Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

# SMBJ5.0 THRU SMBJ440CA

## Transient Voltage Suppressor 5.0 to 440 Volts 600 Watt

## Features

- For surface mount applicationsin order to optimize board space
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Fast response time: typical less than 1.0ps from 0 volts to $V_{BR}$ minimum
- Low inductance
- UL Recognized File # E331408
- Halogen free available upon request by adding suffix "-HF"

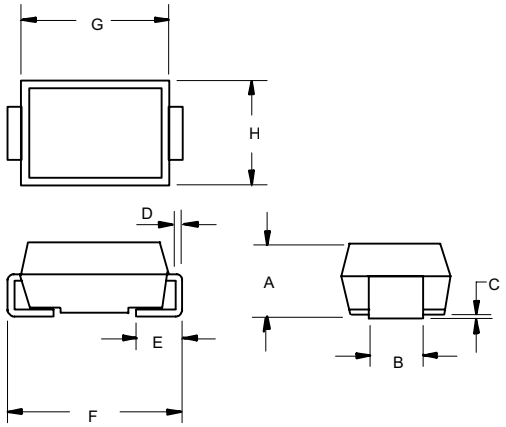
## Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode) except Bidirectional
- Maximum soldering temperature: 260°C for 10 seconds

### Maximum Ratings @ 25°C Unless Otherwise Specified

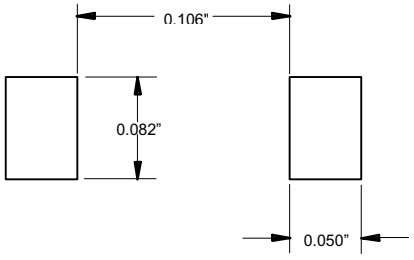
| | | | |
|---|---|---|---|
| Peak Pulse Current on 10/1000us waveform | $I_{PP}$ | See Table 1 | Note: 2 |
| Peak Pulse Power Dissipation | $P_{PP}$ | 600W | Note: 2, 3 |
| Operation And Storage Temperature Range | $T_J$, $T_{STG}$ | -55°C to +175°C | |
| Thermal Resistance | $R_{thJC}$<br>$R_{thJL}$ | 25°C/W<br>20°C/W | |

DO-214AA
(SMB) (LEAD FRAME)




| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| A | .083 | .096 | 2.13 | 2.44 | |
| B | .075 | .083 | 1.91 | 2.11 | |
| C | .002 | .008 | 0.051 | 0.203 | |
| D | .006 | .012 | 0.152 | 0.305 | |
| E | .030 | .050 | 0.76 | 1.27 | |
| F | .200 | .220 | 5.08 | 5.59 | |
| G | .160 | .185 | 4.06 | 4.70 | |
| H | .130 | .155 | 3.30 | 3.94 | |

SUGGESTED SOLDER PAD LAYOUT




**NOTES:**

1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
2. Non-repetitive current pulse, per Fig.3 and derated above $T_A$=25°C per Fig.2.
3. Mounted on 5.0mm$^2$ copper pads to each terminal.
4. Peak pulse current waveform is 10/1000us, with maximum duty Cycle of 0.01%.
5. Unidirectional and bidirectional available,for bidirectional devices add 'C' suffix to the pn#, i.e.SMBJ5.0CA
6. For bi-directional type having Vrwm of 10 Volts and less, the IR limit is double.

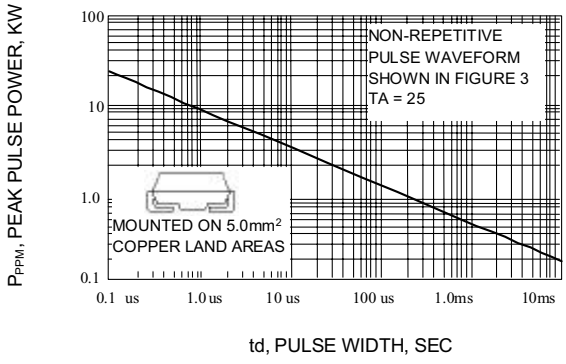



Fig. 1-PEAK PULSE POWER RATING CURVE

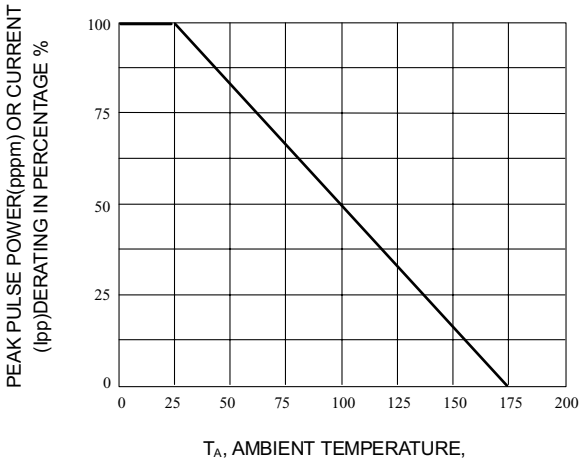



Fig. 2-PULSE DERATING CURVE

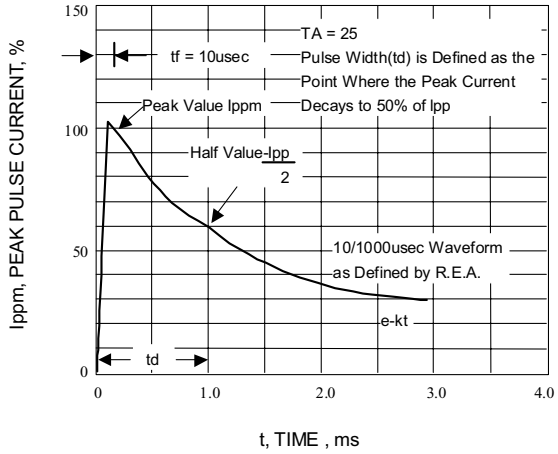



Fig. 3-PULSE WAVEFORM

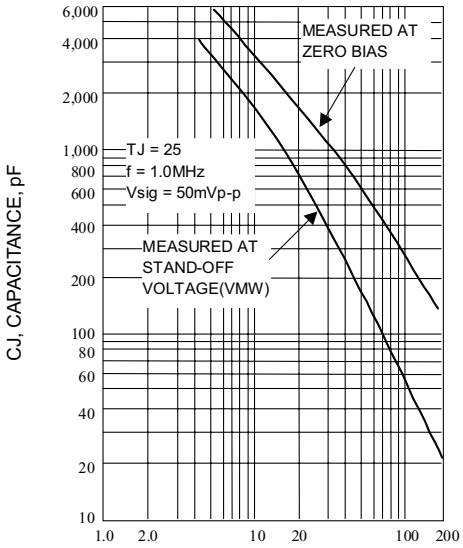



Fig. 4-TYPICAL JUNCTION CAPACITANCE

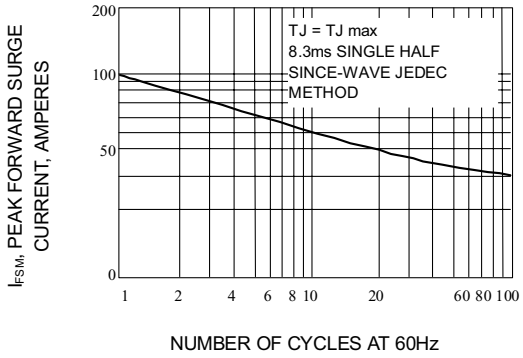



Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

# SMBJ5.0(A) thru SMBJ440(A)

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

| MCC PART NUMBER | REVERSE STAND-OFF VOLTAGE $V_{WM}$ | BREAKDOWN VOLTAGE $V_{(BR)}$ @$I_T$ (VOLTS) | | | MAXIMUM CLAMPING VOLTAGE@$I_{PP}$ | PEAK PULSE CURRENT $I_{PP}$ | MAXIMUM REVERSE LEAKAGE @$V_{WM}$ $I_D$ | MARKING CODE |
|---|---|---|---|---|---|---|---|---|
| | VOLTS | MIN | MAX | $I_T$(mA) | VOLTS | (AMPS) | (uA) | |
| SMBJ5.0 | 5.0 | 6.40 | 7.30 | 10 | 9.6 | 62.5 | 800 | KD |
| SMBJ5.0A | 5.0 | 6.40 | 7.00 | 10 | 9.2 | 65.2 | 800 | KE |
| SMBJ6.0 | 6.0 | 6.67 | 8.15 | 10 | 11.4 | 52.6 | 800 | KF |
| SMBJ6.0A | 6.0 | 6.67 | 7.37 | 10 | 10.3 | 58.3 | 800 | KG |
| SMBJ6.5 | 6.5 | 7.22 | 8.82 | 10 | 12.3 | 48.7 | 500 | KH |
| SMBJ6.5A | 6.5 | 7.22 | 7.98 | 10 | 11.2 | 53.6 | 500 | KK |
| SMBJ7.0 | 7.0 | 7.78 | 9.51 | 10 | 13.3 | 45.1 | 200 | KL |
| SMBJ7.0A | 7.0 | 7.78 | 8.60 | 10 | 12.0 | 50.0 | 200 | KM |
| SMBJ7.5 | 7.5 | 8.33 | 10.2 | 1 | 14.3 | 42.0 | 100 | KN |
| SMBJ7.5A | 7.5 | 8.33 | 9.21 | 1 | 12.9 | 46.5 | 100 | KP |
| SMBJ8.0 | 8.0 | 8.89 | 10.9 | 1 | 15.0 | 40.0 | 50 | KQ |
| SMBJ8.0A | 8.0 | 8.89 | 9.83 | 1 | 13.6 | 44.1 | 50 | KR |
| SMBJ8.5 | 8.5 | 9.44 | 11.5 | 1 | 15.9 | 37.7 | 10 | KS |
| SMBJ8.5A | 8.5 | 9.44 | 10.4 | 1 | 14.4 | 41.7 | 10 | KT |
| SMBJ9.0 | 9.0 | 10.0 | 12.2 | 1 | 16.9 | 35.5 | 5 | KU |
| SMBJ9.0A | 9.0 | 10.0 | 11.1 | 1 | 15.4 | 39.0 | 5 | KV |
| SMBJ10 | 10 | 11.1 | 13.6 | 1 | 18.8 | 31.9 | 5 | KW |
| SMBJ10A | 10 | 11.1 | 12.3 | 1 | 17.0 | 35.3 | 5 | KX |
| SMBJ11 | 11 | 12.2 | 14.9 | 1 | 20.1 | 29.9 | 5 | KY |
| SMBJ11A | 11 | 12.2 | 13.5 | 1 | 18.2 | 33.0 | 5 | KZ |
| SMBJ12 | 12 | 13.3 | 16.3 | 1 | 22.0 | 27.3 | 5 | LD |
| SMBJ12A | 12 | 13.3 | 14.7 | 1 | 19.9 | 30.2 | 5 | LE |
| SMBJ13 | 13 | 14.4 | 17.6 | 1 | 23.8 | 25.2 | 5 | LF |
| SMBJ13A | 13 | 14.4 | 15.9 | 1 | 21.5 | 27.9 | 5 | LG |
| SMBJ14 | 14 | 15.6 | 19.1 | 1 | 25.8 | 23.3 | 5 | LH |
| SMBJ14A | 14 | 15.6 | 17.2 | 1 | 23.2 | 25.8 | 5 | LK |
| SMBJ15 | 15 | 16.7 | 20.4 | 1 | 26.9 | 22.3 | 5 | LL |
| SMBJ15A | 15 | 16.7 | 18.5 | 1 | 24.4 | 24.0 | 5 | LM |
| SMBJ16 | 16 | 17.8 | 21.8 | 1 | 28.8 | 20.8 | 5 | LN |
| SMBJ16A | 16 | 17.8 | 19.7 | 1 | 26.0 | 23.1 | 5 | LP |
| SMBJ17 | 17 | 18.9 | 23.1 | 1 | 30.5 | 19.7 | 5 | LQ |
| SMBJ17A | 17 | 18.9 | 20.9 | 1 | 27.6 | 21.7 | 5 | LR |
| SMBJ18 | 18 | 20.0 | 24.4 | 1 | 32.2 | 18.6 | 5 | LS |
| SMBJ18A | 18 | 20.0 | 22.1 | 1 | 29.2 | 20.5 | 5 | LT |
| SMBJ20 | 20 | 22.2 | 27.1 | 1 | 35.8 | 16.7 | 5 | LU |
| SMBJ20A | 20 | 22.2 | 24.5 | 1 | 32.4 | 18.5 | 5 | LV |
| SMBJ22 | 22 | 24.4 | 29.8 | 1 | 39.4 | 15.2 | 5 | LW |
| SMBJ22A | 22 | 24.4 | 26.9 | 1 | 35.5 | 16.9 | 5 | LX |
| SMBJ24 | 24 | 26.7 | 32.6 | 1 | 43.0 | 14.0 | 5 | LY |
| SMBJ24A | 24 | 26.7 | 29.5 | 1 | 38.9 | 15.4 | 5 | LZ |
| SMBJ26 | 26 | 28.9 | 35.3 | 1 | 46.6 | 12.4 | 5 | MD |
| SMBJ26A | 26 | 28.9 | 31.9 | 1 | 42.1 | 14.2 | 5 | ME |

# SMBJ5.0(A) thru SMBJ440(A)

## Electrical Characteristics @ 25°C Unless Otherwise Specified

| MCC PART NUMBER | REVERSE STAND-OFF VOLTAGE $V_{WM}$ | BREAKDOWN VOLTAGE $V_{(BR)}$ @$I_T$ (VOLTS) | | | MAXIMUM CLAMPING VOLTAGE@$I_{PP}$ | PEAK PULSE CURRENT $I_{PP}$ | MAXIMUM REVERSE LEAKAGE @$V_{WM}$ $I_D$ | MARKING CODE |
|---|---|---|---|---|---|---|---|---|
| | VOLTS | MIN | MAX | $I_T$(mA) | VOLTS | (AMPS) | (uA) | |
| SMBJ28 | 28 | 31.1 | 38.0 | 1 | 50.0 | 12.0 | 5 | MF |
| SMBJ28A | 28 | 31.1 | 34.4 | 1 | 45.4 | 13.2 | 5 | MG |
| SMBJ30 | 30 | 33.3 | 40.7 | 1 | 53.5 | 11.2 | 5 | MH |
| SMBJ30A | 30 | 33.3 | 36.8 | 1 | 48.4 | 12.4 | 5 | MK |
| SMBJ33 | 33 | 36.7 | 44.9 | 1 | 59.0 | 10.2 | 5 | ML |
| SMBJ33A | 33 | 36.7 | 40.6 | 1 | 53.3 | 11.3 | 5 | MM |
| SMBJ36 | 36 | 40.0 | 48.9 | 1 | 64.3 | 9.3 | 5 | MN |
| SMBJ36A | 36 | 40.0 | 44.2 | 1 | 58.1 | 10.3 | 5 | MP |
| SMBJ40 | 40 | 44.4 | 54.3 | 1 | 71.4 | 8.4 | 5 | MQ |
| SMBJ40A | 40 | 44.4 | 49.1 | 1 | 64.5 | 9.3 | 5 | MR |
| SMBJ43 | 43 | 47.8 | 58.4 | 1 | 76.7 | 7.8 | 5 | MS |
| SMBJ43A | 43 | 47.8 | 52.8 | 1 | 69.4 | 8.6 | 5 | MT |
| SMBJ45 | 45 | 50.0 | 61.1 | 1 | 80.3 | 7.5 | 5 | MU |
| SMBJ45A | 45 | 50.0 | 55.3 | 1 | 72.7 | 8.3 | 5 | MV |
| SMBJ48 | 48 | 53.3 | 65.1 | 1 | 85.5 | 7.0 | 5 | MW |
| SMBJ48A | 48 | 53.3 | 58.9 | 1 | 77.4 | 7.7 | 5 | MX |
| SMBJ51 | 51 | 56.7 | 69.3 | 1 | 91.1 | 6.6 | 5 | MY |
| SMBJ51A | 51 | 56.7 | 62.7 | 1 | 82.4 | 7.3 | 5 | MZ |
| SMBJ54 | 54 | 60.0 | 73.3 | 1 | 96.3 | 6.2 | 5 | ND |
| SMBJ54A | 54 | 60.0 | 66.3 | 1 | 87.1 | 6.9 | 5 | NE |
| SMBJ58 | 58 | 64.4 | 78.7 | 1 | 103 | 5.8 | 5 | NF |
| SMBJ58A | 58 | 64.4 | 71.2 | 1 | 93.6 | 6.4 | 5 | NG |
| SMBJ60 | 60 | 66.7 | 81.5 | 1 | 107 | 5.6 | 5 | NH |
| SMBJ60A | 60 | 66.7 | 73.7 | 1 | 96.8 | 6.2 | 5 | NK |
| SMBJ64 | 64 | 71.1 | 86.9 | 1 | 114 | 5.3 | 5 | NL |
| SMBJ64A | 64 | 71.1 | 78.6 | 1 | 103 | 5.8 | 5 | NM |
| SMBJ70 | 70 | 77.8 | 95.1 | 1 | 125 | 4.8 | 5 | NN |
| SMBJ70A | 70 | 77.8 | 86.0 | 1 | 113 | 5.3 | 5 | NP |
| SMBJ75 | 75 | 83.3 | 102 | 1 | 134 | 4.5 | 5 | NQ |
| SMBJ75A | 75 | 83.3 | 92.1 | 1 | 121 | 4.9 | 5 | NR |
| SMBJ78 | 78 | 86.7 | 106 | 1 | 139 | 4.3 | 5 | NS |
| SMBJ78A | 78 | 86.7 | 95.8 | 1 | 126 | 4.7 | 5 | NT |
| SMBJ85 | 85 | 94.4 | 115 | 1 | 151 | 3.9 | 5 | NU |
| SMBJ85A | 85 | 94.4 | 104 | 1 | 137 | 4.4 | 5 | NV |
| SMBJ90 | 90 | 100 | 122 | 1 | 160 | 3.8 | 5 | NW |
| SMBJ90A | 90 | 100 | 111 | 1 | 146 | 4.1 | 5 | NX |
| SMBJ100 | 100 | 111 | 136 | 1 | 179 | 3.4 | 5 | NY |
| SMBJ100A | 100 | 111 | 123 | 1 | 162 | 3.7 | 5 | NZ |
| SMBJ110 | 110 | 122 | 149 | 1 | 196 | 3.0 | 5 | PD |
| SMBJ110A | 110 | 122 | 135 | 1 | 177 | 3.4 | 5 | PE |
| SMBJ120 | 120 | 133 | 163 | 1 | 214 | 2.8 | 5 | PF |
| SMBJ120A | 120 | 133 | 147 | 1 | 193 | 3.1 | 5 | PG |

## ELECTRICAL CHARACTERISTICS @25°C

| MCC PART NUMBER | REVERSE STAND-OFF VOLTAGE $V_{WM}$ | BREAKDOWN VOLTAGE $V_{(BR)}$ @ $I_T$ (VOLTS) | | | MAXIMUM CLAMPING VOLTAGE @ $I_{PP}$ | PEAK PULSE CURRENT $I_{PP}$ | MAXIMUM REVERSE LEAKAGE @$V_{WM}$ $I_D$ | MARKING CODE |
|---|---|---|---|---|---|---|---|---|
| | (VOLTS) | MIN | MAX | $I_T$ (mA) | (VOLTS) | (AMPS) | (µA) | |
| SMBJ130 | 130 | 144 | 176 | 1 | 231 | 2.6 | 5 | PH |
| SMBJ130A | 130 | 144 | 159 | 1 | 209 | 2.9 | 5 | PK |
| SMBJ150 | 150 | 167 | 204 | 1 | 268 | 2.2 | 5 | PL |
| SMBJ150A | 150 | 167 | 185 | 1 | 243 | 2.5 | 5 | PM |
| SMBJ160 | 160 | 178 | 218 | 1 | 287 | 2.1 | 5 | PN |
| SMBJ160A | 160 | 178 | 197 | 1 | 259 | 2.3 | 5 | PP |
| SMBJ170 | 170 | 189 | 231 | 1 | 304 | 2.0 | 5 | PQ |
| SMBJ170A | 170 | 189 | 209 | 1 | 275 | 2.2 | 5 | PR |
| SMBJ180A | 180 | 201 | 222 | 1 | 292 | 2.1 | 5 | PT |
| SMBJ200A | 200 | 224 | 247 | 1 | 324 | 1.9 | 5 | PV |
| SMBJ220A | 220 | 246 | 272 | 1 | 356 | 1.7 | 5 | PX |
| SMBJ250A | 250 | 279 | 309 | 1 | 405 | 1.5 | 5 | PZ |
| SMBJ300A | 300 | 335 | 371 | 1 | 486 | 1.3 | 5 | QE |
| SMBJ350A | 350 | 391 | 432 | 1 | 567 | 1.1 | 5 | QG |
| SMBJ400A | 400 | 447 | 494 | 1 | 648 | 0.9 | 5 | QK |
| SMBJ440A | 440 | 492 | 543 | 1 | 713 | 0.9 | 5 | QM |

# SMBJ5.0C(A) thru SMBJ440C(A)

Micro Commercial Components

## Electrical Characteristics @ 25°C Unless Otherwise Specified

| MCC PART NUMBER | REVERSE STAND-OFF VOLTAGE $V_{WM}$ | BREAKDOWN VOLTAGE $V_{(BR)}$ @$I_T$ (VOLTS) | | | MAXIMUM CLAMPING VOLTAGE@$I_{PP}$ | PEAK PULSE CURRENT $I_{PP}$ | MAXIMUM REVERSE LEAKAGE @$V_{WM}$ $I_D$ | MARKING CODE |
|---|---|---|---|---|---|---|---|---|
| | VOLTS | MIN | MAX | $I_T$(mA) | VOLTS | (AMPS) | (uA) | |
| SMBJ5.0C | 5.0 | 6.40 | 7.30 | 10 | 9.6 | 62.5 | 1600 | AD |
| SMBJ5.0CA | 5.0 | 6.40 | 7.00 | 10 | 9.2 | 65.2 | 1600 | AE |
| SMBJ6.0C | 6.0 | 6.67 | 8.15 | 10 | 11.4 | 52.6 | 1600 | AF |
| SMBJ6.0CA | 6.0 | 6.67 | 7.37 | 10 | 10.3 | 58.3 | 1600 | AG |
| SMBJ6.5C | 6.5 | 7.22 | 8.82 | 10 | 12.3 | 48.7 | 1000 | AH |
| SMBJ6.5CA | 6.5 | 7.22 | 7.98 | 10 | 11.2 | 53.6 | 1000 | AK |
| SMBJ7.0C | 7.0 | 7.78 | 9.51 | 10 | 13.3 | 45.1 | 400 | AL |
| SMBJ7.0CA | 7.0 | 7.78 | 8.60 | 10 | 12.0 | 50.0 | 400 | AM |
| SMBJ7.5C | 7.5 | 8.33 | 10.2 | 1 | 14.3 | 42.0 | 200 | AN |
| SMBJ7.5CA | 7.5 | 8.33 | 9.21 | 1 | 12.9 | 46.5 | 200 | AP |
| SMBJ8.0C | 8.0 | 8.89 | 10.9 | 1 | 15.0 | 40.0 | 100 | AQ |
| SMBJ8.0CA | 8.0 | 8.89 | 9.83 | 1 | 13.6 | 44.1 | 100 | AR |
| SMBJ8.5C | 8.5 | 9.44 | 11.5 | 1 | 15.9 | 37.7 | 20 | AS |
| SMBJ8.5CA | 8.5 | 9.44 | 10.4 | 1 | 14.4 | 41.7 | 20 | AT |
| SMBJ9.0C | 9.0 | 10.0 | 12.2 | 1 | 16.9 | 35.5 | 10 | AU |
| SMBJ9.0CA | 9.0 | 10.0 | 11.1 | 1 | 15.4 | 39.0 | 10 | AV |
| SMBJ10C | 10 | 11.1 | 13.6 | 1 | 18.8 | 31.9 | 5 | AW |
| SMBJ10CA | 10 | 11.1 | 12.3 | 1 | 17.0 | 35.3 | 5 | AX |
| SMBJ11C | 11 | 12.2 | 14.9 | 1 | 20.1 | 29.9 | 5 | AY |
| SMBJ11CA | 11 | 12.2 | 13.5 | 1 | 18.2 | 33.0 | 5 | AZ |
| SMBJ12C | 12 | 13.3 | 16.3 | 1 | 22.0 | 27.3 | 5 | BD |
| SMBJ12CA | 12 | 13.3 | 14.7 | 1 | 19.9 | 30.2 | 5 | BE |
| SMBJ13C | 13 | 14.4 | 17.6 | 1 | 23.8 | 25.2 | 5 | BF |
| SMBJ13CA | 13 | 14.4 | 15.9 | 1 | 21.5 | 27.9 | 5 | BG |
| SMBJ14C | 14 | 15.6 | 19.1 | 1 | 25.8 | 23.3 | 5 | BH |
| SMBJ14CA | 14 | 15.6 | 17.2 | 1 | 23.2 | 25.8 | 5 | BK |
| SMBJ15C | 15 | 16.7 | 20.4 | 1 | 26.9 | 22.3 | 5 | BL |
| SMBJ15CA | 15 | 16.7 | 18.5 | 1 | 24.4 | 24.0 | 5 | BM |
| SMBJ16C | 16 | 17.8 | 21.8 | 1 | 28.8 | 20.8 | 5 | BN |
| SMBJ16CA | 16 | 17.8 | 19.7 | 1 | 26.0 | 23.1 | 5 | BP |
| SMBJ17C | 17 | 18.9 | 23.1 | 1 | 30.5 | 19.7 | 5 | BQ |
| SMBJ17CA | 17 | 18.9 | 20.9 | 1 | 27.6 | 21.7 | 5 | BR |
| SMBJ18C | 18 | 20.0 | 24.4 | 1 | 32.2 | 18.6 | 5 | BS |
| SMBJ18CA | 18 | 20.0 | 22.1 | 1 | 29.2 | 20.5 | 5 | BT |
| SMBJ20C | 20 | 22.2 | 27.1 | 1 | 35.8 | 16.7 | 5 | BU |
| SMBJ20CA | 20 | 22.2 | 24.5 | 1 | 32.4 | 18.5 | 5 | BV |
| SMBJ22C | 22 | 24.4 | 29.8 | 1 | 39.4 | 15.2 | 5 | BW |
| SMBJ22CA | 22 | 24.4 | 26.9 | 1 | 35.5 | 16.9 | 5 | BX |
| SMBJ24C | 24 | 26.7 | 32.6 | 1 | 43.0 | 14.0 | 5 | BY |
| SMBJ24CA | 24 | 26.7 | 29.5 | 1 | 38.9 | 15.4 | 5 | BZ |
| SMBJ26C | 26 | 28.9 | 35.3 | 1 | 46.6 | 12.4 | 5 | CD |
| SMBJ26CA | 26 | 28.9 | 31.9 | 1 | 42.1 | 14.2 | 5 | CE |

# SMBJ5.0C(A) thru SMBJ440C(A)

## Electrical Characteristics @ 25°C Unless Otherwise Specified

| MCC PART NUMBER | REVERSE STAND-OFF VOLTAGE $V_{WM}$ | BREAKDOWN VOLTAGE $V_{(BR)}$ @$I_T$ (VOLTS) | | | MAXIMUM CLAMPING VOLTAGE@$I_{PP}$ | PEAK PULSE CURRENT $I_{PP}$ | MAXIMUM REVERSE LEAKAGE @$V_{WM}$ $I_D$ | MARKING CODE |
|---|---|---|---|---|---|---|---|---|
| | VOLTS | MIN | MAX | $I_T$(mA) | VOLTS | (AMPS) | (uA) | |
| SMBJ28C | 28 | 31.1 | 38.0 | 1 | 50.0 | 12.0 | 5 | CF |
| SMBJ28CA | 28 | 31.1 | 34.4 | 1 | 45.4 | 13.2 | 5 | CG |
| SMBJ30C | 30 | 33.3 | 40.7 | 1 | 53.5 | 11.2 | 5 | CH |
| SMBJ30CA | 30 | 33.3 | 36.8 | 1 | 48.4 | 12.4 | 5 | CK |
| SMBJ33C | 33 | 36.7 | 44.9 | 1 | 59.0 | 10.2 | 5 | CL |
| SMBJ33CA | 33 | 36.7 | 40.6 | 1 | 53.3 | 11.3 | 5 | CM |
| SMBJ36C | 36 | 40.0 | 48.9 | 1 | 64.3 | 9.3 | 5 | CN |
| SMBJ36CA | 36 | 40.0 | 44.2 | 1 | 58.1 | 10.3 | 5 | CP |
| SMBJ40C | 40 | 44.4 | 54.3 | 1 | 71.4 | 8.4 | 5 | CQ |
| SMBJ40CA | 40 | 44.4 | 49.1 | 1 | 64.5 | 9.3 | 5 | CR |
| SMBJ43C | 43 | 47.8 | 58.4 | 1 | 76.7 | 7.8 | 5 | CS |
| SMBJ43CA | 43 | 47.8 | 52.8 | 1 | 69.4 | 8.6 | 5 | CT |
| SMBJ45C | 45 | 50.0 | 61.1 | 1 | 80.3 | 7.5 | 5 | CU |
| SMBJ45CA | 45 | 50.0 | 55.3 | 1 | 72.7 | 8.3 | 5 | CV |
| SMBJ48C | 48 | 53.3 | 65.1 | 1 | 85.5 | 7.0 | 5 | CW |
| SMBJ48CA | 48 | 53.3 | 58.9 | 1 | 77.4 | 7.7 | 5 | CX |
| SMBJ51C | 51 | 56.7 | 69.3 | 1 | 91.1 | 6.6 | 5 | CY |
| SMBJ51CA | 51 | 56.7 | 62.7 | 1 | 82.4 | 7.3 | 5 | CZ |
| SMBJ54C | 54 | 60.0 | 73.3 | 1 | 96.3 | 6.2 | 5 | DD |
| SMBJ54CA | 54 | 60.0 | 66.3 | 1 | 87.1 | 6.9 | 5 | DE |
| SMBJ58C | 58 | 64.4 | 78.7 | 1 | 103 | 5.8 | 5 | DF |
| SMBJ58CA | 58 | 64.4 | 71.2 | 1 | 93.6 | 6.4 | 5 | DG |
| SMBJ60C | 60 | 66.7 | 81.5 | 1 | 107 | 5.6 | 5 | DH |
| SMBJ60CA | 60 | 66.7 | 73.7 | 1 | 96.8 | 6.2 | 5 | DK |
| SMBJ64C | 64 | 71.1 | 86.9 | 1 | 114 | 5.3 | 5 | DL |
| SMBJ64CA | 64 | 71.1 | 78.6 | 1 | 103 | 5.8 | 5 | DM |
| SMBJ70C | 70 | 77.8 | 95.1 | 1 | 125 | 4.8 | 5 | DN |
| SMBJ70CA | 70 | 77.8 | 86.0 | 1 | 113 | 5.3 | 5 | DP |
| SMBJ75C | 75 | 83.3 | 102 | 1 | 134 | 4.5 | 5 | DQ |
| SMBJ75CA | 75 | 83.3 | 92.1 | 1 | 121 | 4.9 | 5 | DR |
| SMBJ78C | 78 | 86.7 | 106 | 1 | 139 | 4.3 | 5 | DS |
| SMBJ78CA | 78 | 86.7 | 95.8 | 1 | 126 | 4.7 | 5 | DT |
| SMBJ85C | 85 | 94.4 | 115 | 1 | 151 | 3.9 | 5 | DU |
| SMBJ85CA | 85 | 94.4 | 104 | 1 | 137 | 4.4 | 5 | DV |
| SMBJ90C | 90 | 100 | 122 | 1 | 160 | 3.8 | 5 | DW |
| SMBJ90CA | 90 | 100 | 111 | 1 | 146 | 4.1 | 5 | DX |
| SMBJ100C | 100 | 111 | 136 | 1 | 179 | 3.4 | 5 | DY |
| SMBJ100CA | 100 | 111 | 123 | 1 | 162 | 3.7 | 5 | DZ |
| SMBJ110C | 110 | 122 | 149 | 1 | 196 | 3.0 | 5 | ED |
| SMBJ110CA | 110 | 122 | 135 | 1 | 177 | 3.4 | 5 | EE |
| SMBJ120C | 120 | 133 | 163 | 1 | 214 | 2.8 | 5 | EF |
| SMBJ120CA | 120 | 133 | 147 | 1 | 193 | 3.1 | 5 | EG |

# SMBJ5.0C(A) THRU SMBJ440C(A)

## ELECTRICAL CHARACTERISTICS @25°C

| MCC PART NUMBER | REVERSE STAND-OFF VOLTAGE $V_{WM}$ | BREAKDOWN VOLTAGE $V_{(BR)}$ @ $I_T$ (VOLTS) | | | MAXIMUM CLAMPING VOLTAGE @ $I_{PP}$ | PEAK PULSE CURRENT $I_{PP}$ | MAXIMUM REVERSE LEAKAGE @$V_{WM}$ $I_D$ | MARKING CODE |
|---|---|---|---|---|---|---|---|---|
| | (VOLTS) | MIN | MAX | $I_T$ (mA) | (VOLTS) | (AMPS) | (µA) | |
| SMBJ130C | 130 | 144 | 176 | 1 | 231 | 2.6 | 5 | EH |
| SMBJ130CA | 130 | 144 | 159 | 1 | 209 | 2.9 | 5 | EK |
| SMBJ150C | 150 | 167 | 204 | 1 | 268 | 2.2 | 5 | EL |
| SMBJ150CA | 150 | 167 | 185 | 1 | 243 | 2.5 | 5 | EM |
| SMBJ160C | 160 | 178 | 218 | 1 | 287 | 2.1 | 5 | EN |
| SMBJ160CA | 160 | 178 | 197 | 1 | 259 | 2.3 | 5 | EP |
| SMBJ170C | 170 | 189 | 231 | 1 | 304 | 2.0 | 5 | EQ |
| SMBJ170CA | 170 | 189 | 209 | 1 | 275 | 2.2 | 5 | ER |
| SMBJ180CA | 180 | 201 | 222 | 1 | 292 | 2.1 | 5 | ET |
| SMBJ200CA | 200 | 224 | 247 | 1 | 324 | 1.9 | 5 | EV |
| SMBJ220CA | 220 | 246 | 272 | 1 | 356 | 1.7 | 5 | EX |
| SMBJ250CA | 250 | 279 | 309 | 1 | 405 | 1.5 | 5 | EZ |
| SMBJ300CA | 300 | 335 | 371 | 1 | 486 | 1.3 | 5 | FE |
| SMBJ350CA | 350 | 391 | 432 | 1 | 567 | 1.1 | 5 | FG |
| SMBJ400CA | 400 | 447 | 494 | 1 | 648 | 0.9 | 5 | FK |
| SMBJ440CA | 440 | 492 | 543 | 1 | 713 | 0.9 | 5 | FM |

Micro Commercial Components

## Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

| ***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. |
| ***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. |

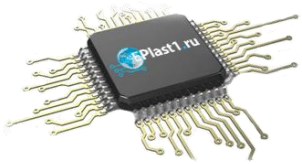
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

**Телефон:** 8 (812) 309 58 32 (многоканальный)
**Факс:** 8 (812) 320-02-42
**Электронная почта:** org@eplast1.ru
**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.