

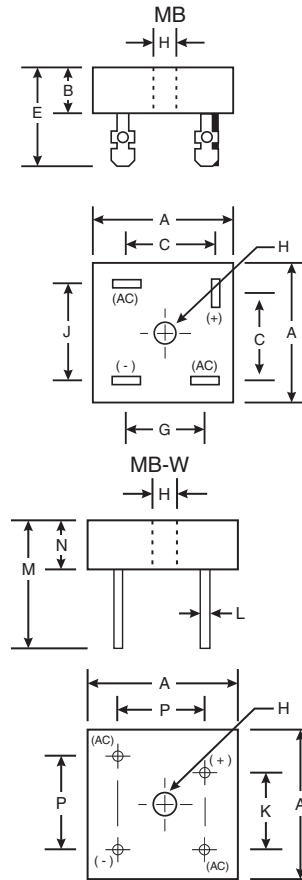
NOT RECOMMENDED FOR NEW DESIGN, USE
GBPC15 SERIES, GBPC25 SERIES, OR GBPC35 SERIES

Features

- High Conductivity
- Metal Case
- Superior Thermal Design
- Terminals Solderable per MIL-STD-202, Method 208
- Universal Terminals; Snap-on, Solder or P.C. Board Mounting
- **Lead Free Finish, RoHS Compliant (Date Code 0514+)**
(Note 2)

Mechanical Data

- Terminals: 0.25" Faston Terminals
- Case material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020C
- Approx Weight: 29 grams
- Mounting Position: Bolt Down on Heat-sink with Silicone Thermal Compound Between Bridge and Mounting Surface for Maximum Heat Transfer Efficiency
- Mounting Torque: 20 in. lb. Max.
- Polarity: Polarity Symbols Marked on Case



| Dim | Min | Max |
|-----|--------------------|-------|
| A | 28.40 | 28.70 |
| B | 10.97 | 11.23 |
| C | 15.50 | 17.60 |
| E | 22.86 | 25.40 |
| G | 13.30 | 15.30 |
| H | Hole for #10 screw | |
| | 4.85Ø | 5.59Ø |
| J | 17.10 | 19.10 |
| K | 10.40 | 12.40 |
| L | 0.97Ø Nominal | 1.07Ø |
| M | 30.50 | — |
| N | 10.97 | 11.23 |
| P | 17.10 | 19.10 |

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Suffix "W" denotes wire leads

| Characteristic | Symbol | -05 | -1 | -2 | -4 | -6 | -8 | -10 | Units |
|--|------------------------------------|-----|-----|-----|----------------------|-----|-----|------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Rectified Output Current @ $T_C = 55^\circ\text{C}$ | MB15 MB25 MB35 $I_{(AV)}$ | | | | 15.0 25.0 35.0 | | | | A |
| Peak Forward Surge Current Single Half Sine-Wave Superimposed on Rated Load | MB15 MB25 MB35 I_{FSM} | | | | 300 300 400 | | | | A |
| Maximum Instantaneous @ 7.5A Forward Voltage Drop per @ 12.5A Rated Load @ 17.5A | MB15 MB25 MB35 V_F | | | | 1.1 1.1 1.2 | | | | V |
| Maximum Reverse DC current at Rated DC Blocking Voltage (per Element) @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$ | I_R | | | | 10 1.0 | | | | μA mA |
| I^2t rating for fusing (8.3ms) | MB15 MB25 MB35 I^2t | | | | 373 373 664 | | | | A^2s |
| Typical Thermal Resistance (Note 1) | $R_{\theta JC}$ | | | | 2.5 | | | | $^\circ\text{C}/\text{W}$ |
| Operating and Storage Temperature Range | T_J, T_{STG} | | | | -55 to +150 | | | | $^\circ\text{C}$ |

Notes: 1. Thermal Resistance from junction to case

2. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see *EU Directive Annex Notes 5 and 7.*

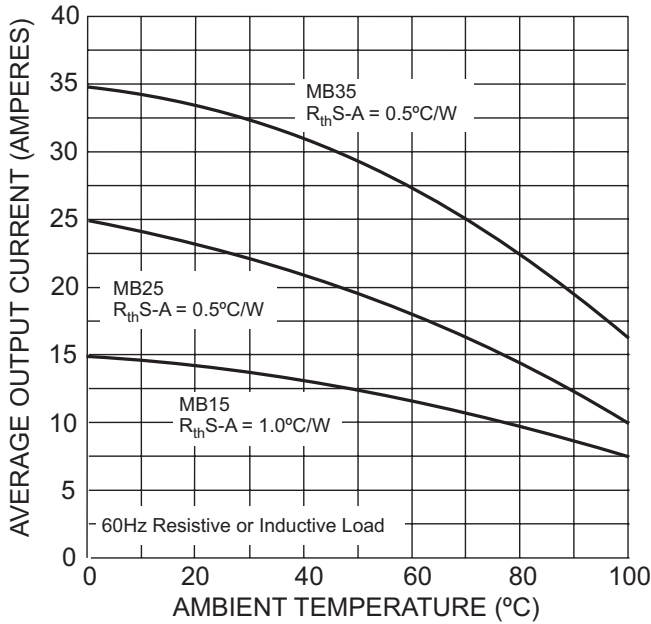


Fig. 1 Maximum Output Rectified Current

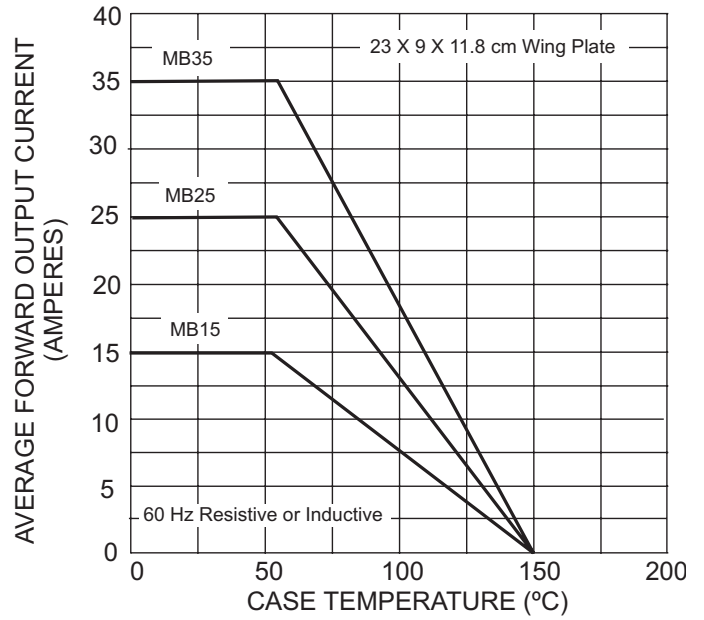


Fig. 2 Maximum Output Rectified Current

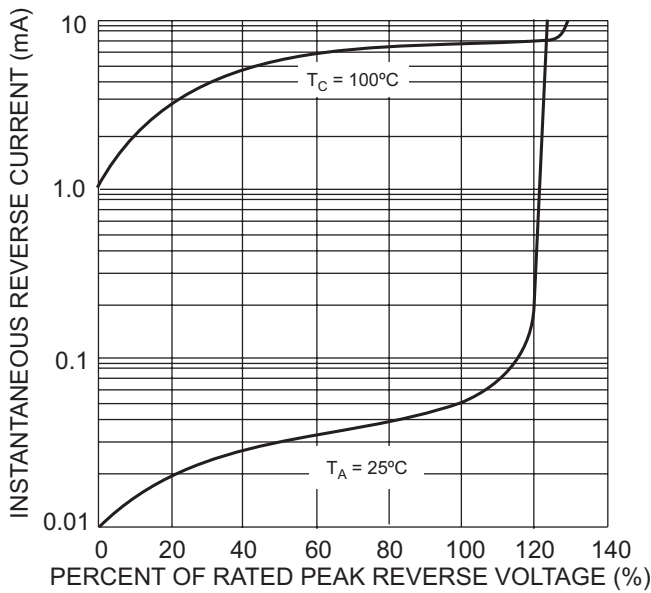


Fig. 3 Typical Reverse Characteristics

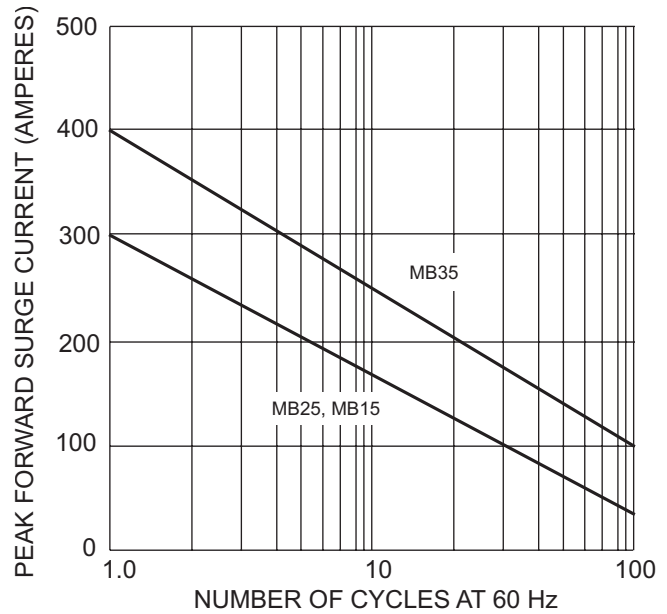


Fig. 4 Maximum Non-Repetitive Peak Forward Surge current

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Ordering Information (Note 3)

| Device | Packaging | Shipping |
|---------|-----------|----------|
| MB1505 | MB | 100/Bulk |
| MB151 | MB | 100/Bulk |
| MB152 | MB | 100/Bulk |
| MB154 | MB | 100/Bulk |
| MB156 | MB | 100/Bulk |
| MB158 | MB | 100/Bulk |
| MB1510 | MB | 100/Bulk |
| MB1505W | MB-W | 100/Bulk |
| MB151W | MB-W | 100/Bulk |
| MB152W | MB-W | 100/Bulk |
| MB154W | MB-W | 100/Bulk |
| MB156W | MB-W | 100/Bulk |
| MB158W | MB-W | 100/Bulk |
| MB1510W | MB-W | 100/Bulk |
| MB2505 | MB | 100/Bulk |
| MB251 | MB | 100/Bulk |
| MB252 | MB | 100/Bulk |
| MB254 | MB | 100/Bulk |
| MB256 | MB | 100/Bulk |
| MB258 | MB | 100/Bulk |
| MB2510 | MB | 100/Bulk |
| MB2505W | MB-W | 100/Bulk |
| MB251W | MB-W | 100/Bulk |
| MB252W | MB-W | 100/Bulk |
| MB254W | MB-W | 100/Bulk |
| MB256W | MB-W | 100/Bulk |
| MB258W | MB-W | 100/Bulk |
| MB2510W | MB-W | 100/Bulk |
| MB3505 | MB | 100/Bulk |
| MB351 | MB | 100/Bulk |
| MB352 | MB | 100/Bulk |
| MB354 | MB | 100/Bulk |
| MB356 | MB | 100/Bulk |
| MB358 | MB | 100/Bulk |
| MB3510 | MB | 100/Bulk |
| MB3505W | MB-W | 100/Bulk |
| MB351W | MB-W | 100/Bulk |
| MB352W | MB-W | 100/Bulk |
| MB354W | MB-W | 100/Bulk |
| MB356W | MB-W | 100/Bulk |
| MB358W | MB-W | 100/Bulk |
| MB3510W | MB-W | 100/Bulk |

Notes: 3. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap2008.pdf>

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