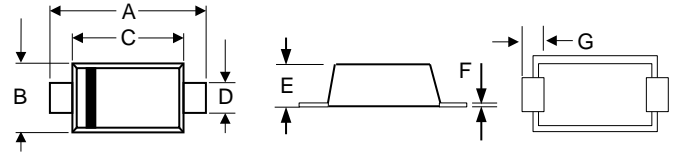


# S2ABF THRU S2MBF

## Surface Mount General Purpose Silicon Rectifiers

### Features

- \* For surface mounted applications
- \* Low profile package
- \* Glass Passivated Chip Junction
- \* Easy to pick and place
- \* High Temp Soldering: 260°C for 10seconds at Terminals



**RoHS**  
COMPLIANT



| SMBF |        |       |      |      |
|------|--------|-------|------|------|
| DIM. | INCHES |       | MM   |      |
|      | MIN    | MAX   | MIN  | MAX  |
| A    | 0.201  | 0.217 | 5.10 | 5.50 |
| B    | 0.138  | 0.146 | 3.5  | 3.7  |
| C    | 0.165  | 0.173 | 4.2  | 4.4  |
| D    | 0.075  | 0.087 | 1.90 | 2.20 |
| E    | 0.043  | 0.051 | 1.10 | 1.30 |
| F    | 0.007  | 0.010 | 0.18 | 0.26 |
| G    | 0.031  | 0.047 | 0.80 | 1.20 |

### Mechanical Data

- \* Case: SMBF Molded plastic
- \* Terminals: Solderable per MIL-STD-750, Method 2026
- \* Polarity: Indicated by cathode band

### Maximum Ratings and Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

| Type Number   | Symbols            | S2ABF       | S2BBF | S2DBF | S2GBF | S2JBF | S2KBF | S2MBF | Unit |
|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|------|
| Maximum Repetitive Peak Reverse Voltage                 | V <sub>RRM</sub>   | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V    |
| Maximum RMS Voltage                                     | V <sub>RMS</sub>   | 35          | 70    | 140   | 280   | 420   | 560   | 700   | V    |
| Maximum D.C Blocking Voltage                            | V <sub>DC</sub>    | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V    |
| Maximum Average Forward Rectified Current               | I <sub>F(AV)</sub> | 2           |       |       |       |       |       |       | A    |
| Peak Forward Surge Current, 8.3ms single half sine-wave | I <sub>FSM</sub>   | 70          |       |       |       |       |       |       | A    |
| Maximum Instantaneous Forward Voltage at 2.0A           | V <sub>F</sub>     | 1.1         |       |       |       |       |       |       | V    |
| Maximum D.C Reverse Current @ T <sub>J</sub> =25°C      | I <sub>R</sub>     | 5           |       |       |       |       |       |       | μA   |
| at Rated D.C Blocking Voltage @ T <sub>J</sub> =125°C   |                    | 100         |       |       |       |       |       |       |      |
| Typical Junction Capacitance (Note1)                    | C <sub>J</sub>     | 25          |       |       |       |       |       |       | pF   |
| Typical Thermal Resistance (Note2)                      | R <sub>θJA</sub>   | 60          |       |       |       |       |       |       | °C/W |
|   | R <sub>θJC</sub>   | 18          |       |       |       |       |       |       |      |
| Operating Junction Temperature Range                    | T <sub>J</sub>     | -55 to +150 |       |       |       |       |       |       | °C   |
| Storage Temperature Range                               | T <sub>STG</sub>   | -55 to +150 |       |       |       |       |       |       | °C   |

Note 1: Measured at 1 MHz and applied reverse voltage of 4 V D.C

Note 2: P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

### Ratings and Characteristic Curves

Fig.1 Forward Current Derating Curve

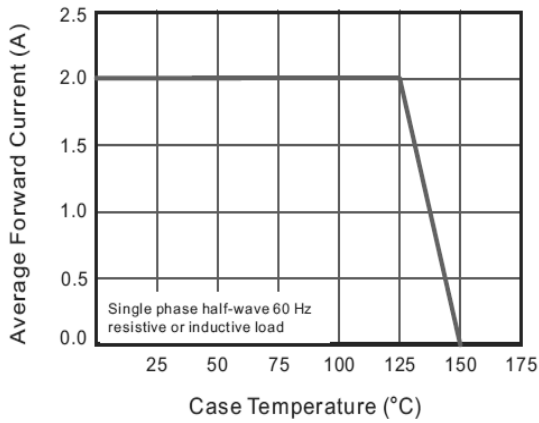


Fig.2 Typical Reverse Characteristics

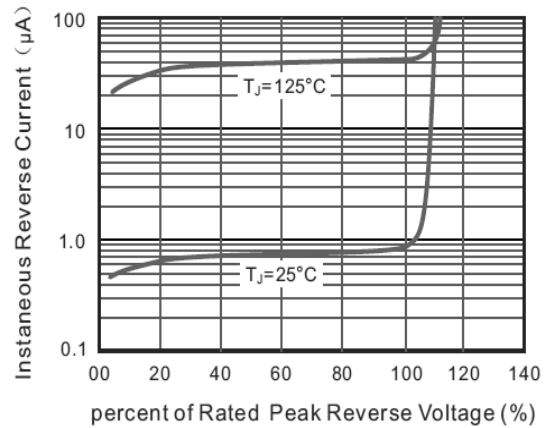


Fig.3 Typical Forward Characteristic

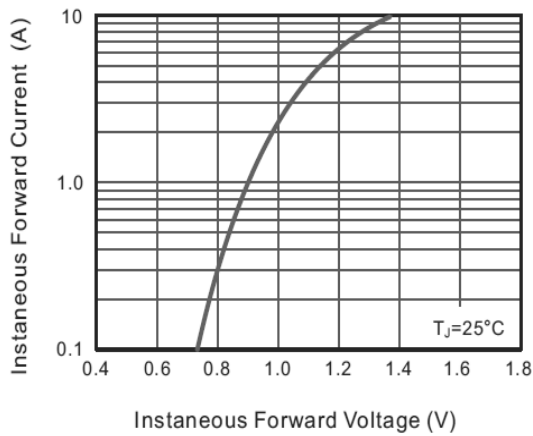


Fig.4 Typical Junction Capacitance

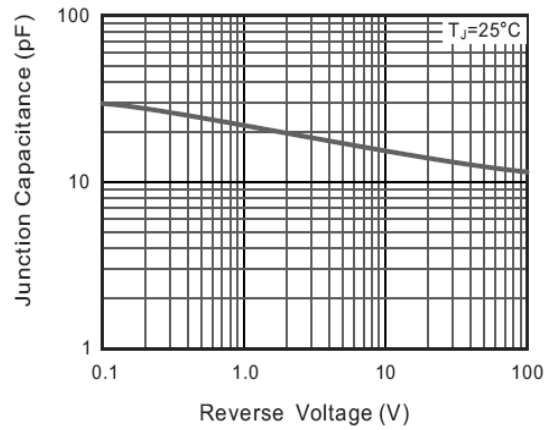
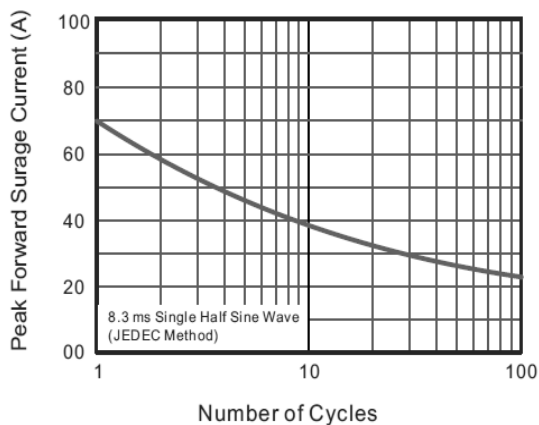


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





## S2ABF THRU S2MBF

*Surface Mount General Purpose Silicon Rectifiers*

### Ordering Information

| Part No.         | Package | Packing Code | Packing      |
|------------------|---------|--------------|--------------|
| S2ABF THRU S2MBF | SMBF    | R50          | 5000pcs/Reel |

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