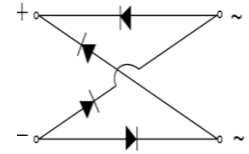
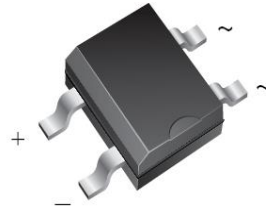


Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ High surge overload rating:35A peak
- ◆ Saves space on printed circuit boards
- ◆ High temperature soldering guaranteed:260°C/10 seconds
- ◆ Add suffix "E" for Halogen Free



MB

Typical Applications

- ◆ General purpose use in ac-to-dc bridge full wave rectification for TV, Monitor, SMPS, Adapter, Printer, Audio equipment, and Home Applications application

Mechanical Data

- ◆ Case: Molded plastic body over passivated junctions
- ◆ Terminals: plated leads solderable per MIL-STD-750, Method 2026
- ◆ Mounting Position: Any

| Maximum Ratings (TA = 25 °C unless otherwise noted) | | | | | | | |
|---------------------------------------------------------------------------------------|-----------------------|-------------|------|------|------|-------|------------------|
| Parameter | Symbol | MB2S | MB4S | MB6S | MB8S | MB10S | Unit |
| Maximum repetitive peak reverse voltage | V_{RRM} | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 200 | 400 | 600 | 800 | 1000 | V |
| Average forward rectified output current ⁽¹⁾ | On Glass-epoxy P.C.B | $0.5^{(1)}$ | | | | | A |
| | On aluminum substrate | $0.8^{(2)}$ | | | | | |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 35 | | | | | A |
| Rating for fusing ($t \leq 8.3ms$) | I^2t | 5 | | | | | A ² s |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to 150 | | | | | °C |
| Typical junction capacitance per at 4.0V, 1.0MHz | C_j | 13 | | | | | pF |

| Electrical Characteristics (TA = 25 °C unless otherwise noted) | | | | | | | | |
|----------------------------------------------------------------|-------------------|-----------------|-------------------|------|------|------|-------|---------|
| Parameter | Test Conditions | Symbol | MB2S | MB4S | MB6S | MB8S | MB10S | Unit |
| Maximum instantaneous forward voltage | $I_F=0.4A$ | V_F | 1.0 | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage | $T_A=25^\circ C$ | I_R | 5.0 | | | | | μA |
| | $T_A=125^\circ C$ | | 100 | | | | | |
| Typical thermal resistance ⁽¹⁾ | | $R_{\theta JA}$ | 85 ⁽¹⁾ | | | | | °C/W |
| | | $R_{\theta JA}$ | 70 ⁽²⁾ | | | | | |
| | | $R_{\theta JL}$ | 20 ⁽¹⁾ | | | | | |

Note:1. On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads

2. On aluminum substrate P.C.B. with an area of 0.8x0.8" (20x20mm) mounted on 0.05x0.05"(1.3x1.3mm) solder pad



Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

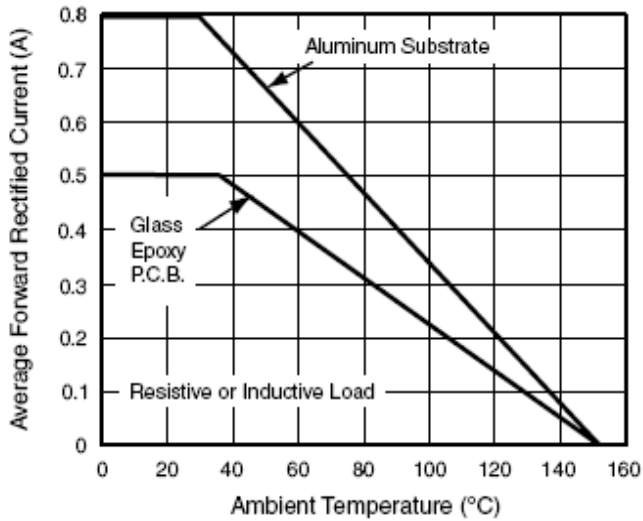


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

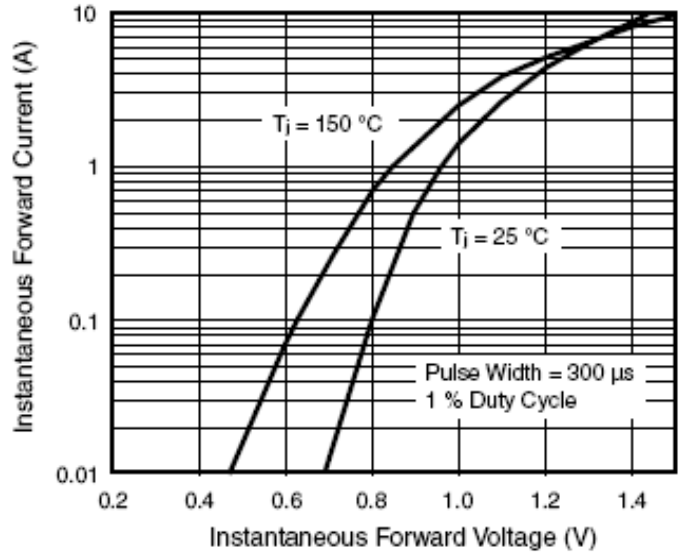


FIG.3 TYPICAL RESERVE LEAKAGE CHARACTERISTICS PER DIODE

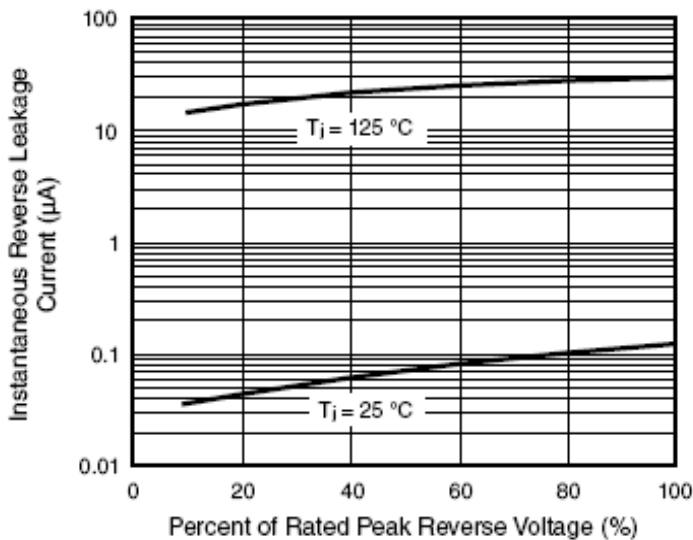
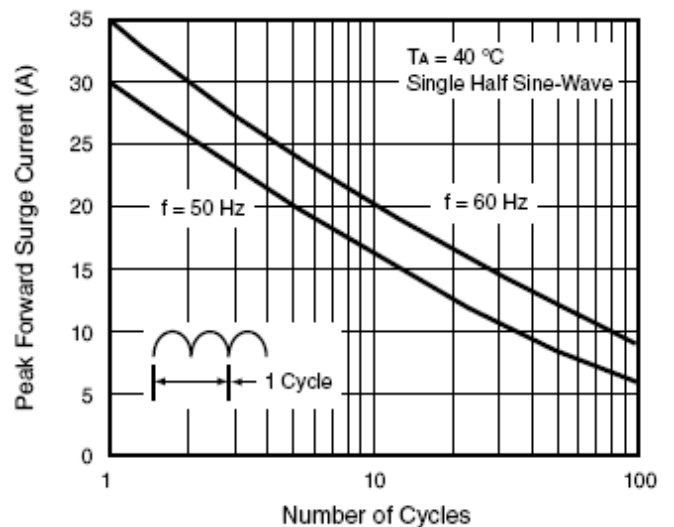


FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT





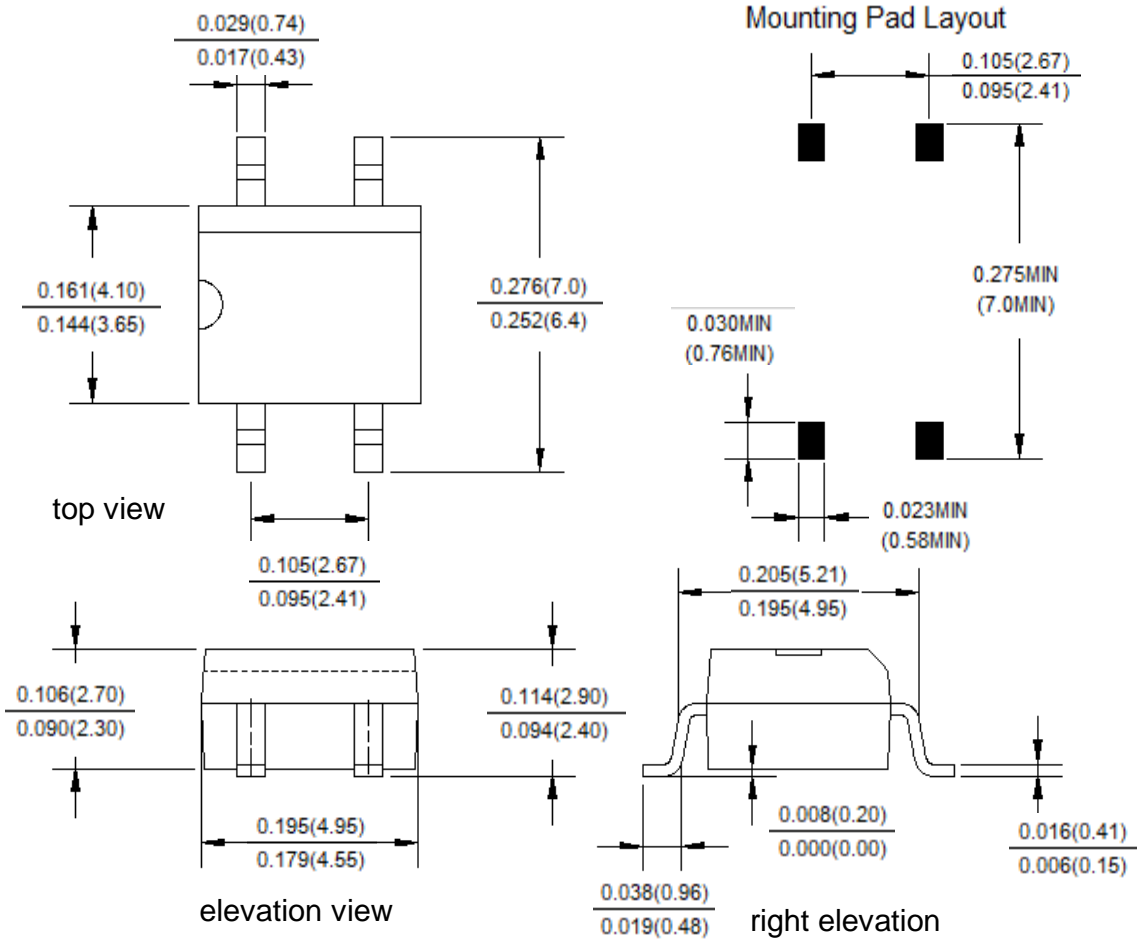
MB2S thru MB10S

Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifier
 Reverse Voltage 200~1000V Output Current 0.5A

Package Outline Dimensions

Unit: inches(mm)

First angle projection



| Version | Revision content | Date |
|---------|-------------------------|--------|
| A | Initial version release | Mar-21 |
| | | |



MB2S thru MB10S

Miniautre Glass Passivated Single-Phase Surface Mount Bridge Rectifier
Reverse Voltage 200~1000V Ountput Current 0.5A

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