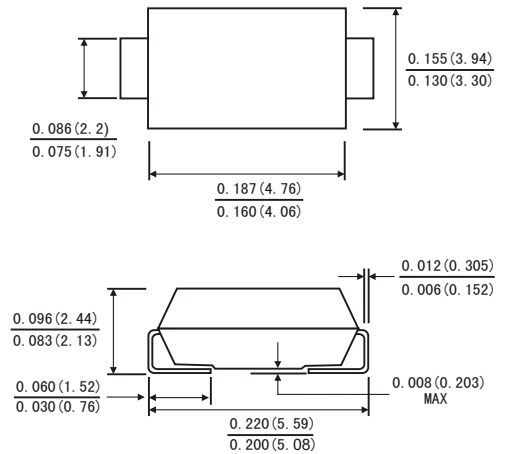


### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Built-in strain relief
- For surface mounted applications
- Low profile package
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling , and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



### SMB(DO-214AA)



Dimensions in inches and (millimeters)

### MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.003ounce,0.093 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

|  | V <sub>RRM</sub>                     | SS 22B       | SS 23B | SS 24B | SS 25B | SS 26B | SS 28B | SS 210B | SS 215B | SS 220B | Volts |
|--|--------------------------------------|--------------|--------|--------|--------|--------|--------|---------|---------|---------|-------|
| Maximum repetitive peak reverse voltage  | V <sub>RRM</sub>                     | 20           | 30     | 40     | 50     | 60     | 80     | 100     | 150     | 200     | Volts |
| Maximum RMS voltage  | V <sub>RMS</sub>                     | 14           | 21     | 28     | 35     | 42     | 57     | 71      | 105     | 140     | Volts |
| Maximum DC blocking voltage  | V <sub>DC</sub>                      | 20           | 30     | 40     | 50     | 60     | 80     | 100     | 150     | 200     | Volts |
| Maximum average forward rectified current (See Fig. 1)   | I <sub>(AV)</sub>                    | 2.0          |        |        |        |        |        |         |         |         | Amps  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                     | 50.0         |        |        |        |        |        |         |         |         | Amps  |
| Maximum instantaneous forward voltage at 2.0 A(note 1)   | V <sub>F</sub>                       | 0.55         |        | 0.75   |        | 0.85   |        | 0.90    |         | 0.95    | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)                       | I <sub>R</sub>                       | 0.2          |        |        |        |        |        |         |         |         | mA    |
|  |                                      | 10.0         |        |        |        |        |        |         |         |         |       |
| Typical thermal resistance (Note 2)  | R <sub>θJA</sub><br>R <sub>θJL</sub> | 55.0<br>17.0 |        |        |        |        |        |         |         |         | °C/W  |
| Operating junction temperature range   | T <sub>J</sub>                       | -65 to +150  |        |        |        |        |        |         |         |         | °C    |
| Storage temperature range  | T <sub>STG</sub>                     | -65 to +150  |        |        |        |        |        |         |         |         | °C    |

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2. P.C.B. mounted with 0.2 X 0.2"(5.0 X 5.0mm)copper pad areas

FIG.1-FORWARD CURRENT DERATING CURVE

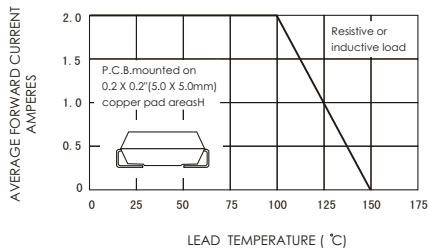


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

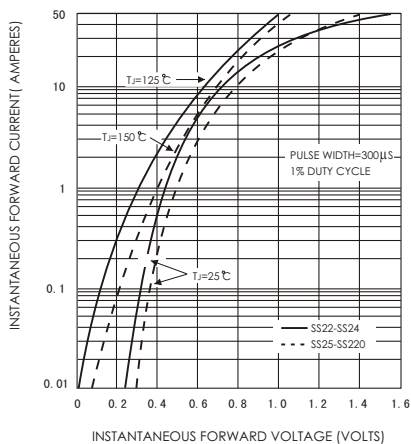


FIG.5-TYPICAL JUNCTION CAPACITANCE

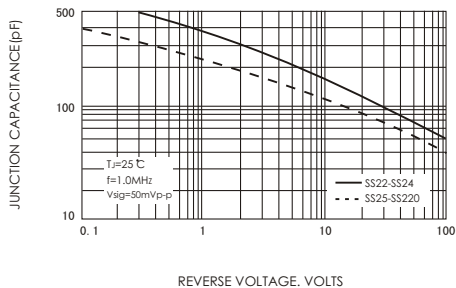


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

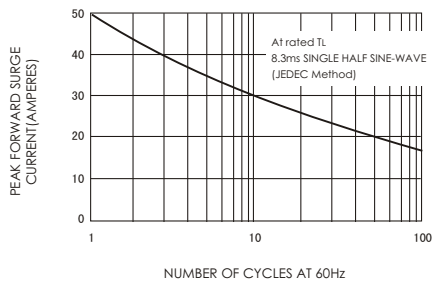


FIG.4-TYPICAL REVERSE CHARACTERISTICS

