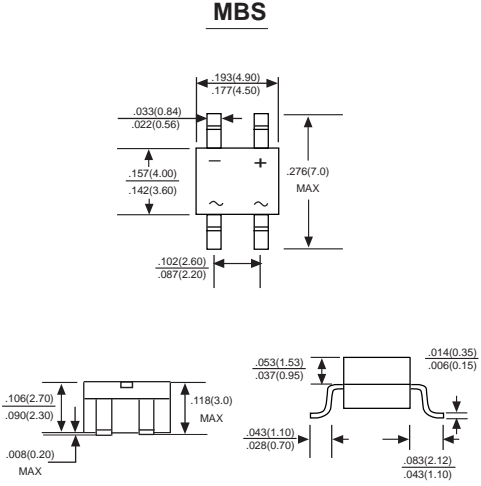


MB2S THRU MB10S

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current 1.0 Ampere

| MBS | FEATURES |
|---|--|
|  <p style="text-align: center;">Dimensions in inches and (millimeters)</p> | <p style="text-align: center;">FEATURES</p> <ul style="list-style-type: none"> ◆ Ideal for printed circuit board ◆ Reliable low cost construction utilizing molded plastic technique ◆ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3kg) tension ◆ Small size, simple installation ◆ High surge current capability <p style="text-align: center;">MECHANICAL DATA</p> <p>Case: Molded plastic body Terminals: Plated leads solderable per MIL-STD-750, Method 2026 Polarity: Polarity symbols marked on case Mounting Position: Any Weight: 0.008 ounce, 0.22 grams</p> |

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 current by 20%.

| | SYMBOLS | MB2S | MB4S | MB6S | MB8S | MB10S | UNITS |
|---|-----------------|-------------|------|------|------|-------|--------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 140 | 280 | 420 | 560 | 700 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum average forward rectified current at $T_A=30^\circ C$ On glass-epoxy P.C.B. (Note1) On aluminum substrate (Note2) | $I_{F(AV)}$ | 0.8 1.0 | | | | | Amps |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30 | | | | | Amps |
| Maximum instantaneous forward voltage drop per leg at 0.4A | V_F | 1.0 | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$ | I_R | 10.0 200 | | | | | μA μA |
| Typical junction capacitance per leg (Note3) | C_J | 15 | | | | | pF |
| Typical thermal resistance per leg | $R_{\theta JA}$ | 75 | | | | | $^\circ C/W$ |
| Operating temperature range | T_J | -55 to +150 | | | | | $^\circ C$ |
| storage temperature range | T_{STG} | -55 to +150 | | | | | $^\circ C$ |

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

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

3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (MB2S THRU MB10S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

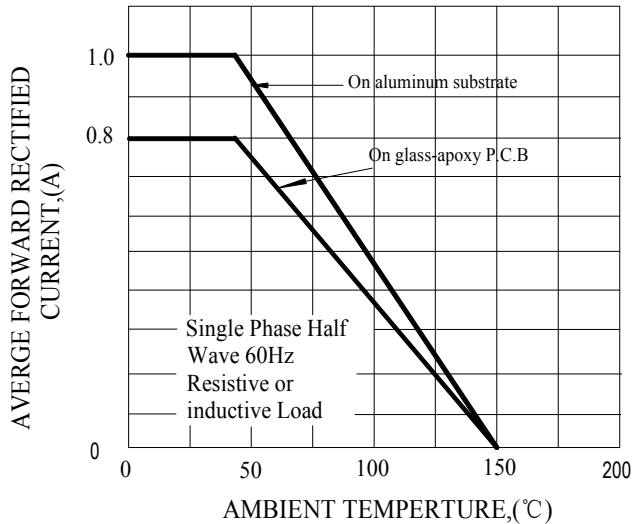


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

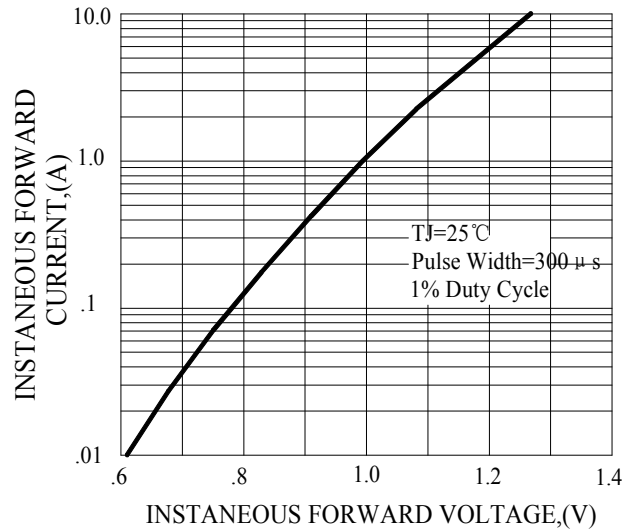


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

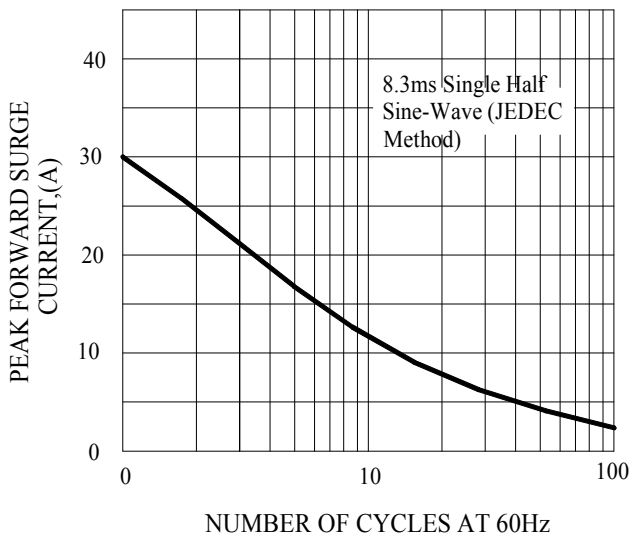


FIG.4-TYPICAL REVERSE CHARACTERISTICS

