| LOW VF GLASS PASSIVATED BRIDGE RECTIFIERS | REVERSE VOLTAGE 50 to 1000 Volts<br>FORWARD CURRENT 15 Amperes |
|---|---|

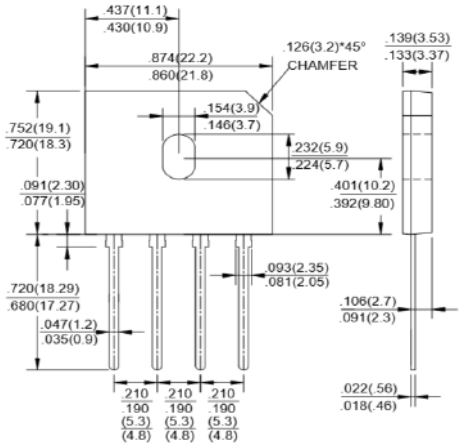
## FEATURES

- Surge overload rating 220 amperes peak
- Ideal for printed circuit board
- Low forward voltage drop,high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0

## MECHANICAL DATA

- Polarity: As marked on Body
- Mounting position: Any

GBU




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, derate current by 20%

| Characteristics | Symbo | GBU1506V | Unit |
|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 600 | V |
| RMS Reverse Voltage | $V_{RMS}$ | 420 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 600 | V |
| Maximum Average Forward(with heatsink Note2)<br>Rectified Current @$T_C$=100˚C(without heatsink) | $I_{(AV)}$ | 15<br>3.2 | A |
| Peak Forward Surge Current,<br>8.3 ms Single Half Sine-wave<br>Superimposed on Rated Load (JEDEC method) | $I_{FSM}$ | 240 | A |
| Maximum Forward Voltage at 7.5A DC | $V_F$ | 0.9 | V |
| Maximum DC Reverse Current @$T_A$=25°C<br>at Rated DC Blocking Voltage @$T_A$=125°C | $I_R$ | 10<br>500 | μA |
| $I^2t$ Rating for Fusing (t<8.3ms) | $I^2t$ | 200 | $A^2s$ |
| Typical Junction Capacitance Per Element (Note1) | $C_J$ | 70 | pF |
| Typical Thermal Resistance | $R_{\theta JC}$ | 2.2 | ˚C/W |
| Junction and StorageTemperature Range | $T_J$, $T_{STG}$ | -55 to +150 | °C |

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.

## Rating and Characteristic Curves

FIG.1-MAXMUN NON-REPETITIVE SURGE CURRENT

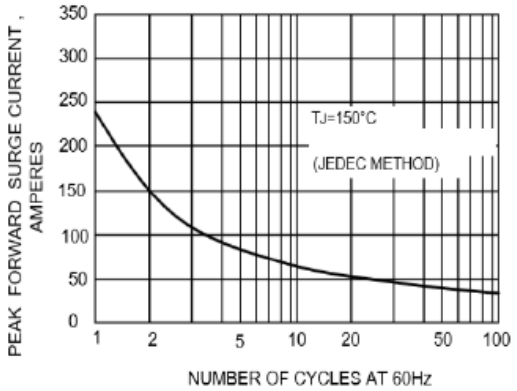



FIG.2- DERATING CURVE OUTPUT RECTIFIED CURRENT

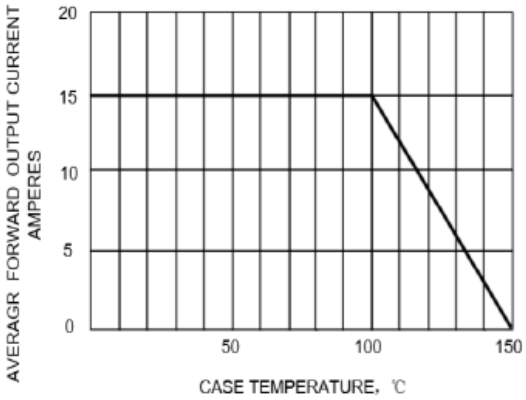
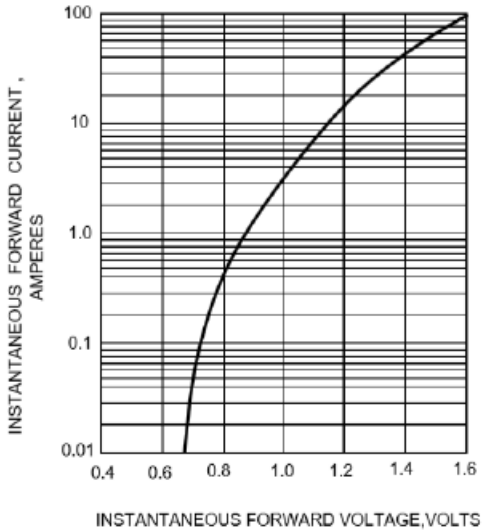



FIG.3-TYPICAL FORWARD CHARACTERISTICS



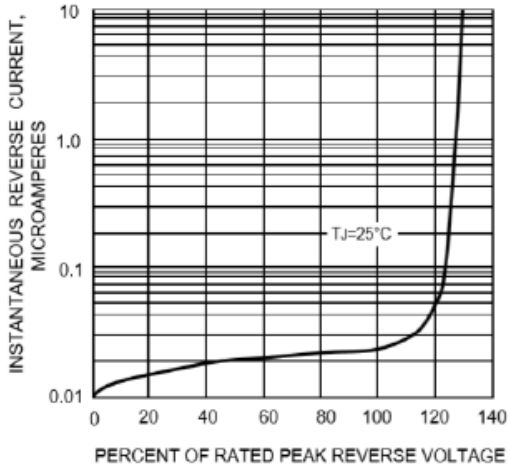


FIG.4-TYPICAL REVERSE CHARACTERISTICS