

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

### Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability
- ◆ Glass passivated chip junction

### Mechanical Data

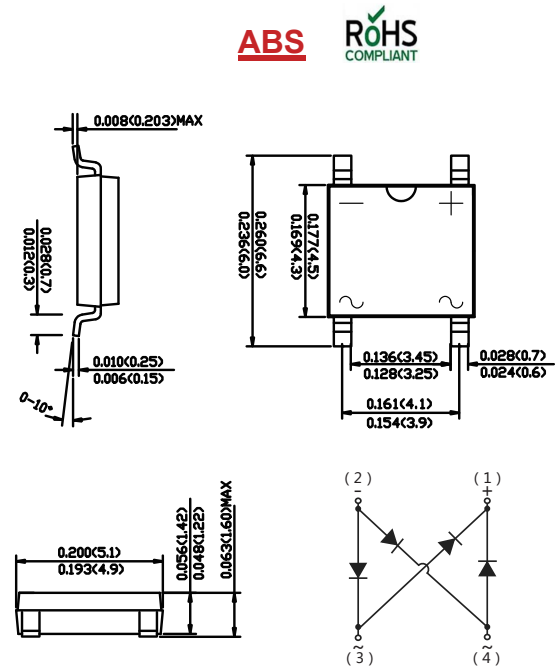
**Case** : JEDEC ABS Molded plastic body

**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity** : Polarity symbol marking on body

**Mounting Position** : Any

**Weight** : 0.003 ounce, 0.098 grams



Dimensions in inches and (millimeters)

### 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 current derate by 20%.

| Parameter                                                                                                 | SYMBOLS                            | ABS2        | ABS4 | ABS6 | ABS8 | ABS10 | UNITS              |
|-----------------------------------------------------------------------------------------------------------|------------------------------------|-------------|------|------|------|-------|--------------------|
| Marking Code                                                                                              |                                    | ABS2        | ABS4 | ABS6 | ABS8 | ABS10 |                    |
| 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                  |
| Maximum average forward rectified current<br>On glass-epoxy P.C.B.(Note1)<br>On aluminum substrate(Note2) | $I_{F(AV)}$                        | 0.8<br>1.0  |      |      |      |       | A                  |
| Peak forward surge current,<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method)   | $I_{FSM}$                          | 30          |      |      |      |       | A                  |
| Maximum instantaneous forward voltage drop<br>per leg at 1A                                               | $V_F$                              | 0.95        |      |      |      |       | V                  |
| Maximum DC reverse current<br>at rated DC blocking voltage<br>$T_A=25^{\circ}C$<br>$T_A=100^{\circ}C$     | $I_R$                              | 5<br>100    |      |      |      |       | $\mu A$<br>$\mu A$ |
| Typical thermal resistance                                                                                | $R_{\theta JL}$<br>$R_{\theta JA}$ | 25<br>80    |      |      |      |       | $^{\circ}C/W$      |
| 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.Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

## Ratings And Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

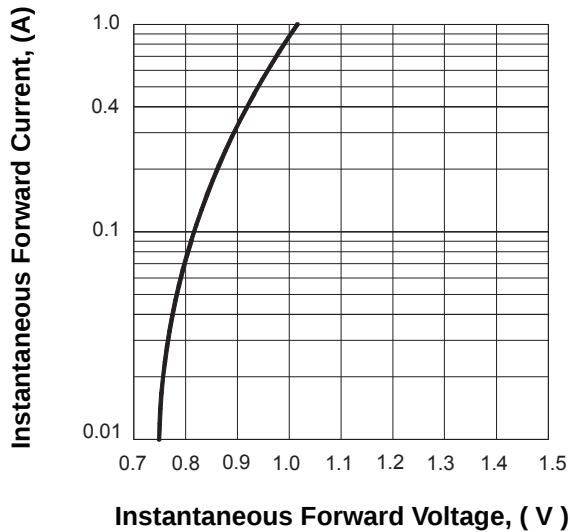


FIG.2 FORWARD DERATING CURVE

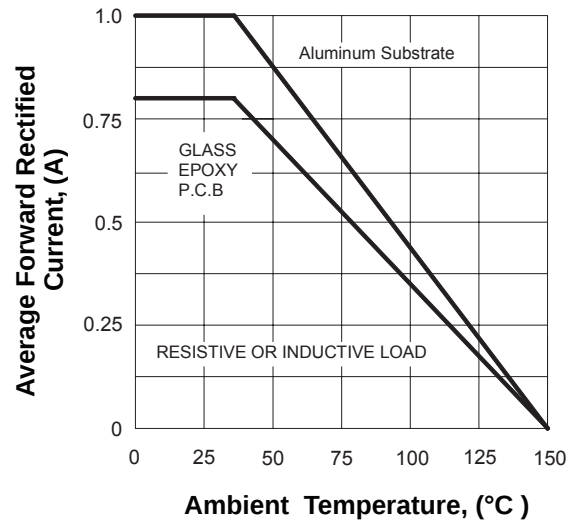


FIG.3 TYPICAL REVERSE CHARACTERISTICS

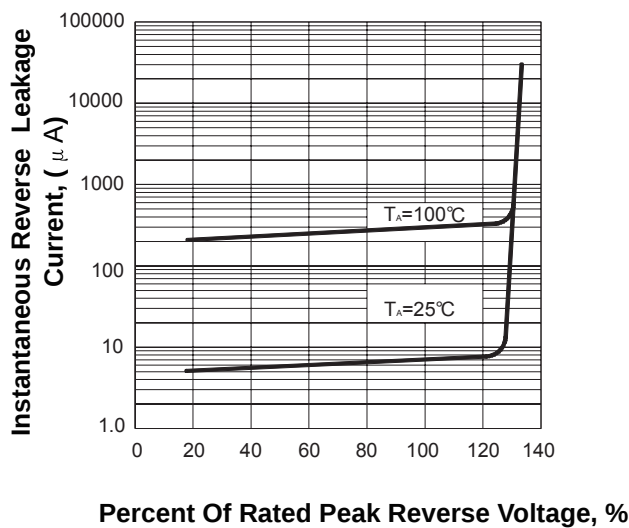
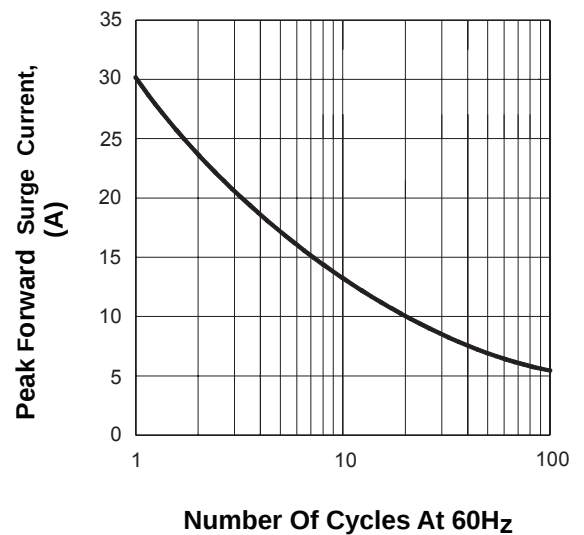
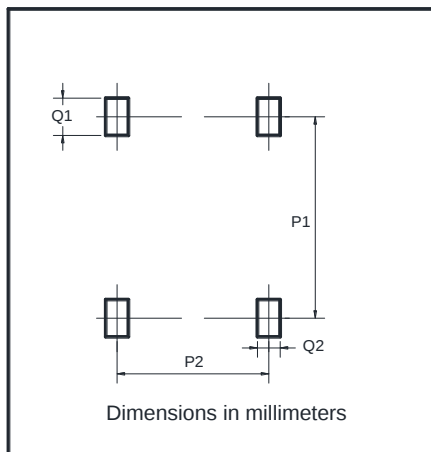


FIG.4 PEAK FORWARD SURGE CURRENT



The curve above is for reference only.

**Suggested Pad Layout**



| Dim | Min  |
|-----|------|
| P1  | 5.72 |
| P2  | 4.00 |
| Q1  | 1.00 |
| Q2  | 0.90 |