



THE DATASHEET OF SMLJ24C-TP



| | |
|---|----------------|
|  | E480232 |
|---|----------------|

Features

- For Surface Mount Application in Order to Optimize Board Space
- Built-in Strain Relief
- Glass Passivated Junction
- For Bidirectional Devices Add "C" To The Suffix of The Part Number: i.e.SMLJ5.0CA for 5% Tolerance
- Excellent Clamping Capability
- Repetition Rate(duty cycle):0.5%
- Fast Response Time: Typical Less Than 1ps From 0V to BV Min
- Typical I_D Less than 1μA Above 10V
- ESD Protected up to 16KV (HBM)
- High Temperature Soldering: 260°C/10 Seconds at Terminals
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Mechanical Data

- Polarity: Color Band Denotes Positive End(Cathode) Except Bi-directional Types
- Weight: 0.007 ounce, 0.21 gram
- Standard Packaging: 16mm Tape Per (EIA 481).
- Terminals: Solderable Per MIL-STD-750, Method 2026

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Thermal Resistance: 17.5°C/W Junction to Lead
- Thermal Resistance: 75°C/W Junction to Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|--|------------------|---------------|----------------|
| Peak Pulse Power Surge Current on 10/1000μs Waveform | I _{PPM} | See the Table | Note 3, Fig3 |
| Peak Pulse Power Dissipation on 10/1000μs Waveform | P _{PPM} | 3000W(Min) | Note 3,4, Fig1 |

Note:

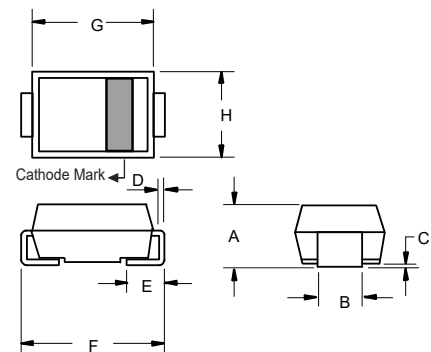
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
3. Non-repetitive current pulse, per Fig.3 and derated above T_A=25 °C per Fig.4.
4. Mounted on 8.0mm² copper pads to each terminal.

Pin Configuration:



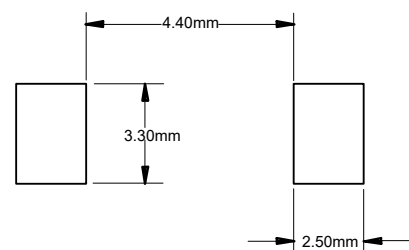
**3000 Watt TVS
5.0 to 440 Volts**

**SMC (DO-214AB)
(LEAD FRAME)**



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|-------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.079 | 0.103 | 2.00 | 2.62 | |
| B | 0.108 | 0.128 | 2.75 | 3.25 | |
| C | 0.002 | 0.008 | 0.051 | 0.203 | |
| D | 0.006 | 0.012 | 0.152 | 0.305 | |
| E | 0.030 | 0.060 | 0.76 | 1.52 | |
| F | 0.305 | 0.320 | 7.75 | 8.13 | |
| G | 0.260 | 0.280 | 6.60 | 7.11 | |
| H | 0.220 | 0.245 | 5.59 | 6.22 | |

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

| MCC Part Number | Reverse Stand-Off Voltage | Breakdown Voltage $V_{BR}(V)$ | | Test Current | Max. Clamping Voltage @ I_{PP} | Peak Pulse Current | Reverse Leakage Current@ V_{WM} | Marking Code |
|-----------------|---------------------------|-------------------------------|------|--------------|----------------------------------|--------------------|-----------------------------------|--------------|
| | $V_{WM}(V)$ | Min | Max | $I_T(mA)$ | $V_C(V)$ | $I_{PP}(A)$ | $I_D(\mu A)$ | |
| SMLJ5.0C | 5.0 | 6.40 | 7.30 | 10 | 9.6 | 312.5 | 1000 | DDD |
| SMLJ5.0CA | 5.0 | 6.40 | 7.00 | 10 | 9.2 | 326.0 | 1000 | DDE |
| SMLJ6.0C | 6.0 | 6.67 | 8.15 | 10 | 11.4 | 263.2 | 1000 | DDF |
| SMLJ6.0CA | 6.0 | 6.67 | 7.37 | 10 | 10.3 | 291.3 | 1000 | DDG |
| SMLJ6.5C | 6.5 | 7.22 | 8.82 | 10 | 12.3 | 243.9 | 500 | DDH |
| SMLJ6.5CA | 6.5 | 7.22 | 7.98 | 10 | 11.2 | 267.9 | 500 | DDK |
| SMLJ7.0C | 7.0 | 7.78 | 9.51 | 10 | 13.3 | 225.6 | 200 | DDL |
| SMLJ7.0CA | 7.0 | 7.78 | 8.60 | 10 | 12.0 | 250.0 | 200 | DDM |
| SMLJ7.5C | 7.5 | 8.33 | 10.2 | 1 | 14.3 | 209.8 | 100 | DDN |
| SMLJ7.5CA | 7.5 | 8.33 | 9.21 | 1 | 12.9 | 232.6 | 100 | DDP |
| SMLJ8.0C | 8.0 | 8.89 | 10.9 | 1 | 15.0 | 200.0 | 50 | DDQ |
| SMLJ8.0CA | 8.0 | 8.89 | 9.83 | 1 | 13.6 | 220.6 | 50 | DDR |
| SMLJ8.5C | 8.5 | 9.44 | 11.5 | 1 | 15.9 | 188.6 | 25 | DDS |
| SMLJ8.5CA | 8.5 | 9.44 | 10.4 | 1 | 14.4 | 208.4 | 25 | DDT |
| SMLJ9.0C | 9.0 | 10.0 | 12.2 | 1 | 16.9 | 177.4 | 10 | DDU |
| SMLJ9.0CA | 9.0 | 10.0 | 11.1 | 1 | 15.4 | 194.8 | 10 | DDV |
| SMLJ10C | 10 | 11.1 | 13.6 | 1 | 18.8 | 159.6 | 5 | DDW |
| SMLJ10CA | 10 | 11.1 | 12.3 | 1 | 17.0 | 176.4 | 5 | DDX |
| SMLJ11C | 11 | 12.2 | 14.9 | 1 | 20.1 | 149.2 | 2 | DDY |
| SMLJ11CA | 11 | 12.2 | 13.5 | 1 | 18.2 | 164.8 | 2 | DDZ |
| SMLJ12C | 12 | 13.3 | 16.3 | 1 | 22.0 | 136.4 | 2 | DED |
| SMLJ12CA | 12 | 13.3 | 14.7 | 1 | 19.9 | 150.6 | 2 | DEE |
| SMLJ13C | 13 | 14.4 | 17.6 | 1 | 23.8 | 126.0 | 2 | DEF |
| SMLJ13CA | 13 | 14.4 | 15.9 | 1 | 21.5 | 139.4 | 2 | DEG |
| SMLJ14C | 14 | 15.6 | 19.1 | 1 | 25.8 | 116.2 | 2 | DEH |
| SMLJ14CA | 14 | 15.6 | 17.2 | 1 | 23.2 | 129.4 | 2 | DEK |
| SMLJ15C | 15 | 16.7 | 20.4 | 1 | 26.9 | 111.6 | 2 | DEL |
| SMLJ15CA | 15 | 16.7 | 18.5 | 1 | 24.4 | 123.0 | 2 | DEM |
| SMLJ16C | 16 | 17.8 | 21.8 | 1 | 28.8 | 104.2 | 2 | DEN |
| SMLJ16CA | 16 | 17.8 | 19.7 | 1 | 26.0 | 115.4 | 2 | DEP |
| SMLJ17C | 17 | 18.9 | 23.1 | 1 | 30.5 | 98.4 | 2 | DEQ |
| SMLJ17CA | 17 | 18.9 | 20.9 | 1 | 27.6 | 106.6 | 2 | DER |
| SMLJ18C | 18 | 20.0 | 24.4 | 1 | 32.2 | 93.2 | 2 | DES |
| SMLJ18CA | 18 | 20.0 | 22.1 | 1 | 29.2 | 102.8 | 2 | DET |
| SMLJ20C | 20 | 22.2 | 27.1 | 1 | 35.8 | 83.8 | 2 | DEU |
| SMLJ20CA | 20 | 22.2 | 24.5 | 1 | 32.4 | 92.6 | 2 | DEV |
| SMLJ22C | 22 | 24.4 | 29.8 | 1 | 39.4 | 76.2 | 2 | DEW |
| SMLJ22CA | 22 | 24.4 | 26.9 | 1 | 35.5 | 84.4 | 2 | DEX |
| SMLJ24C | 24 | 26.7 | 32.6 | 1 | 43.0 | 69.8 | 2 | DEY |
| SMLJ24CA | 24 | 26.7 | 29.5 | 1 | 38.9 | 77.2 | 2 | DEZ |
| SMLJ26C | 26 | 28.9 | 35.3 | 1 | 46.6 | 64.4 | 2 | DFD |
| SMLJ26CA | 26 | 28.9 | 31.9 | 1 | 42.1 | 71.2 | 2 | DFE |
| SMLJ28C | 28 | 31.1 | 38.0 | 1 | 50.0 | 60.0 | 2 | DFF |
| SMLJ28CA | 28 | 31.1 | 34.4 | 1 | 45.4 | 66.0 | 2 | DFG |
| SMLJ30C | 30 | 33.3 | 40.7 | 1 | 53.5 | 56.0 | 2 | DFH |

For parts without A, the VBR is +10%.

Electrical Characteristics @ 25°C Unless Otherwise Specified

| MCC Part Number | Reverse Stand-Off Voltage | Breakdown Voltage $V_{BR}(V)$ | | Test Current | Max. Clamping Voltage @ I_{PP} | Peak Pulse Current | Reverse Leakage Current@ V_{WM} | Marking Code |
|-----------------|---------------------------|-------------------------------|------|--------------|----------------------------------|--------------------|-----------------------------------|--------------|
| | $V_{WM}(V)$ | Min | Max | $I_T(mA)$ | $V_C(V)$ | $I_{PP}(A)$ | $I_D(\mu A)$ | |
| SMLJ30CA | 30 | 33.3 | 36.8 | 1 | 48.4 | 62.0 | 2 | DFK |
| SMLJ33C | 33 | 36.7 | 44.9 | 1 | 59.0 | 50.4 | 2 | DFL |
| SMLJ33CA | 33 | 36.7 | 40.6 | 1 | 53.3 | 56.2 | 2 | DFM |
| SMLJ36C | 36 | 40.0 | 48.9 | 1 | 64.3 | 46.6 | 2 | DFN |
| SMLJ36CA | 36 | 40.0 | 44.2 | 1 | 58.1 | 51.6 | 2 | DFP |
| SMLJ40C | 40 | 44.4 | 54.3 | 1 | 71.4 | 42.0 | 2 | DFQ |
| SMLJ40CA | 40 | 44.4 | 49.1 | 1 | 64.5 | 46.4 | 2 | DFR |
| SMLJ43C | 43 | 47.8 | 58.4 | 1 | 76.7 | 39.2 | 2 | DFS |
| SMLJ43CA | 43 | 47.8 | 52.8 | 1 | 69.4 | 43.2 | 2 | DFT |
| SMLJ45C | 45 | 50.0 | 61.1 | 1 | 80.3 | 37.4 | 2 | DFU |
| SMLJ45CA | 45 | 50.0 | 55.3 | 1 | 72.7 | 41.2 | 2 | DFV |
| SMLJ48C | 48 | 53.3 | 65.1 | 1 | 85.5 | 35.0 | 2 | DFW |
| SMLJ48CA | 48 | 53.3 | 58.9 | 1 | 77.4 | 38.8 | 2 | DFX |
| SMLJ51C | 51 | 56.7 | 69.3 | 1 | 91.1 | 37.0 | 2 | DFY |
| SMLJ51CA | 51 | 56.7 | 62.7 | 1 | 82.4 | 36.4 | 2 | DFZ |
| SMLJ54C | 54 | 60.0 | 73.3 | 1 | 96.3 | 31.2 | 2 | DGD |
| SMLJ54CA | 54 | 60.0 | 66.3 | 1 | 87.1 | 34.4 | 2 | DGE |
| SMLJ58C | 58 | 64.4 | 78.7 | 1 | 103 | 39.2 | 2 | DGF |
| SMLJ58CA | 58 | 64.4 | 71.2 | 1 | 93.6 | 32.0 | 2 | DGG |
| SMLJ60C | 60 | 66.7 | 81.5 | 1 | 107 | 28.0 | 2 | DGH |
| SMLJ60CA | 60 | 66.7 | 73.7 | 1 | 96.8 | 31.0 | 2 | DGK |
| SMLJ64C | 64 | 71.1 | 86.9 | 1 | 114 | 26.4 | 2 | DGL |
| SMLJ64CA | 64 | 71.1 | 78.6 | 1 | 103 | 29.2 | 2 | DGM |
| SMLJ70C | 70 | 77.8 | 95.1 | 1 | 125 | 24.0 | 2 | DGN |
| SMLJ70CA | 70 | 77.8 | 86.0 | 1 | 113 | 26.6 | 2 | DGP |
| SMLJ75C | 75 | 83.3 | 102 | 1 | 134 | 22.4 | 2 | DGQ |
| SMLJ75CA | 75 | 83.3 | 92.1 | 1 | 121 | 24.8 | 2 | DGR |
| SMLJ78C | 78 | 86.7 | 106 | 1 | 139 | 21.6 | 2 | DGS |
| SMLJ78CA | 78 | 86.7 | 95.8 | 1 | 126 | 22.8 | 2 | DGT |
| SMLJ85C | 85 | 94.4 | 115 | 1 | 151 | 19.8 | 2 | DGU |
| SMLJ85CA | 85 | 94.4 | 104 | 1 | 137 | 20.8 | 2 | DGV |
| SMLJ90C | 90 | 100 | 122 | 1 | 160 | 18.8 | 2 | DGW |
| SMLJ90CA | 90 | 100 | 111 | 1 | 146 | 20.6 | 2 | DGX |
| SMLJ100C | 100 | 111 | 136 | 1 | 179 | 16.8 | 2 | DGY |
| SMLJ100CA | 100 | 111 | 123 | 1 | 162 | 18.6 | 2 | DGZ |
| SMLJ110C | 110 | 122 | 149 | 1 | 196 | 15.4 | 2 | DHD |
| SMLJ110CA | 110 | 122 | 135 | 1 | 177 | 16.8 | 2 | DHE |
| SMLJ120C | 120 | 133 | 163 | 1 | 214 | 14.0 | 2 | DHF |
| SMLJ120CA | 120 | 133 | 147 | 1 | 193 | 15.6 | 2 | DHG |
| SMLJ130C | 130 | 144 | 176 | 1 | 231 | 13.0 | 2 | DHH |
| SMLJ130CA | 130 | 144 | 159 | 1 | 209 | 14.4 | 2 | DHK |
| SMLJ150C | 150 | 167 | 204 | 1 | 268 | 11.2 | 2 | DHL |
| SMLJ150CA | 150 | 167 | 185 | 1 | 243 | 12.4 | 2 | DHM |
| SMLJ160C | 160 | 178 | 218 | 1 | 287 | 10.4 | 2 | DHN |
| SMLJ160CA | 160 | 178 | 197 | 1 | 259 | 11.6 | 2 | DHP |
| SMLJ170C | 170 | 189 | 231 | 1 | 304 | 9.8 | 2 | DHQ |

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| MCC Part Number | Reverse Stand-Off Voltage | Breakdown Voltage $V_{BR}(V)$ | | Test Current | Max. Clamping Voltage @ I_{PP} | Peak Pulse Current | Reverse Leakage Current @ V_{WM} | Marking Code |
|-----------------|---------------------------|-------------------------------|------|--------------|----------------------------------|--------------------|------------------------------------|--------------|
| | $V_{WM}(V)$ | Min | Max | $I_T(mA)$ | $V_C(V)$ | $I_{PP}(A)$ | $I_D(\mu A)$ | |
| SMLJ170CA | 170 | 189 | 209 | 1 | 275 | 11.0 | 2 | DHR |
| SMLJ180CA | 180 | 200 | 220 | 5 | 291.6 | 10.29 | 2 | DHT |
| SMLJ190CA | 190 | 211 | 232 | 5 | 307.8 | 9.75 | 2 | DHV |
| SMLJ200CA | 200 | 224 | 247 | 5 | 324 | 9.26 | 2 | DHW |
| SMLJ220CA | 220 | 246 | 272 | 5 | 356 | 8.43 | 2 | DHX |
| SMLJ250CA | 250 | 279 | 309 | 5 | 405 | 7.41 | 2 | DHZ |
| SMLJ300CA | 300 | 335 | 371 | 5 | 486 | 6.17 | 2 | DJE |
| SMLJ350CA | 350 | 391 | 432 | 5 | 567 | 5.29 | 2 | DJG |
| SMLJ400CA | 400 | 447 | 494 | 5 | 648 | 4.63 | 2 | DJK |
| SMLJ440CA | 440 | 492 | 543 | 5 | 713 | 4.21 | 2 | DJM |
| SMLJ5.0 | 5.0 | 6.40 | 7.30 | 10 | 9.6 | 312.5 | 1000 | RDD |
| SMLJ5.0A | 5.0 | 6.40 | 7.00 | 10 | 9.2 | 326.0 | 1000 | RDE |
| SMLJ6.0 | 6.0 | 6.67 | 8.15 | 10 | 11.4 | 263.2 | 1000 | RDF |
| SMLJ6.0A | 6.0 | 6.67 | 7.37 | 10 | 10.3 | 291.3 | 1000 | RDG |
| SMLJ6.5 | 6.5 | 7.22 | 8.82 | 10 | 12.3 | 243.9 | 500 | RDH |
| SMLJ6.5A | 6.5 | 7.22 | 7.98 | 10 | 11.2 | 267.9 | 500 | RDK |
| SMLJ7.0 | 7.0 | 7.78 | 9.51 | 10 | 13.3 | 225.6 | 200 | PDL |
| SMLJ7.0A | 7.0 | 7.78 | 8.60 | 10 | 12.0 | 250.0 | 200 | PDM |
| SMLJ7.5 | 7.5 | 8.33 | 10.2 | 1 | 14.3 | 209.8 | 100 | PDN |
| SMLJ7.5A | 7.5 | 8.33 | 9.21 | 1 | 12.9 | 232.6 | 100 | PDP |
| SMLJ8.0 | 8.0 | 8.89 | 10.9 | 1 | 15.0 | 200.0 | 50 | PDQ |
| SMLJ8.0A | 8.0 | 8.89 | 9.83 | 1 | 13.6 | 220.6 | 50 | PDR |
| SMLJ8.5 | 8.5 | 9.44 | 11.5 | 1 | 15.9 | 188.6 | 25 | PDS |
| SMLJ8.5A | 8.5 | 9.44 | 10.4 | 1 | 14.4 | 208.4 | 25 | PDT |
| SMLJ9.0 | 9.0 | 10.0 | 12.2 | 1 | 16.9 | 177.4 | 10 | PDU |
| SMLJ9.0A | 9.0 | 10.0 | 11.1 | 1 | 15.4 | 194.8 | 10 | PDV |
| SMLJ10 | 10 | 11.1 | 13.6 | 1 | 18.8 | 159.6 | 5 | PDW |
| SMLJ10A | 10 | 11.1 | 12.3 | 1 | 17.0 | 176.4 | 5 | PDX |
| SMLJ11 | 11 | 12.2 | 14.9 | 1 | 20.1 | 149.2 | 2 | PDY |
| SMLJ11A | 11 | 12.2 | 13.5 | 1 | 18.2 | 164.8 | 2 | PDZ |
| SMLJ12 | 12 | 13.3 | 16.3 | 1 | 22.0 | 136.4 | 2 | PED |
| SMLJ12A | 12 | 13.3 | 14.7 | 1 | 19.9 | 150.6 | 2 | PEE |
| SMLJ13 | 13 | 14.4 | 17.6 | 1 | 23.8 | 126.0 | 2 | PEF |
| SMLJ13A | 13 | 14.4 | 15.9 | 1 | 21.5 | 139.4 | 2 | PEG |
| SMLJ14 | 14 | 15.6 | 19.1 | 1 | 25.8 | 116.2 | 2 | PEH |
| SMLJ14A | 14 | 15.6 | 17.2 | 1 | 23.2 | 129.4 | 2 | PEK |
| SMLJ15 | 15 | 16.7 | 20.4 | 1 | 26.9 | 111.6 | 2 | PEL |
| SMLJ15A | 15 | 16.7 | 18.5 | 1 | 24.4 | 123.0 | 2 | PEM |
| SMLJ16 | 16 | 17.8 | 21.8 | 1 | 28.8 | 104.2 | 2 | PEN |
| SMLJ16A | 16 | 17.8 | 19.7 | 1 | 26.0 | 115.4 | 2 | PEP |
| SMLJ17 | 17 | 18.9 | 23.1 | 1 | 30.5 | 98.4 | 2 | PEQ |
| SMLJ17A | 17 | 18.9 | 20.9 | 1 | 27.6 | 106.6 | 2 | PER |
| SMLJ18 | 18 | 20.0 | 24.4 | 1 | 32.2 | 93.2 | 2 | PES |
| SMLJ18A | 18 | 20.0 | 22.1 | 1 | 29.2 | 102.8 | 2 | PET |
| SMLJ20 | 20 | 22.2 | 27.1 | 1 | 35.8 | 83.8 | 2 | PEU |
| SMLJ20A | 20 | 22.2 | 24.5 | 1 | 32.4 | 92.6 | 2 | PEV |

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Electrical Characteristics @ 25°C Unless Otherwise Specified

| MCC Part Number | Reverse Stand-Off Voltage | Breakdown Voltage $V_{BR}(V)$ | | Test Current | Max. Clamping Voltage @ I_{PP} | Peak Pulse Current | Reverse Leakage Current@ V_{WM} | Marking Code |
|-----------------|---------------------------|-------------------------------|------|--------------|----------------------------------|--------------------|-----------------------------------|--------------|
| | $V_{WM}(V)$ | Min | Max | $I_T(mA)$ | $V_C(V)$ | $I_{PP}(A)$ | $I_D(\mu A)$ | |
| SMLJ22 | 22 | 24.4 | 29.8 | 1 | 39.4 | 76.2 | 2 | PEW |
| SMLJ22A | 22 | 24.4 | 26.9 | 1 | 35.5 | 84.4 | 2 | PEX |
| SMLJ24 | 24 | 26.7 | 32.6 | 1 | 43.0 | 69.8 | 2 | PEY |
| SMLJ24A | 24 | 26.7 | 29.5 | 1 | 38.9 | 77.2 | 2 | PEZ |
| SMLJ26 | 26 | 28.9 | 35.3 | 1 | 46.6 | 64.4 | 2 | PFD |
| SMLJ26A | 26 | 28.9 | 31.9 | 1 | 42.1 | 71.2 | 2 | PFE |
| SMLJ28 | 28 | 31.1 | 38.0 | 1 | 50.0 | 60.0 | 2 | PFF |
| SMLJ28A | 28 | 31.1 | 34.4 | 1 | 45.4 | 66.0 | 2 | PFG |
| SMLJ30 | 30 | 33.3 | 40.7 | 1 | 53.5 | 56.0 | 2 | PFH |
| SMLJ30A | 30 | 33.3 | 36.8 | 1 | 48.4 | 62.0 | 2 | PFK |
| SMLJ33 | 33 | 36.7 | 44.9 | 1 | 59.0 | 50.4 | 2 | PFL |
| SMLJ33A | 33 | 36.7 | 40.6 | 1 | 53.3 | 56.2 | 2 | PFM |
| SMLJ36 | 36 | 40.0 | 48.9 | 1 | 64.3 | 46.6 | 2 | PFN |
| SMLJ36A | 36 | 40.0 | 44.2 | 1 | 58.1 | 51.6 | 2 | PFP |
| SMLJ40 | 40 | 44.4 | 54.3 | 1 | 71.4 | 42.0 | 2 | PFQ |
| SMLJ40A | 40 | 44.4 | 49.1 | 1 | 64.5 | 46.4 | 2 | PFR |
| SMLJ43 | 43 | 47.8 | 58.4 | 1 | 76.7 | 39.2 | 2 | PFS |
| SMLJ43A | 43 | 47.8 | 52.8 | 1 | 69.4 | 43.2 | 2 | PFT |
| SMLJ45 | 45 | 50.0 | 61.1 | 1 | 80.3 | 37.4 | 2 | PFU |
| SMLJ45A | 45 | 50.0 | 55.3 | 1 | 72.7 | 41.2 | 2 | PFV |
| SMLJ48 | 48 | 53.3 | 65.1 | 1 | 85.5 | 35.0 | 2 | PFW |
| SMLJ48A | 48 | 53.3 | 58.9 | 1 | 77.4 | 38.8 | 2 | PFX |
| SMLJ51 | 51 | 56.7 | 69.3 | 1 | 91.1 | 37.0 | 2 | PFY |
| SMLJ51A | 51 | 56.7 | 62.7 | 1 | 82.4 | 36.4 | 2 | PFZ |
| SMLJ54 | 54 | 60.0 | 73.3 | 1 | 96.3 | 31.2 | 2 | RGD |
| SMLJ54A | 54 | 60.0 | 66.3 | 1 | 87.1 | 34.4 | 2 | RGE |
| SMLJ58 | 58 | 64.4 | 78.7 | 1 | 103 | 39.2 | 2 | PGF |
| SMLJ58A | 58 | 64.4 | 71.2 | 1 | 93.6 | 32.0 | 2 | PGG |
| SMLJ60 | 60 | 66.7 | 81.5 | 1 | 107 | 28.0 | 2 | PGH |
| SMLJ60A | 60 | 66.7 | 73.7 | 1 | 96.8 | 31.0 | 2 | PGK |
| SMLJ64 | 64 | 71.1 | 86.9 | 1 | 114 | 26.4 | 2 | PGL |
| SMLJ64A | 64 | 71.1 | 78.6 | 1 | 103 | 29.2 | 2 | PGM |
| SMLJ70 | 70 | 77.8 | 95.1 | 1 | 125 | 24.0 | 2 | PGN |
| SMLJ70A | 70 | 77.8 | 86.0 | 1 | 113 | 26.6 | 2 | PGP |
| SMLJ75 | 75 | 83.3 | 102 | 1 | 134 | 22.4 | 2 | PGQ |
| SMLJ75A | 75 | 83.3 | 92.1 | 1 | 121 | 24.8 | 2 | PGR |
| SMLJ78 | 78 | 86.7 | 106 | 1 | 139 | 21.6 | 2 | PGS |
| SMLJ78A | 78 | 86.7 | 95.8 | 1 | 126 | 22.8 | 2 | PGT |
| SMLJ85 | 85 | 94.4 | 115 | 1 | 151 | 19.8 | 2 | PGU |
| SMLJ85A | 85 | 94.4 | 104 | 1 | 137 | 20.8 | 2 | PGV |
| SMLJ90 | 90 | 100 | 122 | 1 | 160 | 18.8 | 2 | PGW |
| SMLJ90A | 90 | 100 | 111 | 1 | 146 | 20.6 | 2 | PGX |
| SMLJ100 | 100 | 111 | 136 | 1 | 179 | 16.8 | 2 | PGY |
| SMLJ100A | 100 | 111 | 123 | 1 | 162 | 18.6 | 2 | PGZ |
| SMLJ110 | 110 | 122 | 149 | 1 | 196 | 15.4 | 2 | PHD |
| SMLJ110A | 110 | 122 | 135 | 1 | 177 | 16.8 | 2 | PHE |

For parts without A, the VBR is +10%.

Electrical Characteristics @ 25°C Unless Otherwise Specified

| MCC Part Number | Reverse Stand-Off Voltage | Breakdown Voltage $V_{BR}(V)$ | | Test Current | Max. Clamping Voltage @ I_{PP} | Peak Pulse Current | Reverse Leakage Current@ V_{WM} | Marking Code |
|--------------------|---------------------------------|----------------------------------|-----|-----------------|--|--------------------------|--------------------------------------|--------------|
| | $V_{WM}(V)$ | Min | Max | $I_T(mA)$ | $V_C(V)$ | $I_{PP}(A)$ | $I_D(\mu A)$ | |
| SMLJ120 | 120 | 133 | 163 | 1 | 214 | 14.0 | 2 | PHF |
| SMLJ120A | 120 | 133 | 147 | 1 | 193 | 15.6 | 2 | PHG |
| SMLJ130 | 130 | 144 | 176 | 1 | 231 | 13.0 | 2 | PHH |
| SMLJ130A | 130 | 144 | 159 | 1 | 209 | 14.4 | 2 | PHK |
| SMLJ150 | 150 | 167 | 204 | 1 | 268 | 11.2 | 2 | PHL |
| SMLJ150A | 150 | 167 | 185 | 1 | 243 | 12.4 | 2 | PHM |
| SMLJ160 | 160 | 178 | 218 | 1 | 287 | 10.4 | 2 | PHN |
| SMLJ160A | 160 | 178 | 197 | 1 | 259 | 11.6 | 2 | PHP |
| SMLJ170 | 170 | 189 | 231 | 1 | 304 | 9.8 | 2 | PHQ |
| SMLJ170A | 170 | 189 | 209 | 1 | 275 | 11.0 | 2 | PHR |
| SMLJ180A | 180 | 200 | 220 | 5 | 291.6 | 10.29 | 2 | PHT |
| SMLJ190A | 190 | 211 | 232 | 5 | 307.8 | 9.75 | 2 | PHV |
| SMLJ200A | 200 | 224 | 247 | 5 | 324 | 9.26 | 2 | PHW |
| SMLJ220A | 220 | 246 | 272 | 5 | 356 | 8.43 | 2 | PHX |
| SMLJ250A | 250 | 279 | 309 | 5 | 405 | 7.41 | 2 | PHZ |
| SMLJ300A | 300 | 335 | 371 | 5 | 486 | 6.17 | 2 | PJE |
| SMLJ350A | 350 | 391 | 432 | 5 | 567 | 5.29 | 2 | PJG |
| SMLJ400A | 400 | 447 | 494 | 5 | 648 | 4.63 | 2 | PJK |
| SMLJ440A | 440 | 492 | 543 | 5 | 713 | 4.21 | 2 | PJM |

For parts without A, the VBR is +10%.

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve



Fig. 2 - Typical Junction Capacitance



Fig. 3 - Pulse Waveform



Fig. 4 - Pulse Derating Curve



Ordering Information

| Device | Packing |
|----------------|----------------------|
| Part Number-TP | Tape&Reel:3Kpcs/Reel |

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