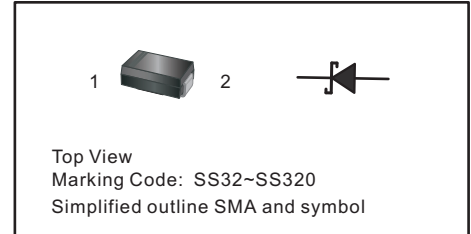


**Surface Mount Schottky Barrier Rectifier**  
**Reverse Voltage - 20 to 200 V**  
**Forward Current - 3.0A**
**PINNING**

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



MBRA340T3G

**Features**

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 60mg / 0.0021oz

**Absolute Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

| Parameter   | Symbols         | SS32       | SS34 | SS34A | SS36 | SS38     | SS310 | SS312 | SS315 | SS320 | Units         |
|---|-----------------|------------|------|-------|------|----------|-------|-------|-------|-------|---------------|
| Maximum Repetitive Peak Reverse Voltage   | $V_{RRM}$       | 20         | 40   | 45    | 60   | 80       | 100   | 120   | 150   | 200   | V             |
| Maximum RMS voltage   | $V_{RMS}$       | 14         | 28   | 31.5  | 42   | 56       | 70    | 84    | 105   | 140   | V             |
| Maximum DC Blocking Voltage   | $V_{DC}$        | 20         | 40   | 45    | 60   | 80       | 100   | 120   | 150   | 200   | V             |
| Maximum Average Forward Rectified Current   | $I_{F(AV)}$     | 3.0        |      |       |      |          |       |       |       |       | A             |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$       | 80         |      |       |      |          |       |       |       |       | A             |
| Max Instantaneous Forward Voltage at 3A   | $V_F$           | 0.55       | 0.70 |       |      | 0.85     |       | 0.95  |       |       | V             |
| Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$   | $I_R$           | 0.5<br>5   |      |       |      | 0.3<br>3 |       |       |       |       | mA            |
| Typical Junction Capacitance <sup>(1)</sup>   | $C_j$           | 450        |      |       |      | 400      |       |       |       |       | pF            |
| Typical Thermal Resistance <sup>(2)</sup>   | $R_{\theta JA}$ | 70         |      |       |      |          |       |       |       |       | $^{\circ}C/W$ |
| Operating Junction Temperature Range  | $T_j$           | -55 ~ +150 |      |       |      |          |       |       |       |       | $^{\circ}C$   |
| Storage Temperature Range   | $T_{stg}$       | -55 ~ +150 |      |       |      |          |       |       |       |       | $^{\circ}C$   |

( 1 ) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

Fig.1 Forward Current Derating Curve

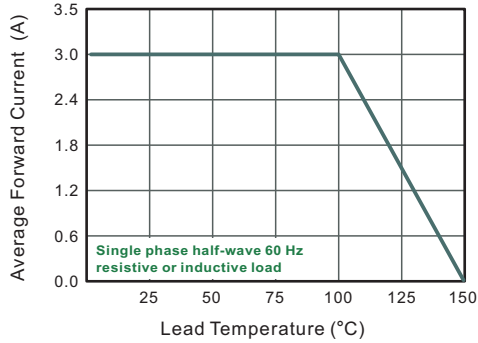


Fig.2 Typical Reverse Characteristics

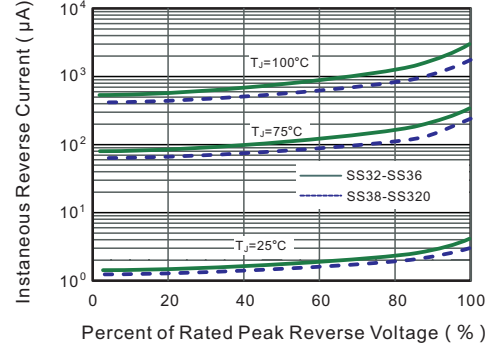


Fig.3 Typical Forward Characteristic

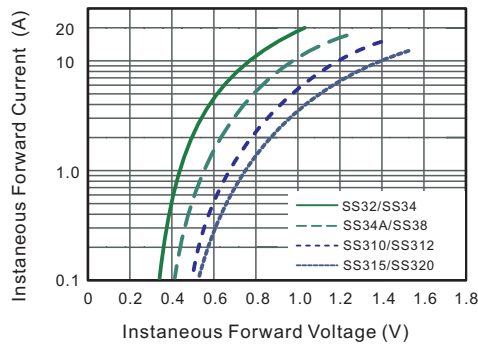


Fig.4 Typical Junction Capacitance

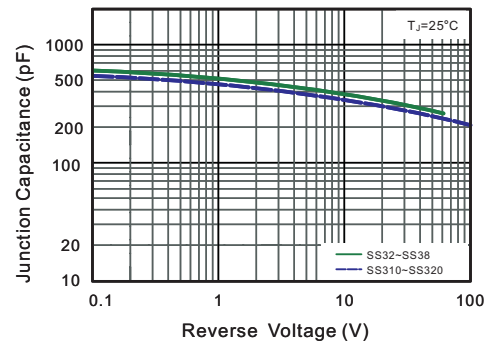


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

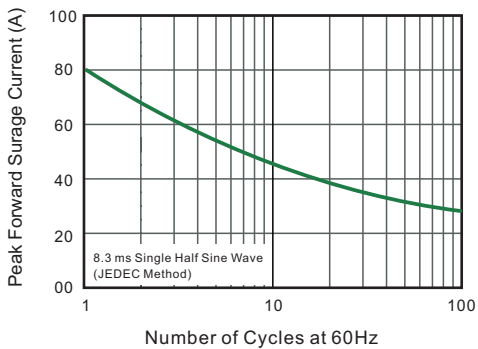
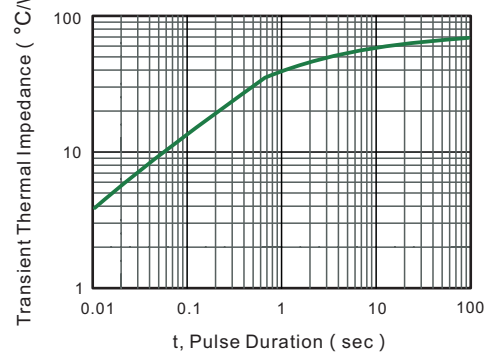
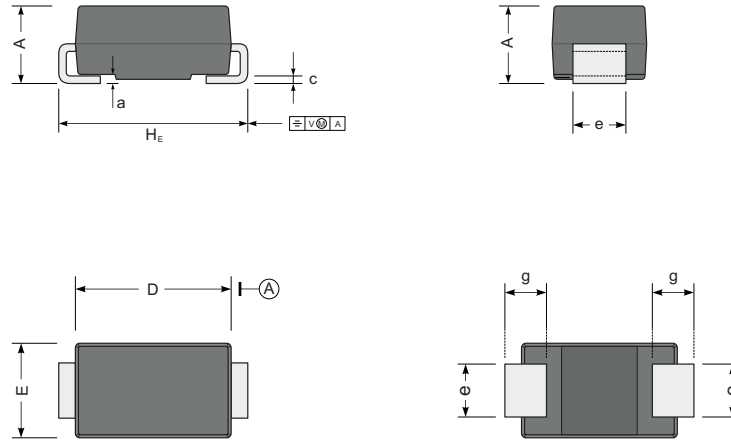


Fig.5- Typical Transient Thermal Impedance



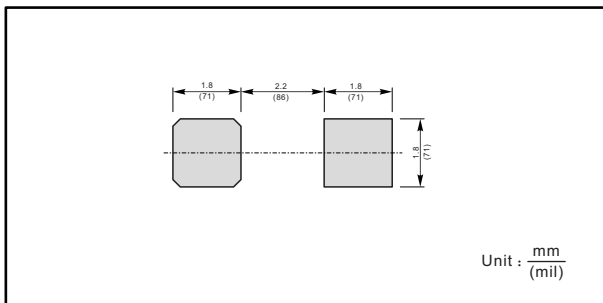
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



| UNIT |     | A   | D   | E   | H <sub>E</sub> | c    | e   | g   | a   |
|------|-----|-----|-----|-----|----------------|------|-----|-----|-----|
| mm   | max | 2.2 | 4.5 | 2.7 | 5.2            | 0.31 | 1.6 | 1.5 | 0.3 |
|      | min | 1.9 | 4.0 | 2.3 | 4.7            | 0.15 | 1.3 | 0.9 |     |
| mil  | max | 87  | 181 | 106 | 205            | 12   | 63  | 59  | 12  |
|      | min | 75  | 157 | 91  | 185            | 6    | 51  | 35  |     |

### The recommended mounting pad size



### Marking

| Type number | Marking code |
|-------------|--------------|
| SS32        | SS32         |
| SS34        | SS34         |
| SS34        | SS34         |
| SS36        | SS36         |
| SS38        | SS38         |
| SS310       | SS310        |
| SS312       | SS312        |
| SS315       | SS315        |
| SS320       | SS320        |