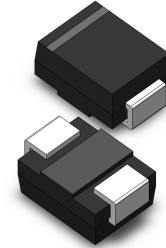


VOLTAGE RANGE: 5.0 - 40V
POWER: 800Watts

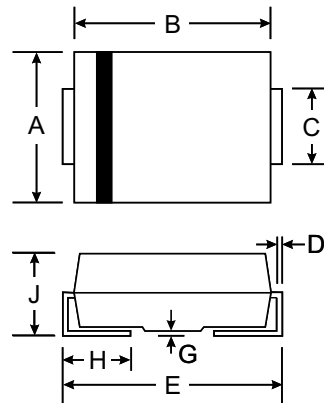
Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Available in uni-directional and bi-directional
- Excellent clamping capability
- Very fast response time
- Low incremental surge resistance



Mechanical Data

- Case: DO-214AA(SMB), Transfer Molded Epoxy
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity Indicator: Cathode Band
(Note: Bi-directional devices have no polarity indicator.)
- Weight: 0.1 grams (approx.)



| SMB(DO-214AA) | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 3.30 | 3.94 |
| B | 4.06 | 4.70 |
| C | 1.91 | 2.21 |
| D | 0.15 | 0.31 |
| E | 5.00 | 5.59 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.00 | 2.62 |
| All Dimensions in mm | | |

Maximum Ratings @ T_A = 25°C unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|---|-----------------------------------|----------------|------|
| Peak pulse power dissipation with a 10/1000 μs | P _{PPM} | 800 | W |
| Peak pulse current with a 10/1000 μs waveform ⁽¹⁾ | I _{PPM} | See next table | A |
| Peak forward surge current 8.3 ms single half sine-wave uni-directional only ⁽²⁾ | I _{FSM} | 100 | A |
| Operating junction and storage temperature range | T _J , T _{STG} | - 55 to + 150 | °C |

(1) Non-repetitive current pulse, per Fig. 3 and derated above T_A = 25 °C per Fig. 2

(2) Mounted on 0.2 x 0.2" (5.0 x 5.0 mm) copper pads to each terminal

| TYPE | | Breakdown Voltage Min. @I _T | Breakdown Voltage Max. @ I _T | Test Current | Reverse Stand-Off Voltage | Reverse Leakage @V _{RWM} | Peak Pulse Current | Maximum Clamping Voltage @I _{PP} |
|-----------|------------|--|---|---------------------|---------------------------|-----------------------------------|---------------------|---|
| (Uni) | (Bi) | V _{BR MIN} (V) | V _{BR MAX} (V) | I _T (mA) | V _{RWM} (V) | I _R (uA) | I _{PP} (A) | V _C (V) |
| SMB8J5.0 | SMB8J5.0C | 6.40 | 7.82 | 10 | 5.0 | 2000 | 83.3 | 9.6 |
| SMB8J5.0A | SMB8J5.0CA | 6.40 | 7.25 | 10 | 5.0 | 2000 | 87.0 | 9.2 |
| SMB8J6.0 | SMB8J6.0C | 6.67 | 8.15 | 10 | 6.0 | 2000 | 70.2 | 11.4 |
| SMB8J6.0A | SMB8J6.0CA | 6.67 | 7.37 | 10 | 6.0 | 2000 | 77.7 | 10.3 |
| SMB8J6.5 | SMB8J6.5C | 7.22 | 8.82 | 10 | 6.5 | 1000 | 65.0 | 12.3 |
| SMB8J6.5A | SMB8J6.5CA | 7.22 | 7.98 | 10 | 6.5 | 1000 | 71.4 | 11.2 |
| SMB8J7.0 | SMB8J7.0C | 7.78 | 9.51 | 10 | 7.0 | 400 | 60.2 | 13.3 |
| SMB8J7.0A | SMB8J7.0CA | 7.78 | 8.60 | 10 | 7.0 | 400 | 66.7 | 12.0 |
| SMB8J7.5 | SMB8J7.5C | 8.33 | 10.2 | 1.0 | 7.5 | 200 | 55.9 | 14.3 |
| SMB8J7.5A | SMB8J7.5CA | 8.33 | 9.21 | 1.0 | 7.5 | 200 | 62.0 | 12.9 |
| SMB8J8.0 | SMB8J8.0C | 8.89 | 10.9 | 1.0 | 8.0 | 100 | 53.3 | 15.0 |
| SMB8J8.0A | SMB8J8.0CA | 8.89 | 9.83 | 1.0 | 8.0 | 100 | 58.8 | 13.6 |
| SMB8J8.5 | SMB8J8.5C | 9.44 | 11.5 | 1.0 | 8.5 | 40 | 50.3 | 15.9 |
| SMB8J8.5A | SMB8J8.5CA | 9.44 | 10.4 | 1.0 | 8.5 | 40 | 55.6 | 14.4 |
| SMB8J9.0 | SMB8J9.0C | 10.0 | 12.2 | 1.0 | 9.0 | 20 | 47.3 | 16.9 |
| SMB8J9.0A | SMB8J9.0CA | 10.0 | 11.1 | 1.0 | 9.0 | 20 | 51.9 | 15.4 |
| SMB8J10 | SMB8J10C | 11.1 | 13.6 | 1.0 | 10 | 10 | 42.6 | 18.8 |
| SMB8J10A | SMB8J10CA | 11.1 | 12.3 | 1.0 | 10 | 10 | 47.1 | 17.0 |
| SMB8J11 | SMB8J11C | 12.2 | 14.9 | 1.0 | 11 | 5.0 | 39.8 | 20.1 |
| SMB8J11A | SMB8J11CA | 12.2 | 13.5 | 1.0 | 11 | 5.0 | 44.0 | 18.2 |
| SMB8J12 | SMB8J12C | 13.3 | 16.3 | 1.0 | 12 | 5.0 | 36.4 | 22.0 |
| SMB8J12A | SMB8J12CA | 13.3 | 14.7 | 1.0 | 12 | 5.0 | 40.2 | 19.9 |
| SMB8J13 | SMB8J13C | 14.4 | 17.6 | 1.0 | 13 | 1.0 | 33.6 | 23.8 |
| SMB8J13A | SMB8J13CA | 14.4 | 15.9 | 1.0 | 13 | 1.0 | 37.2 | 21.5 |
| SMB8J14 | SMB8J14C | 15.6 | 19.1 | 1.0 | 14 | 1.0 | 31.0 | 25.8 |
| SMB8J14A | SMB8J14CA | 15.6 | 17.2 | 1.0 | 14 | 1.0 | 34.5 | 23.2 |
| SMB8J15 | SMB8J15C | 16.7 | 20.4 | 1.0 | 15 | 1.0 | 29.7 | 26.9 |
| SMB8J15A | SMB8J15CA | 16.7 | 18.5 | 1.0 | 15 | 1.0 | 32.8 | 24.4 |
| SMB8J16 | SMB8J16C | 17.8 | 21.8 | 1.0 | 16 | 1.0 | 27.8 | 28.8 |
| SMB8J16A | SMB8J16CA | 17.8 | 19.7 | 1.0 | 16 | 1.0 | 30.8 | 26.0 |
| SMB8J17 | SMB8J17C | 18.9 | 23.1 | 1.0 | 17 | 1.0 | 26.2 | 30.5 |
| SMB8J17A | SMB8J17CA | 18.9 | 20.9 | 1.0 | 17 | 1.0 | 29.0 | 27.6 |
| SMB8J18 | SMB8J18C | 20.0 | 24.4 | 1.0 | 18 | 1.0 | 24.8 | 32.2 |
| SMB8J18A | SMB8J18CA | 20.0 | 22.1 | 1.0 | 18 | 1.0 | 27.4 | 29.2 |
| SMB8J20 | SMB8J20C | 22.2 | 27.1 | 1.0 | 20 | 1.0 | 22.3 | 35.8 |
| SMB8J20A | SMB8J20CA | 22.2 | 24.5 | 1.0 | 20 | 1.0 | 24.7 | 32.4 |
| SMB8J22 | SMB8J22C | 24.4 | 29.8 | 1.0 | 22 | 1.0 | 20.3 | 39.4 |
| SMB8J22A | SMB8J22CA | 24.4 | 26.9 | 1.0 | 22 | 1.0 | 22.5 | 35.5 |
| SMB8J24 | SMB8J24C | 26.7 | 32.6 | 1.0 | 24 | 1.0 | 18.6 | 43.0 |
| SMB8J24A | SMB8J24CA | 26.7 | 29.5 | 1.0 | 24 | 1.0 | 20.6 | 38.9 |
| SMB8J26 | SMB8J26C | 28.9 | 35.3 | 1.0 | 26 | 1.0 | 17.2 | 46.6 |
| SMB8J26A | SMB8J26CA | 28.9 | 31.9 | 1.0 | 26 | 1.0 | 19.0 | 42.1 |
| SMB8J28 | SMB8J28C | 31.1 | 38.0 | 1.0 | 28 | 1.0 | 16.0 | 50.0 |
| SMB8J28A | SMB8J28CA | 31.1 | 34.4 | 1.0 | 28 | 1.0 | 17.6 | 45.4 |
| SMB8J30 | SMB8J30C | 33.3 | 40.7 | 1.0 | 30 | 1.0 | 15.0 | 53.5 |
| SMB8J30A | SMB8J30CA | 33.3 | 36.8 | 1.0 | 30 | 1.0 | 16.5 | 48.4 |
| SMB8J33 | SMB8J33C | 36.7 | 44.9 | 1.0 | 33 | 1.0 | 13.6 | 59.0 |
| SMB8J33A | SMB8J33CA | 36.7 | 40.6 | 1.0 | 33 | 1.0 | 15.0 | 53.3 |
| SMB8J36 | SMB8J36C | 40.0 | 48.9 | 1.0 | 36 | 1.0 | 12.4 | 64.3 |
| SMB8J36A | SMB8J36CA | 40.0 | 44.2 | 1.0 | 36 | 1.0 | 13.8 | 58.1 |
| SMB8J40 | SMB8J40C | 44.4 | 54.3 | 1.0 | 40 | 1.0 | 11.2 | 71.4 |
| SMB8J40A | SMB8J40CA | 44.4 | 49.1 | 1.0 | 40 | 1.0 | 12.4 | 64.5 |

Notes:

 (1) Pulse test: $t_p \leq 50$ ms