

Power Schottky Rectifier - 5Amp 40~200Volt

Features

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed
- High reliability
- High surge current capability
- Epitaxial construction
- Lead free device
- Halogen-Free

Mechanical data

- Case : Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Terminals : Solder plated, solderable per MIL-STD-750,method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce 0.0955 grams

Maximum ratings and Electrical characteristics

| Parameters | SBR54 | SBR56 | SBR510 | SBR515 | SBR520 | UNIT |
|--|-------------|-------|-------------|--------|--------|------|
| Marking Code | SS54 | SS56 | S510 | S515 | S520 | |
| Maximum Recurrent Peak Reverse Voltage | 40 | 60 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | 28 | 42 | 70 | 105 | 140 | V |
| Maximum DC Blocking Voltage | 40 | 60 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current | 5 | | | | | A |
| Peak Forward Surge Current | 100 | | | | | A |
| Maximum Instantaneous Forward Voltage at 5A | Tc = 25°C | 0.55 | 0.70 | 0.85 | 0.88 | V |
| | Tc = 125°C | 0.50 | 0.60 | 0.66 | 0.69 | |
| Maximum Average Reverse Current at Rated DC Blocking Voltage | Tc = 25°C | 0.5 | | 0.05 | | mA |
| | Tc = 100°C | 20 | | 10 | | |
| Typical Junction Capacitance | 250 | | | | | pF |
| Typical Thermal Resistance R _{θJL} (Note 1) | 18 | | | | | °C/W |
| Operating and Storage Temperature Range | -50 to +125 | | -50 to +150 | | | °C |

Note : 1. Mounted on P.C.B with copper pad size 14mm x 14mm

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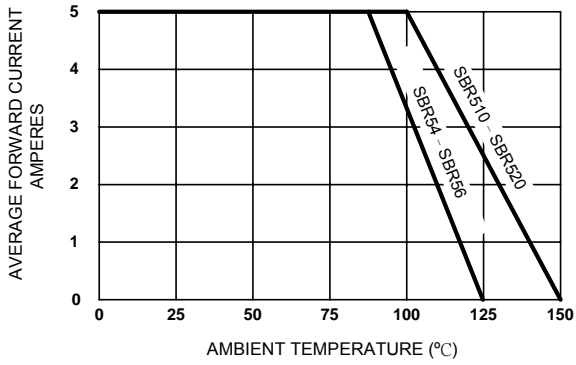


Figure 1. Forward Current Derating Curve

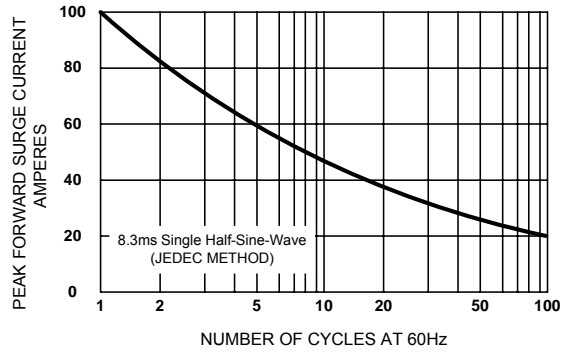


Figure 2. Maximum Non-repetitive Surge Current

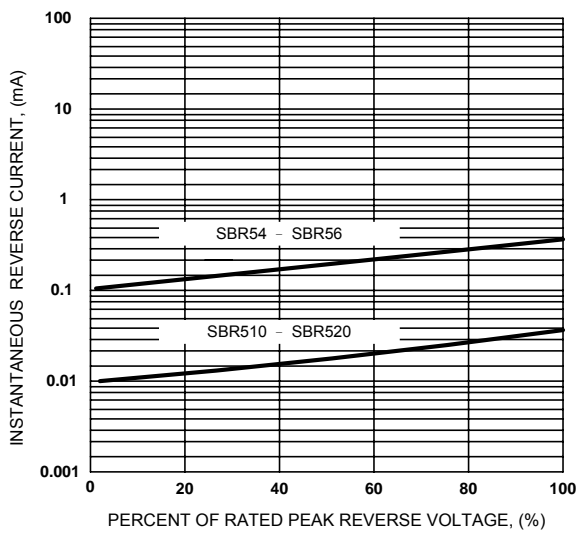


Figure 3. Typical Reverse Characteristics

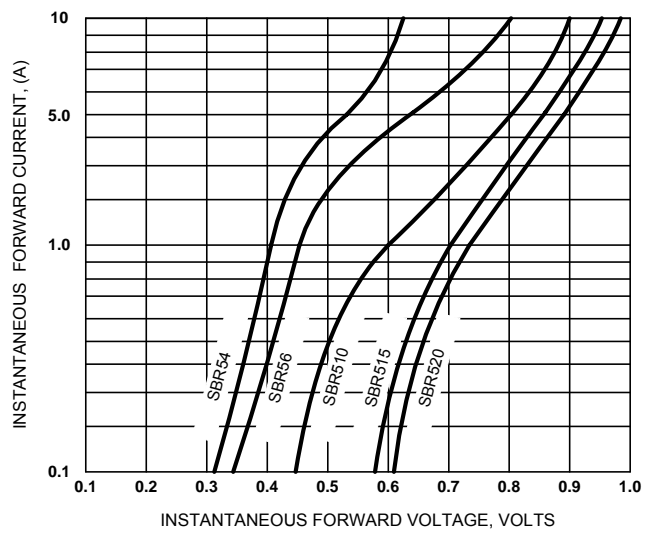


Figure 4. Typical Forward Characteristics

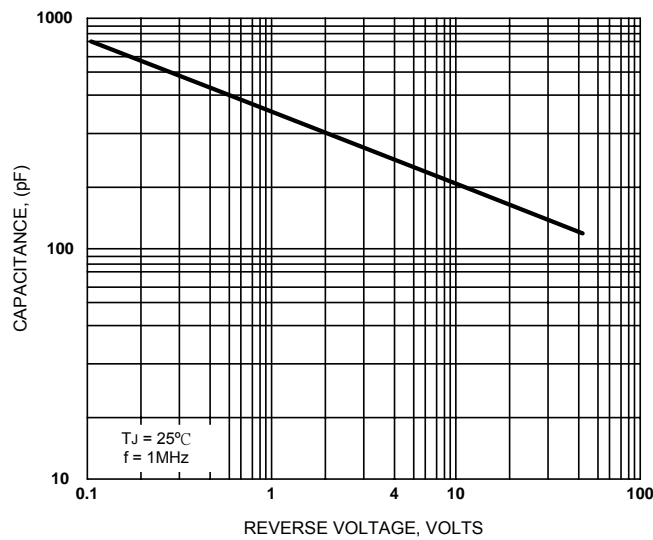
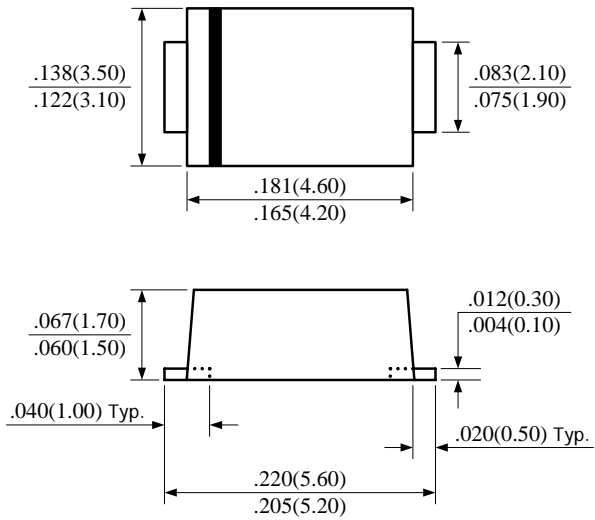


Figure 5. Typical Junction Capacitance

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SMB - F

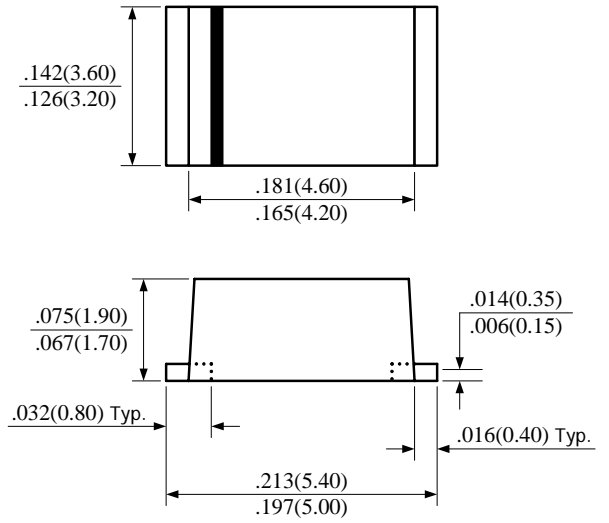


UNIT : inch(mm)



SBR54~SBR520

SMB - FW



UNIT : inch(mm)



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