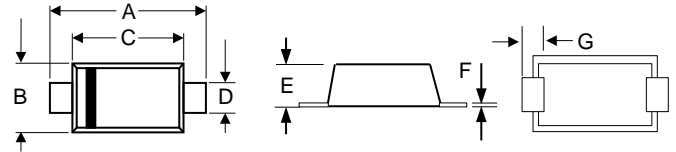


S3ABF THRU S3MBF

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_A=25°C unless otherwise noted)

| Type Number | Symbols | S3ABF | S3BBF | S3DBF | S3GBF | S3JBF | S3KBF | S3MBF | Unit |
|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum D.C Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current | I _{F(AV)} | 3 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms single half sine-wave | I _{FSM} | 100 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 3.0A | V _F | 1.1 | | | | | | | V |
| Maximum D.C Reverse Current @ T _J =25°C | I _R | 5 | | | | | | | μA |
| at Rated D.C Blocking Voltage @ T _J =125°C | | 100 | | | | | | | |
| Typical Junction Capacitance (Note1) | C _J | 35 | | | | | | | pF |
| Typical Thermal Resistance (Note2) | R _{θJA} | 45 | | | | | | | °C/W |
| | R _{θJC} | 15 | | | | | | | |
| Operating Junction Temperature Range | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -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

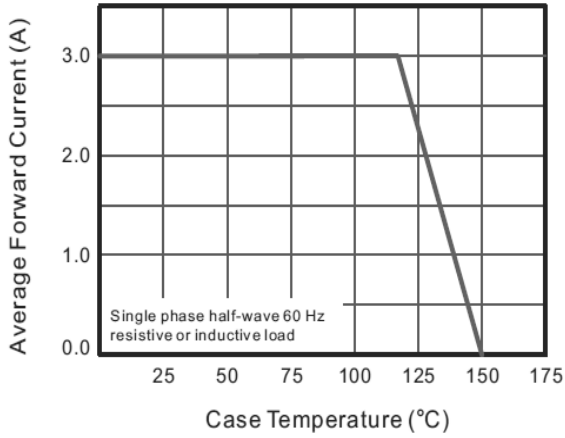


Fig.2 Typical Reverse Characteristics

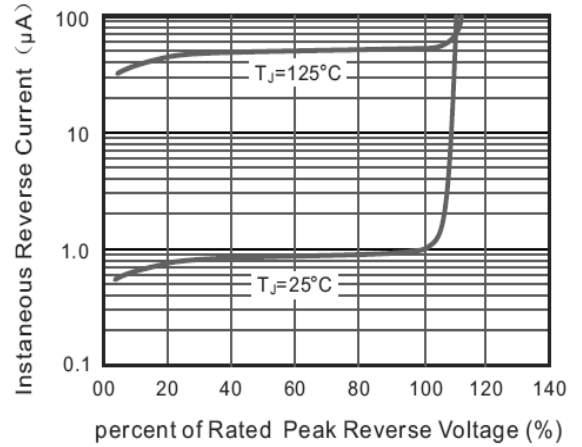


Fig.3 Typical Forward Characteristic

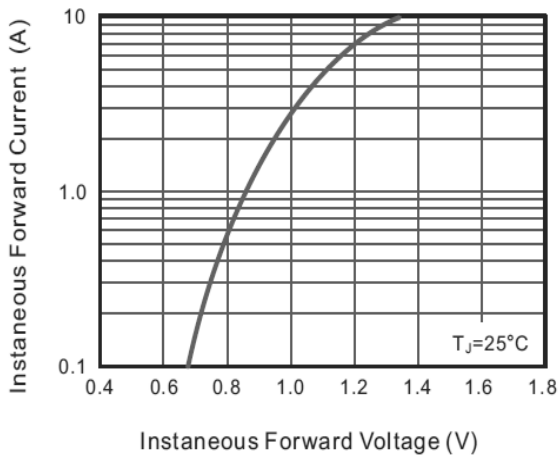


Fig.4 Typical Junction Capacitance

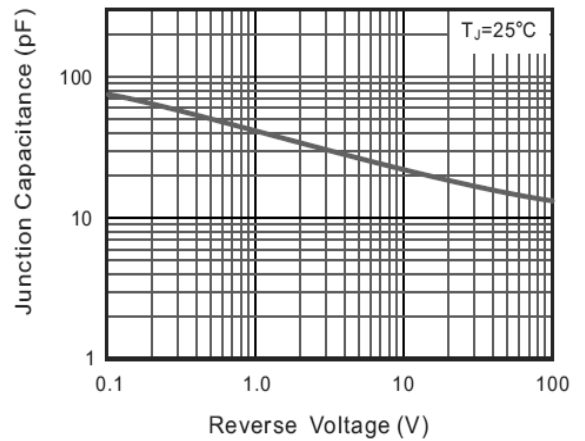
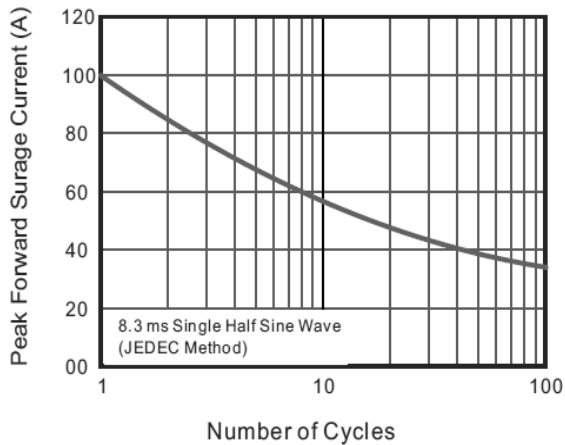


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current





S3ABF THRU S3MBF

Surface Mount General Purpose Silicon Rectifiers

Ordering Information

| Part No. | Package | Packing Code | Packing |
|------------------|---------|--------------|--------------|
| S3ABF THRU S3MBF | SMBF | R50 | 5000pcs/Reel |

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