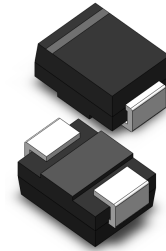


**VOLTAGE RANGE: 20 - 100V**  
**CURRENT: 5.0 A**

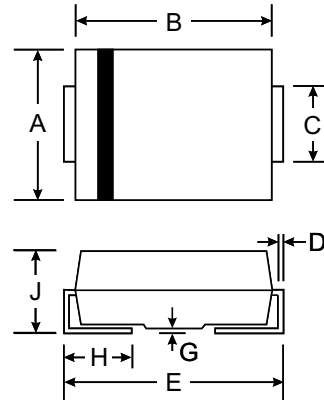


### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 175A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

### Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 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 and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

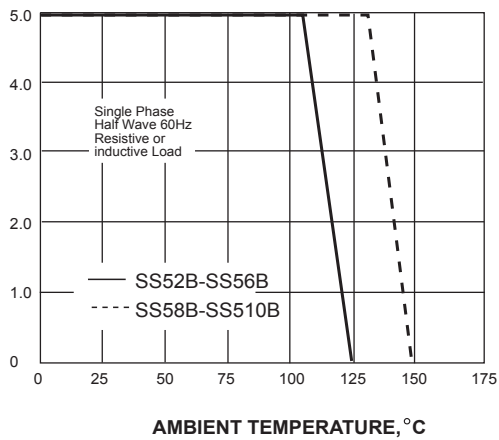
| Characteristic                                                                                                  | Symbol            | SS52B       | SS53B | SS54B | SS55B | SS56B | SS58B       | SS510B | Unit |
|-----------------------------------------------------------------------------------------------------------------|-------------------|-------------|-------|-------|-------|-------|-------------|--------|------|
| Maximum repetitive peak reverse voltage                                                                         | V <sub>RRM</sub>  | 20          | 30    | 40    | 50    | 60    | 80          | 100    | V    |
| Maximum RMS voltage                                                                                             | V <sub>RMS</sub>  | 14          | 21    | 28    | 35    | 42    | 56          | 70     | V    |
| Maximum DC blocking voltage                                                                                     | V <sub>DC</sub>   | 20          | 30    | 40    | 50    | 60    | 80          | 100    | V    |
| Maximum average forward rectified current at T <sub>L</sub> (see fig.1)                                         | I <sub>(AV)</sub> | 5.0         |       |       |       |       |             |        | A    |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method)             | I <sub>FSM</sub>  | 150.0       |       |       |       |       |             |        | A    |
| Maximum instantaneous forward voltage at 5.0A                                                                   | V <sub>F</sub>    | 0.55        |       |       | 0.70  |       | 0.85        |        | V    |
| Maximum DC reverse current      T <sub>A</sub> =25°C<br>at rated DC blocking voltage      T <sub>A</sub> =100°C | I <sub>R</sub>    | 0.5         |       |       |       |       |             | 10     | mA   |
|                                                                                                                 |                   | 20          |       |       |       |       |             |        |      |
| Typical junction capacitance (NOTE 1)                                                                           | C <sub>J</sub>    | 200         |       |       |       |       |             |        | pF   |
| Typical thermal resistance (NOTE 2)                                                                             | R <sub>θJA</sub>  | 50.0        |       |       |       |       |             |        | °C/W |
| Operating junction temperature range                                                                            | T <sub>J</sub> ,  | -65 to +125 |       |       |       |       | -65 to +150 |        | °C   |
| Storage temperature range                                                                                       | T <sub>STG</sub>  | -65 to +150 |       |       |       |       |             |        | °C   |

**Note:**1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES SS52B THRU SS510B

AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT,  
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

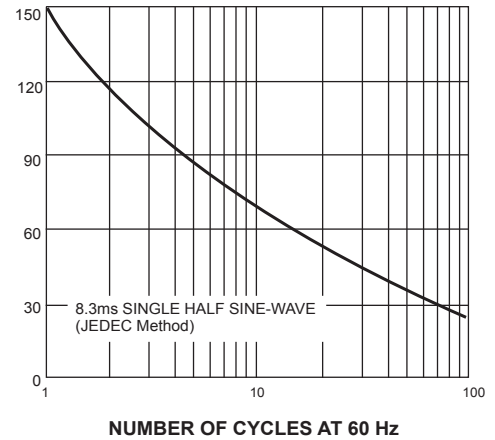


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

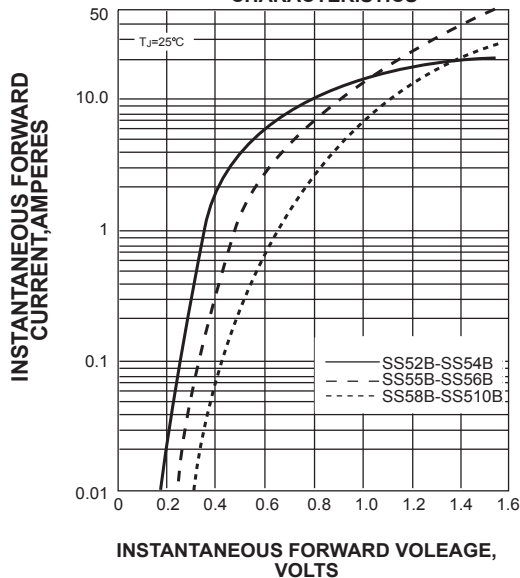


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

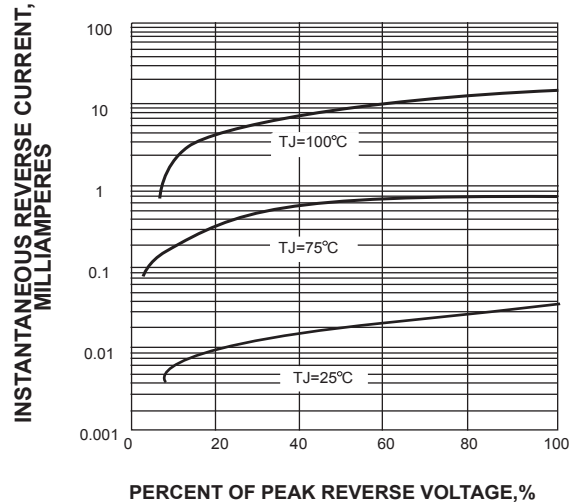
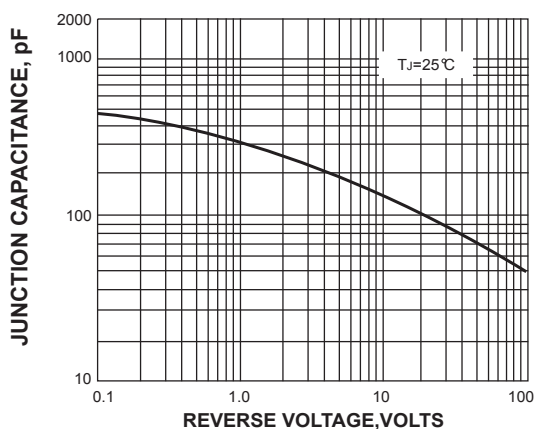
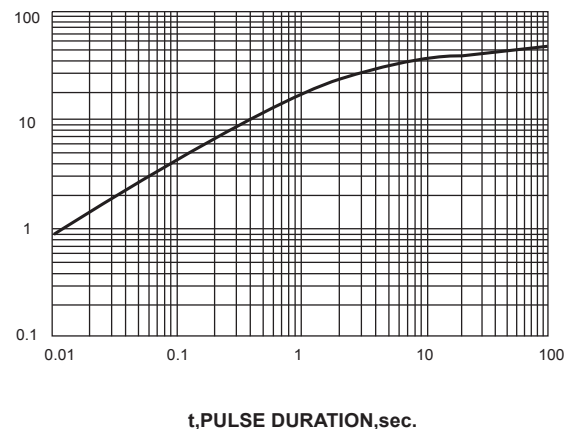


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,  
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



单击下面可查看定价，库存，交付和生命周期等信息

[>>SUNMATE\(森美特\)](#)