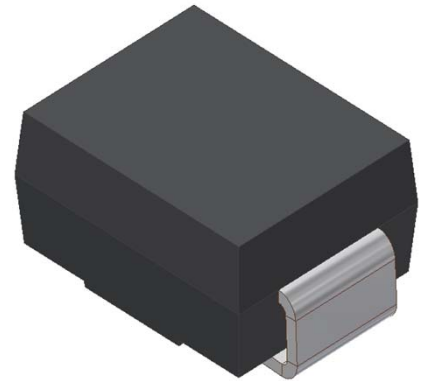


SM560B

Surface Mount Schottky Barrier Rectifiers
Reverse Voltage 60V Forward Current 5.0A

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- Low power loss,high efficiency.
- For use in low voltage high frequency inverters,free wheeling, and polarity protection applications.
- High temperature soldering guaranteed:260°C/10 seconds.
- Weight: 0.088g



2. DEVICE MARKING AND ORDERING INFORMATION

| Device | Marking | Shipping |
|--------|---------|----------------|
| SM560B | S56 | 4000/Tape&Reel |

3. MAXIMUM RATINGS(Ta = 25°C)

| Parameter | 0 | Symbol | Limits | Unit |
|---|---|----------|-----------|------|
| Maximum repetitive peak reverse voltage | | VRRM | 60 | V |
| Maximum RMS voltage | | VRMS | 42 | V |
| Maximum DC blocking voltage | | VDC | 60 | V |
| Maximum average forward rectified current 0.375" (9.5mm) lead length at TC = 75°C | | IF(AV) | 5 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | | IFSM | 120 | A |
| Typical thermal resistance (Note 1) | | RθJA | 160 | °C/W |
| | | RθJC | 50 | |
| Operating junction and storage temperature range | | TJ, TSTG | -50 ~+150 | °C |

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

| Characteristic | Symbol | Min. | Typ. | Max. | Unit |
|---|--------|------|------|------|------|
| Maximum instantaneous forward voltage at 3.0A | VF | - | - | 0.7 | V |
| Maximum DC reverse current TA = 25°C at rated DC blocking voltage TJ = 100°C | IR | - | - | 0.5 | mA |
| | | - | - | 10 | |
| Typical junction capacitance at 4.0V, 1MHz | CJ | - | 380 | - | PF |

1. 8.0mm² (.013mm thick) land areas

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1 - Forward Current Derating Curve

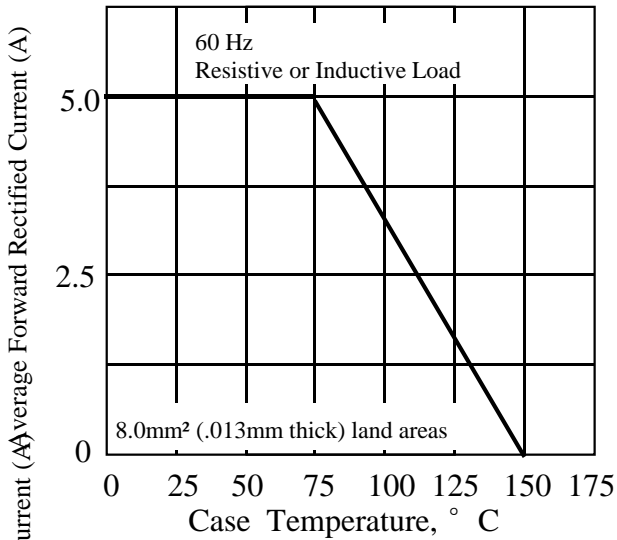


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

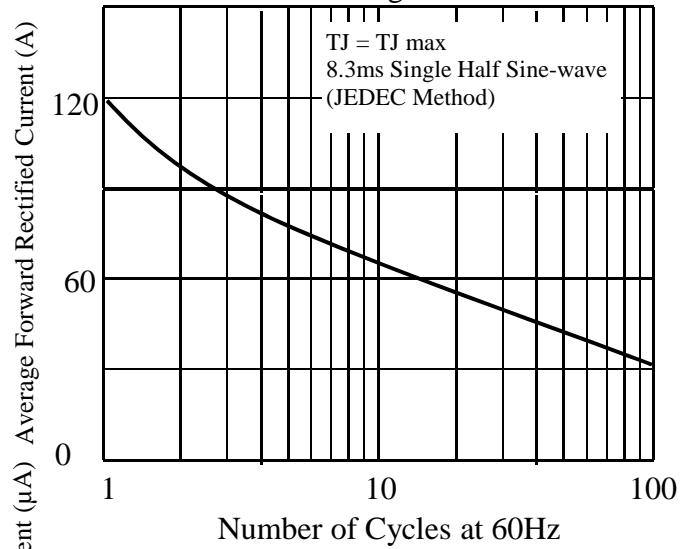


Fig. 3. - Typical Instantaneous Forward Characteristics

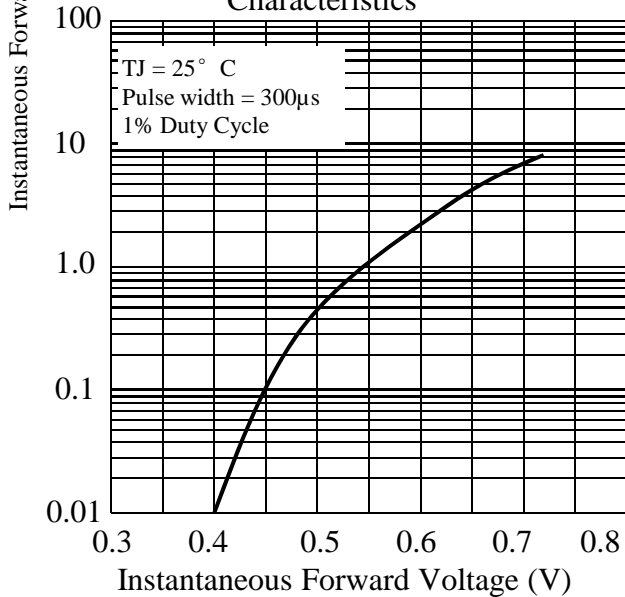


Fig. 4. - Typical Reverse Characteristics

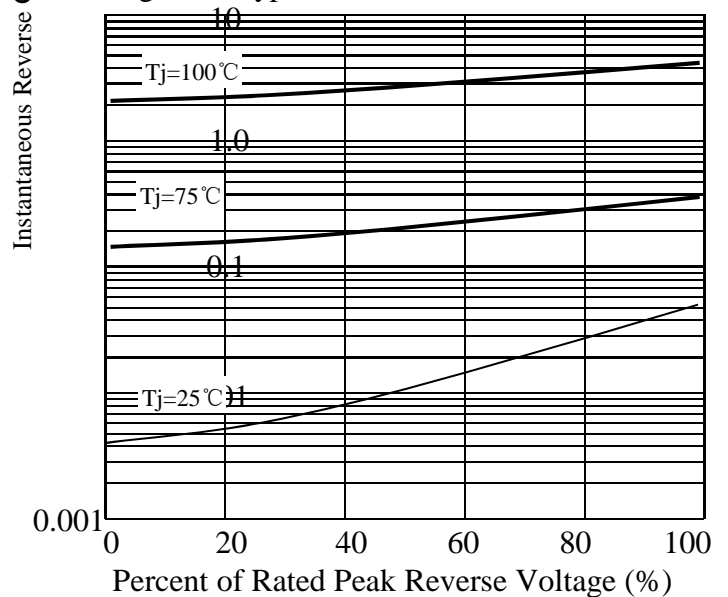
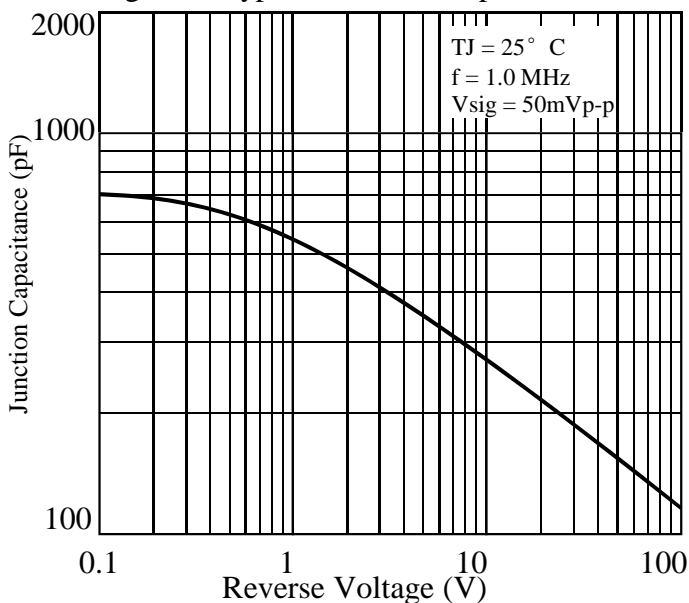
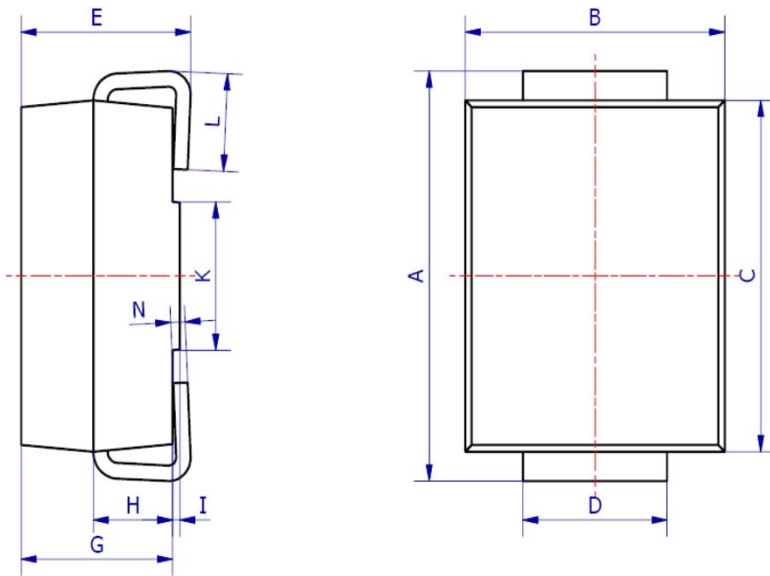


Fig. 5. - Typical Junction Capacitance

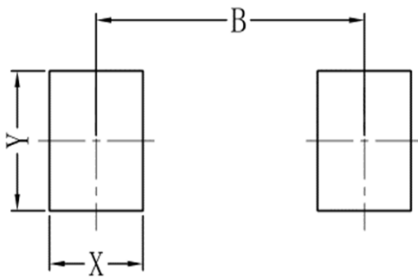


6. OUTLINE AND DIMENSIONS



| SMB | | | |
|----------------------|------|------|------|
| DIM | Min | Max | Typ. |
| A | 5.00 | 5.45 | 5.25 |
| B | 3.20 | 4.00 | 3.60 |
| C | 4.30 | 4.70 | 4.50 |
| D | 1.80 | 2.20 | 2.00 |
| E | 2.20 | 2.50 | 2.35 |
| G | 1.90 | 2.30 | 2.10 |
| H | 0.95 | 1.25 | 1.10 |
| I | 0.05 | 0.15 | 0.10 |
| K | 1.70 | 2.10 | 1.90 |
| L | 0.90 | 1.60 | 1.30 |
| N | 0.10 | 0.30 | 0.20 |
| All Dimensions in mm | | | |

7. SOLDERING FOOTPRINT



| SMB | |
|-----|------|
| DIM | (mm) |
| X | 1.60 |
| Y | 2.20 |
| B | 4.60 |