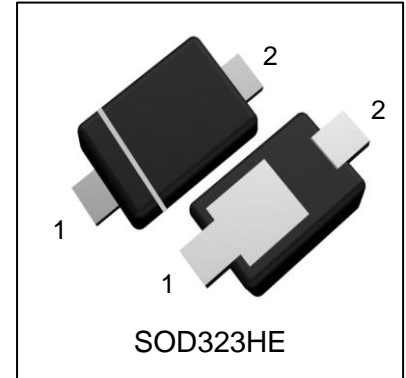


LMBR1100ET1G

S-LMBR1100ET1G

Schottky Barrier Diode



1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Low power loss,high efficiency.
- For use in low voltage high frequency inverters,free wheeling,and polarity protection applications.
- Guardring for over voltage protection.
- High temperature soldering guaranteed:260°C/10 seconds at terminals.

2. DEVICE MARKING AND ORDERING INFORMATION

| Device | Marking | Shipping |
|----------------|---------|----------------|
| LMBR1100ET1G | 110 | 3000/Tape&Reel |
| LMBR1100ET3G | 110 | 5000/Tape&Reel |
| S-LMBR1100ET1G | 110 | 3000/Tape&Reel |
| S-LMBR1100ET3G | 110 | 5000/Tape&Reel |

3. MAXIMUM RATINGS(Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|--------------------------------------------------------------------------------------------------|--------|------------|------|
| Maximum repetitive peak reverse voltage | VRRM | 100 | V |
| Maximum RMS voltage | VRMS | 70 | V |
| Maximum DC blocking voltage | VDC | 100 | V |
| Maximum average forward rectified current at TC = 75°C | IF(AV) | 1 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 22 | A |
| Typical thermal resistance (Note 1) | RθJA | 210 | °C/W |
| | RθJL | 70 | |
| Operating junction temperature range | TJ | -55 ~ +150 | °C |
| storage temperature range | TSTG | -55 ~ +150 | °C |

Note: 1. 8.0mm² (.013mm thick) land areas

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

| Characteristic | Symbol | Min. | Typ. | Max. | Unit |
|------------------------------------------------------------------------------------|--------|------|------|------------|------|
| Maximum instantaneous forward (IF = 1.0 A, TJ = 25°C) | VF | - | - | 0.85 | V |
| Maximum DC reverse current at rated DC blocking voltage TA = 25°C TJ = 125°C | IR | - | - | 0.03 10 | mA |
| Typical junction capacitance at 4.0V, 1MHz | CJ | - | 160 | - | pF |

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1 - Forward Current Derating Curve

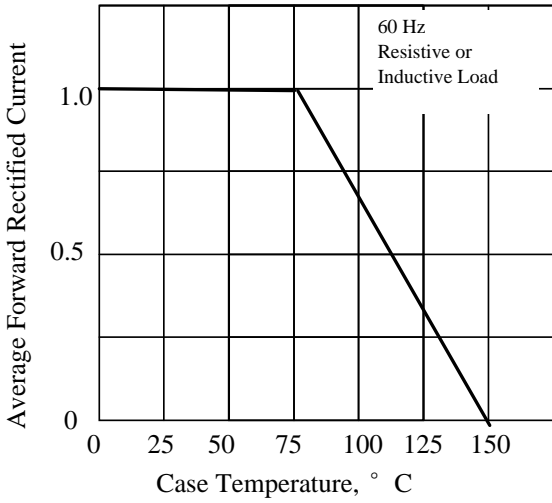


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

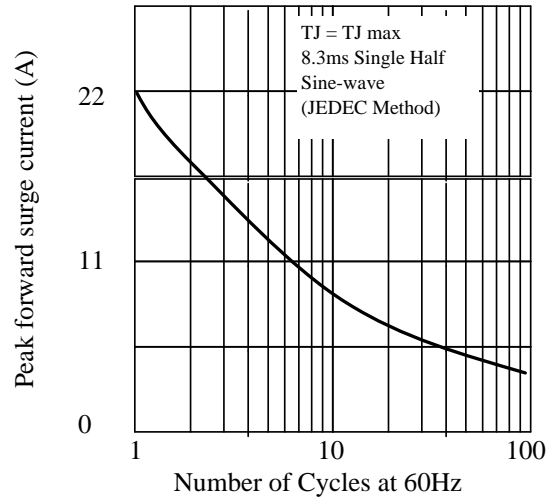


Fig 3. - Typical Instantaneous Forward Characteristics

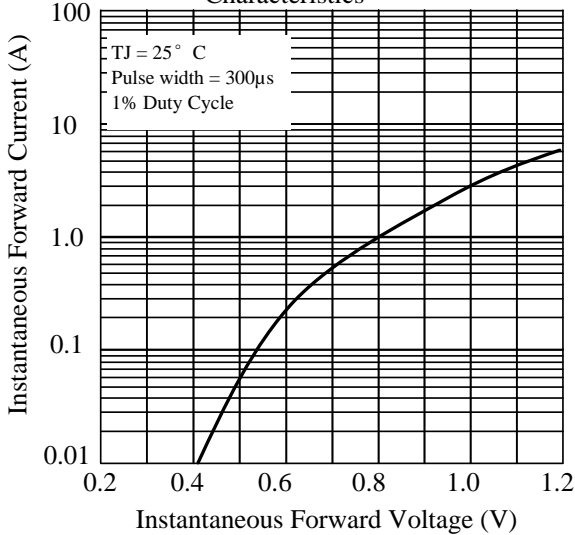


Fig 4. - Typical Reverse Characteristics

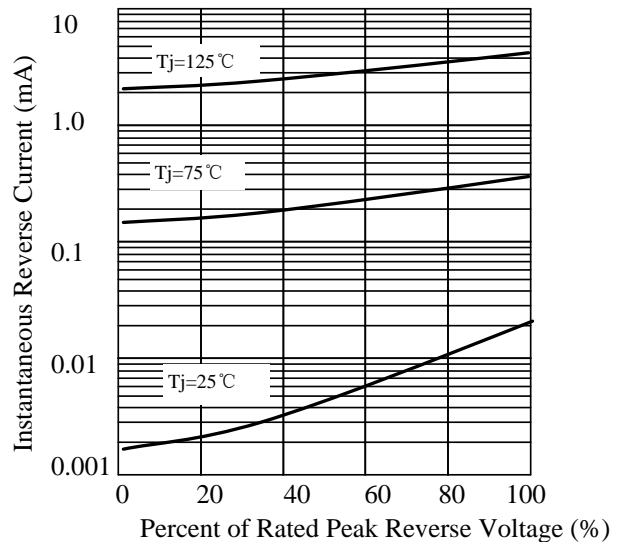


Fig 5. - typical transient thermal impedance

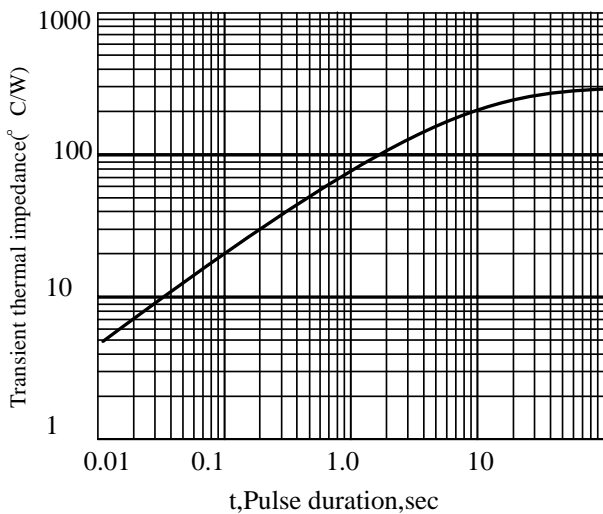
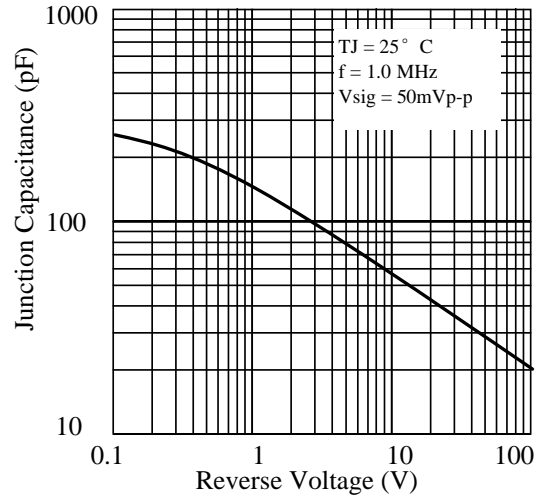
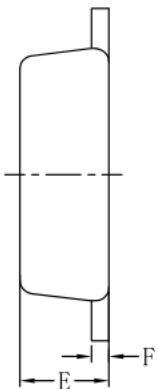


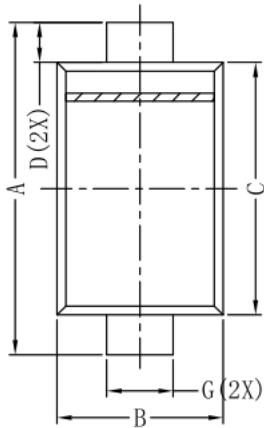
Fig 6. - Typical Junction Capacitance



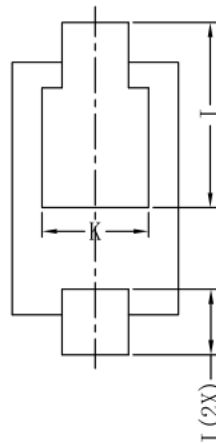
6.OUTLINE AND DIMENSIONS



SIDE VIEW



TOP VIEW



BOTTOM VIEW

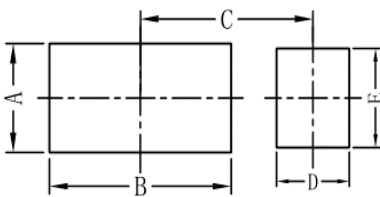
| SOD323HE | | | |
|----------------------|------|------|------|
| DIM | MIN | MAX | Typ. |
| A | 2.30 | 2.70 | 2.55 |
| B | 1.20 | 1.35 | 1.25 |
| C | 1.75 | 1.95 | 1.90 |
| D | - | - | 0.30 |
| E | 0.55 | 0.75 | 0.67 |
| F | 0.10 | 0.20 | 0.15 |
| G | 0.45 | 0.65 | 0.50 |
| I | 0.40 | 0.70 | 0.50 |
| J | 1.15 | 1.55 | 1.40 |
| K | - | - | 0.80 |
| All Dimensions in mm | | | |

GENERAL NOTES

1. Top package surface finish $Ra0.4 \pm 0.2 \mu m$
2. Bottom package surface finish $Ra0.7 \pm 0.2 \mu m$

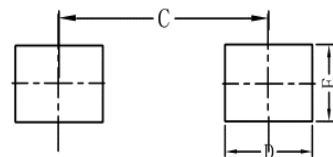
7.SOLDERING FOOTPRINT

RECOMMENDED PAD



| SOD323HE | |
|----------|------|
| DIM | (mm) |
| A | 1.1 |
| B | 2.0 |
| C | 1.9 |
| D | 0.8 |
| E | 1.0 |

COMPATIBLE PAD



| SOD323HE | |
|----------|------|
| DIM | (mm) |
| D | 1.0 |
| E | 0.8 |
| C | 2.4 |

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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