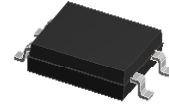
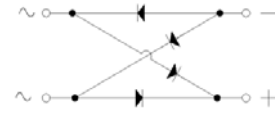


Features

- Glass passivated Fast Recovery bridge rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile, Max Height 1.30mm



LPMB

Typical Applications

For use of general purpose AC to DC bridge rectification in power supply, charger, office appliance, home appliance and telecom device.

| Maximum Ratings (TA = 25 °C unless otherwise noted) | | | | | | | |
|--|------------------|--------------------|--------|--------|--------|--------|--------------------|
| Parameter | Symbol | LMR02A | LMR04A | LMR06A | LMR08A | LMR10A | Unit |
| Maximum repetitive peak reverse voltage | VRRM | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | VRMS | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | VDC | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average output rectified current | Io(AV) | 0.6 ⁽¹⁾ | | | | | A |
| | | 1.2 ⁽²⁾ | | | | | |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | IFSM | 40 | | | | | A |
| Rating for fusing(t<8.3ms) | I ² t | 6.5 | | | | | A ² sec |
| Operating junction and storage temperature range | TJ, TSTG | - 55 to + 150 | | | | | °C |

| Electrical Characteristics (TA = 25 °C unless otherwise noted) | | | | | | | | |
|--|---|-----------------|--------|--------|--------|--------|--------|-------|
| Parameter | Test Conditions | Symbol | LMR02A | LMR04A | LMR06A | LMR08A | LMR10A | Unit |
| Maximum instantaneous forward voltage | IF=0.6 A, TA=25°C | V _F | 1.3 | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage | TA=25°C | I _R | 5 | | | | | µA |
| | TA=125°C | | 100 | | | | | |
| Typical reverse recovery time | I _F =0.5A, I _R =1.0 I _{rr} =0.25A | t _{rr} | 150 | | 250 | 500 | nS | |
| Typical junction capacitance | 4.0 V, 1 MHz | C _J | 18 | | | | | pF |

| Thermal Characteristics | | | | | | | |
|----------------------------|---------------------------------|--------|--------|--------|--------|--------|------|
| Parameter | Symbol | LMR02A | LMR04A | LMR06A | LMR08A | LMR10A | Unit |
| Typical thermal resistance | R _{θJA} ⁽¹⁾ | 60 | | | | | °C/W |
| | R _{θJA} ⁽²⁾ | 50 | | | | | |
| | R _{θJC} ⁽¹⁾ | 20 | | | | | |

Notes: 1. On glass epoxy PCB, mounted on 1.3*1.3mm solder pads
2. On glass epoxy PCB, mounted on 13*13mm solder pads



LMR02A thru LMR10A

Low Profile Miniature Single Phase Surface Mount Bridge Rectifiers
Reverse Voltage 200~1000V Output Current 1.2

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

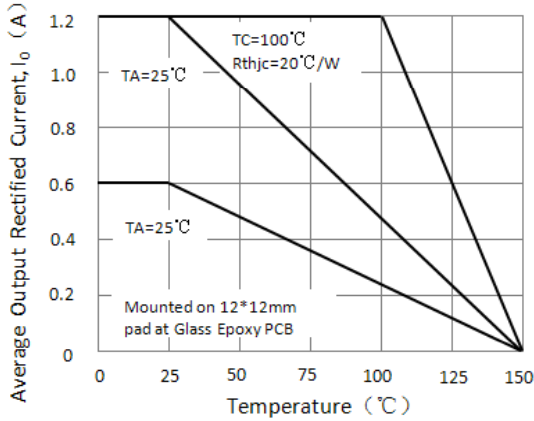


Figure 1. Output Rectifier Current Derating Curve

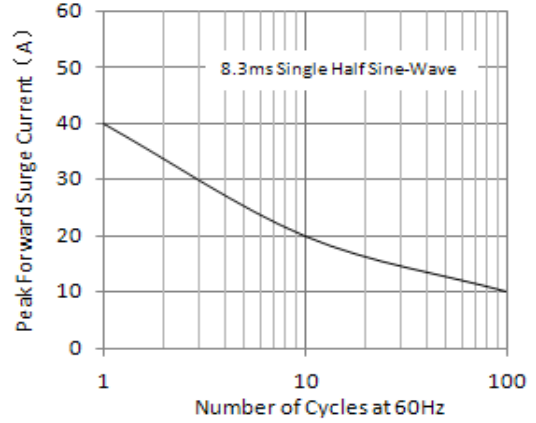


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

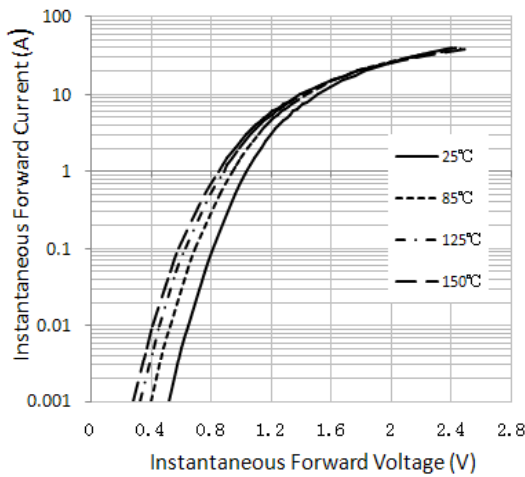


Figure 3. Typical Forward Characteristics

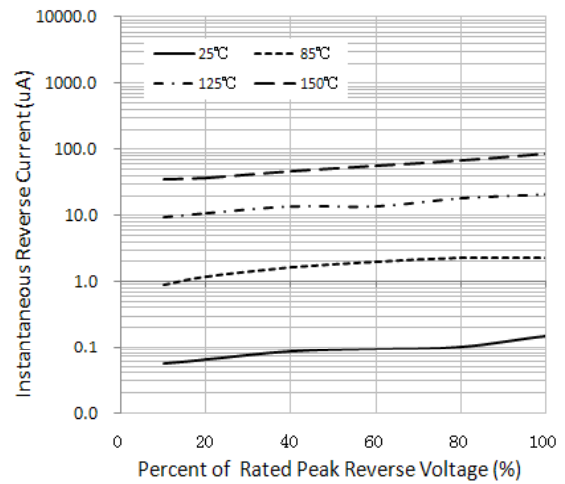


Figure 4. Typical Reverse Characteristics

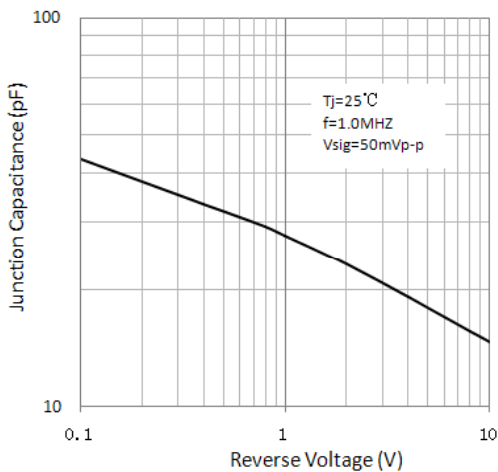
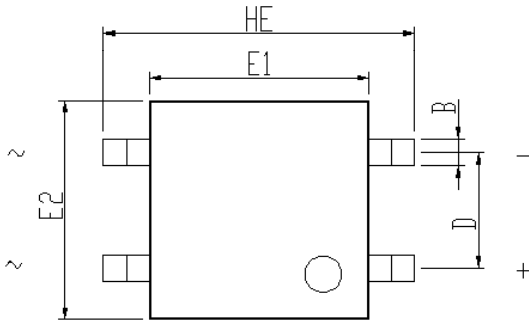


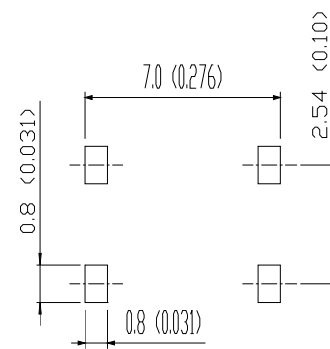
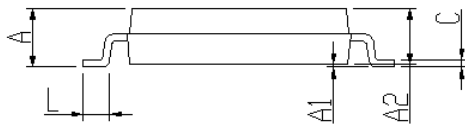
Figure 5. Typical Junction Capacitance

Package Outline Dimensions



| DIM | Unit: mm | | Unit: inch | |
|-----|-----------|------|------------|-------|
| | MIN | MAX | MIN | MAX |
| A | 1.2 | 1.3 | 0.047 | 0.051 |
| A1 | 0 | 0.1 | 0.000 | 0.004 |
| B | 0.5 | 0.75 | 0.020 | 0.030 |
| C | 0.1 | 0.25 | 0.004 | 0.010 |
| D | 2.54 typ. | | 0.10 typ. | |
| E1 | 4.7 | 4.9 | 0.185 | 0.193 |
| E2 | 4.7 | 4.9 | 0.185 | 0.193 |
| L | 0.4 | 0.7 | 0.016 | 0.028 |
| HE | 6.65 | 6.95 | 0.262 | 0.274 |

Mounting pad layout in mm(inch)

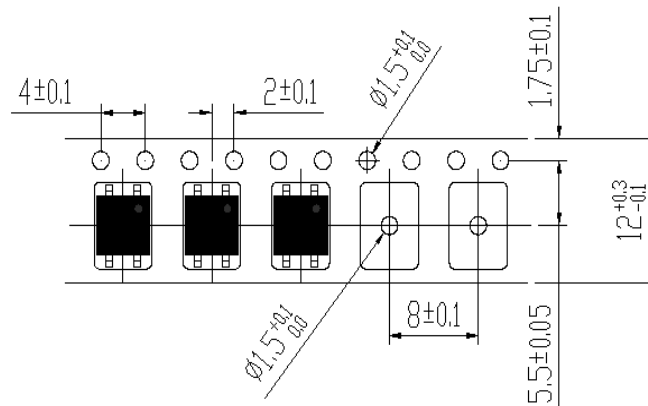


Packing Information

Packing quantities:

4000 pcs/Reel, 15 Reels/Box; 12mm Tape, 13" Reel

Tape & Reel Specification





LMR02A thru LMR10A

Low Profile Miniature Single Phase Surface Mount Bridge Rectifiers
Reverse Voltage 200~1000V Output Current 1.2

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