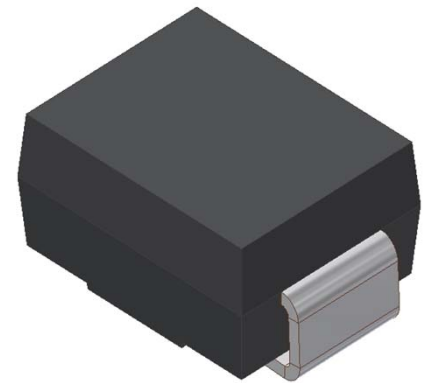


# S-S2MB

Surface Mount Glass Passivated Rectifiers  
Reverse Voltage 1000V Forward Current 2.0A

## 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.
- High temperature metallurgically bonded construction.
- Cavity-free glass passivated junction.
- Capable of meeting environmental standards of MIL-S-19500.
- High temperature soldering guaranteed: 260°C/10 seconds.
- V Weight: 0.088g
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Weight: 0.088g



## 2. DEVICE MARKING AND ORDERING INFORMATION

| Device | Marking | Shipping       |
|--------|---------|----------------|
| S-S2MB | S2M     | 3500/Tape&Reel |

## 3. MAXIMUM RATINGS(Ta = 25°C)

| Parameter                                                                                           | Symbol   | Limits    | Unit |
|-----------------------------------------------------------------------------------------------------|----------|-----------|------|
| Maximum repetitive peak reverse voltage                                                             | VRRM     | 1000      | V    |
| Maximum RMS voltage                                                                                 | VRMS     | 700       | V    |
| Maximum DC blocking voltage                                                                         | VDC      | 1000      | V    |
| Maximum average forward rectified current<br>0.375" (9.5mm) lead length at TC = 75°C                | IF(AV)   | 2         | A    |
| Peak forward surge current 8.3ms single half sine-wave<br>superimposed on rated load (JEDEC Method) | IFSM     | 50        | 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 2.0A                                   | VF     | -    | -    | 1.1      | V    |
| Maximum DC reverse current TA = 25°C<br>at rated DC blocking voltage TJ = 125°C | IR     | -    | -    | 5<br>100 | μA   |
| Typical junction capacitance at 4.0V, 1MHz                                      | CJ     | -    | 15   | -        | PF   |

1. 8.0mm² (.013mm thick) land areas

## 5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1 - Forward Current Derating Curve

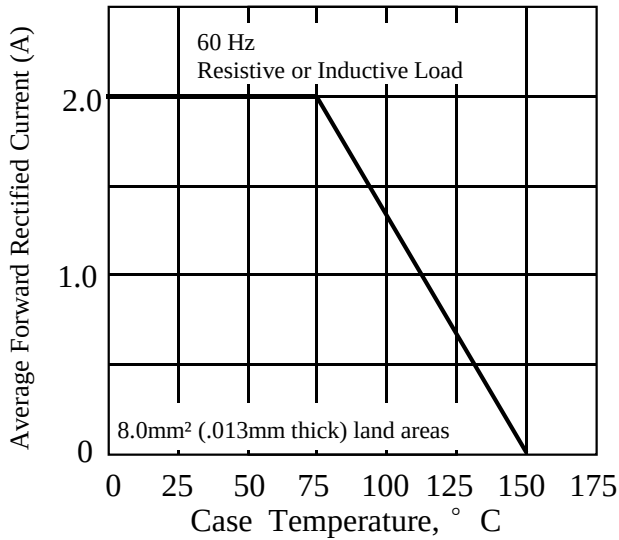


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

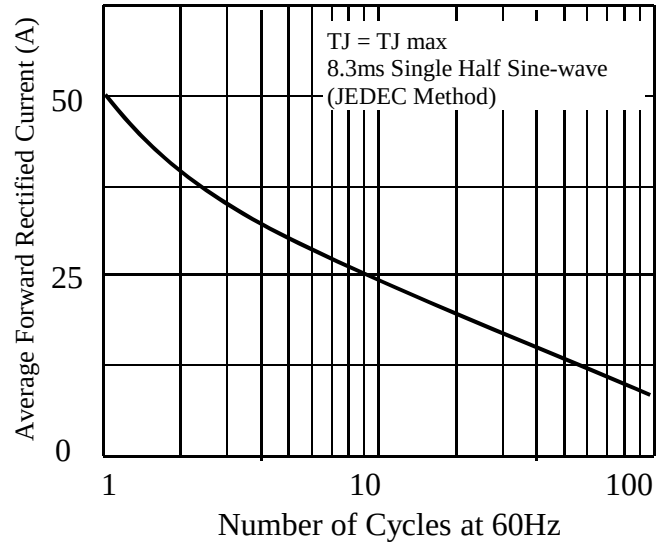


Fig 3. - Typical Instantaneous Forward Characteristics

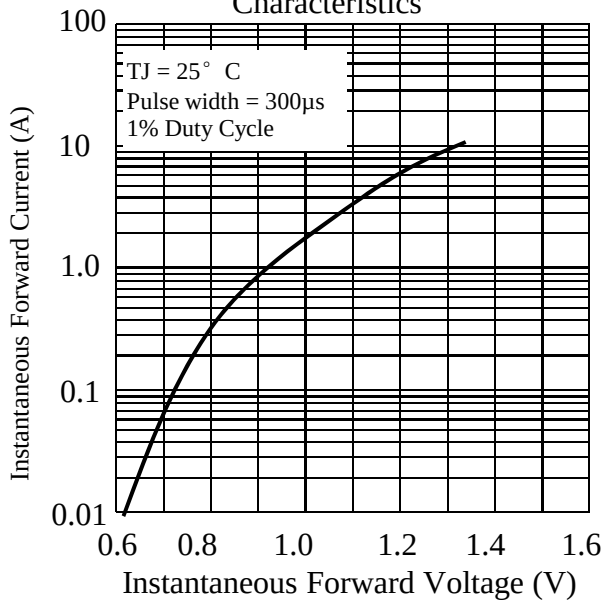


Fig 4. - Typical Reverse Characteristics

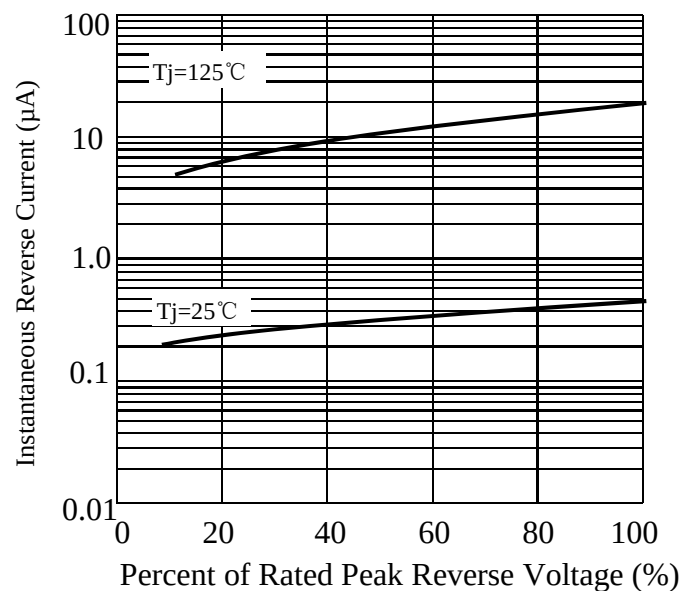
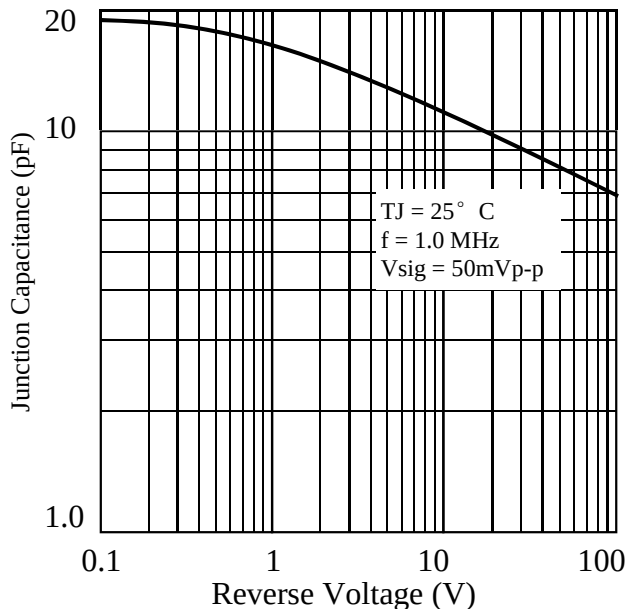
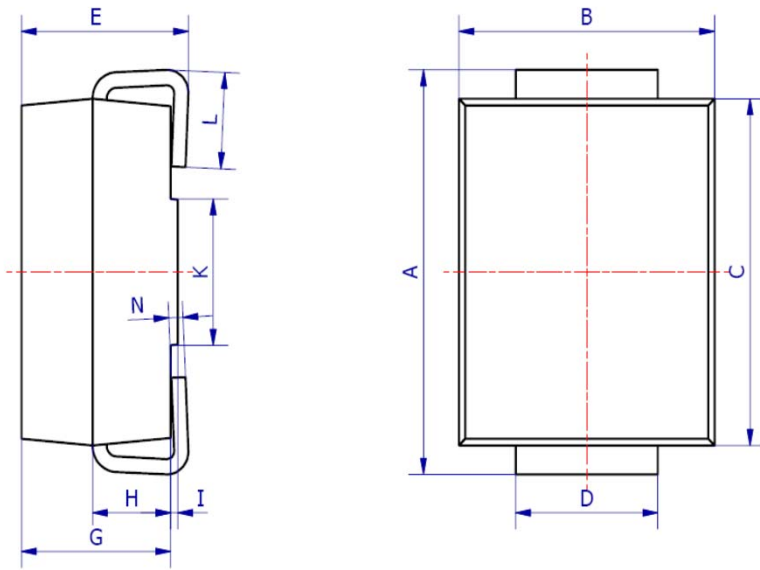


Fig 5. - Typical Junction Capacitance

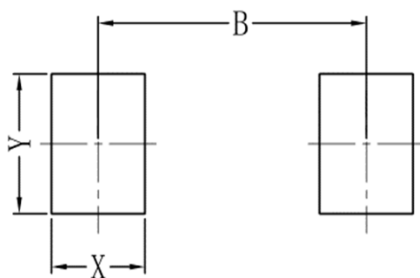


## 6.OUTLINE AND DIMENSIONS



| SMB                  |      |      |      |
|----------------------|------|------|------|
| DIM                  | Min  | Max  | Typ. |
| A                    | 5.20 | 5.45 | 5.25 |
| B                    | 3.20 | 4.00 | 3.60 |
| C                    | 4.30 | 4.60 | 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 | 1.50 | 1.20 |
| 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 |