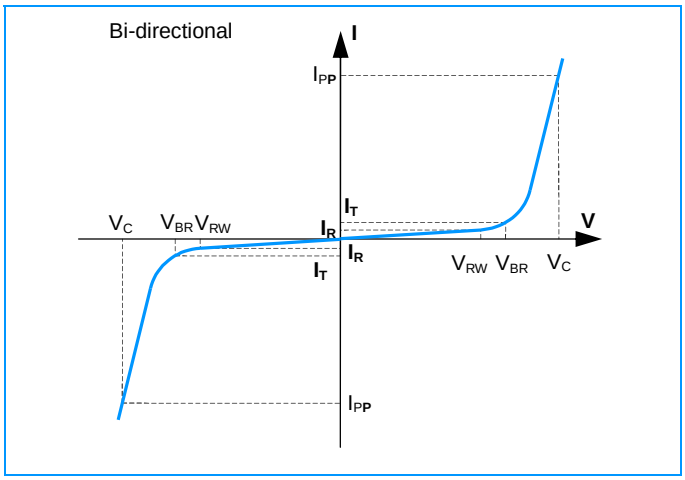

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# Surface Mount Transient Voltage Suppressors (TVS)

## 5.0SMDJ Series 11 To 440 V 5000W

## I-V Curve Characteristics



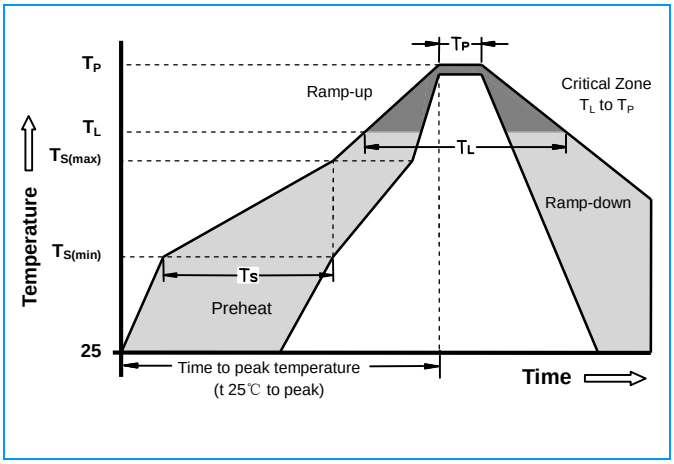

## Physical Specifications

| | |
|---|---|
| **Weight** | 0.007 ounce, 0.21 gram |
| **Case** | JEDEC DO-214AB Molded Plastic over glass passivated junction |
| **Polarity** | Color band denotes cathode except Bipolar |
| **Terminal** | Matte Tin-plated leads, Solderable per JESD22-B102D |

## Environmental Specifications

| | |
|---|---|
| **Temperature Cycle** | JESD22-A104 |
| **Pressure Cooker** | JESD22-A102 |
| **High Temp. Storage** | JESD22-A103 |
| **HTRB** | JESD22-A108 |
| **Thermal Shock** | JESD22-A106 |

## Soldering Parameters




| | | |
|---|---|---|
| **Reflow Condition** | | Lead–free assembly |
| **Pre Heat** | **-Temperature Min ($T_{s(min)}$)** | 150°C |
| | **-Temperature Max ($T_{s(max)}$)** | 200°C |
| | **- Time (min to max) ($T_s$)** | 60 -180 Seconds |
| **Average ramp up rate ( Liquidus Temp $T_L$) to peak** | | 3°C/second max |
| **$T_{S(max)}$ to TL - Ramp-up Rate** | | 3°C/second max |
| **Reflow** | **- Temperature ($T_L$) (Liquidus)** | 217°C |
| | **- Time (min to max) ($T_L$)** | 60 -150 Seconds |
| **Peak Temperature ($T_P$)** | | 260 +0/-5°C |
| **Time within 5°C of actual peak Temperature ($t_p$)** | | 20 -40 Seconds |
| **Ramp-down Rate** | | 6°C/second max |
| **Time 25°C to peak Temperature ($T_P$)** | | 8 minutes Max |
| **Do not exceed** | | 280°C |



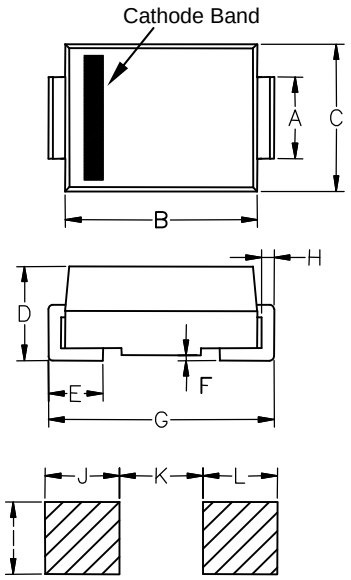
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# Surface Mount Transient Voltage Suppressors (TVS)

## 5.0SMDJ Series 11 To 440 V 5000W

## Dimensions

**DO-214AB (SMC)**



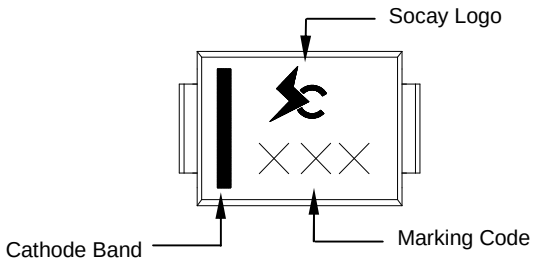

| Dimensions | Inches | | Millimeters | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 0.114 | 0.126 | 2.86 | 3.160 |
| B | 0.260 | 0.280 | 6.520 | 7.020 |
| C | 0.220 | 0.245 | 5.520 | 6.150 |
| D | 0.079 | 0.103 | 1.980 | 2.590 |
| E | 0.030 | 0.060 | 0.750 | 1.510 |
| F | - | 0.008 | - | 0.203 |
| G | 0.305 | 0.320 | 7.640 | 8.020 |
| H | 0.006 | 0.012 | 0.152 | 0.305 |
| I | 0.129 | - | 3.300 | - |
| J | 0.094 | - | 2.400 | - |
| K | - | 0.165 | - | 4.200 |
| L | 0.094 | - | 2.400 | - |

## Part Numbering

**5 . 0 S M D J × × × C A**

- 5% $V_{BR}$ VOLTAGE TOLERANCE
- BI-DIRECTIONAL
- $V_R$ VOLTAGE
- SERIES

## Part Marking






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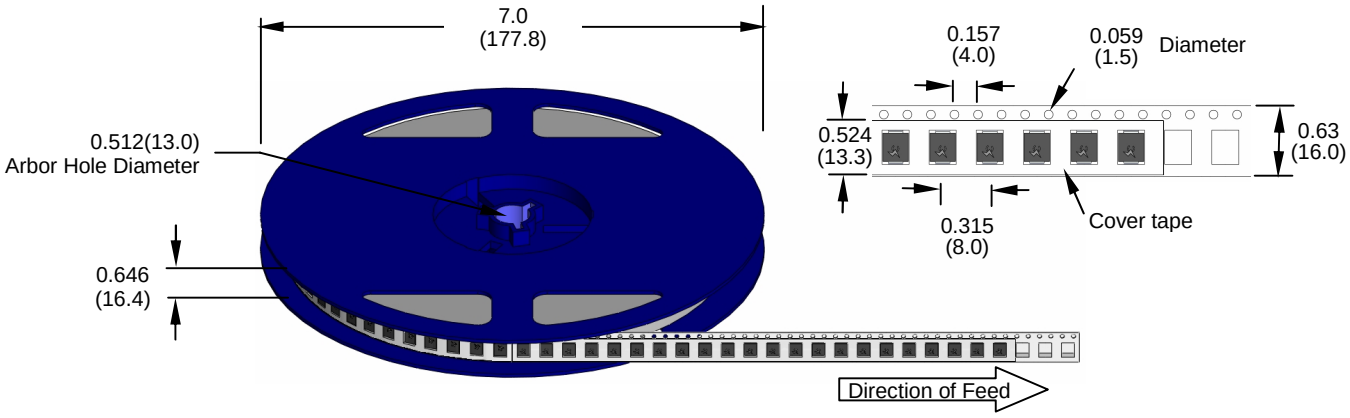
# Surface Mount Transient Voltage Suppressors (TVS)

## 5.0SMDJ Series 11 To 440 V 5000W

### Packaging

| Part Number | Component Package | Quantity | Packaging Option | Packaging Specification |
|---|---|---|---|---|
| 5.0SMDJXXXXX | DO-214AB | 500 | Tape & Reel -16mm/7"tape | EIA STD RS-481 |

### Tape and Reel Specifications




Dimensions are in inches
(and millimeters)



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