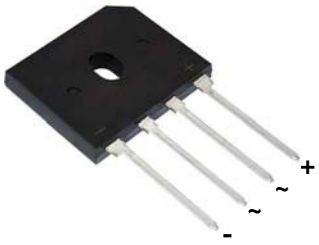
TRR®

GBU15005 thru GBU1510

15.0A Single-Phase Silicon Brige Rectifier

Features

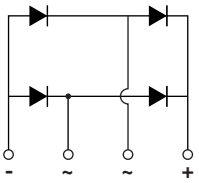
- Ideal for printed circuit boards
- High case dielectric strength
- High temperature soldering：
  260℃/5 seconds at terminals



GBU

Mechanical Date

- **Case:**GBU
  Molding compound meets
  UL 94 V-0 flammability rating
- **Terminals:** Solder plated, solderable per
  MIL-STD-750， Method 2026
- **Polarity:**As marked on body
- **Mounting Position:** Any



GBU

Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise noted)

Items	Symbol	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 15010	Unit
Maximum repetitive 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 forward rectified output current at T_C=40℃ (with heatsink)	$I_{F(AV)}$	15							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	220							A
Typical thermal resistance	$R_{\theta JC}$ (1)	4.0							℃/W
Operating junction and storage temperature range	T_J T_{STG}	-55 to +150							℃

Note:1.Units case mounted on aluminum plate heatsink.Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws.

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Items	Symbol	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 15010	Unit
Maximum instantaneous forward voltage drop per leg at 7.5A	V_F	1.1							V
Maximum DC reverse current at rated T_A =25℃ DC blocking voltage per element T_A =125℃	I_R	10 500							uA

Characteristic Curves

(T_A=25 ℃ unless otherwise noted)

Fig.1 Forward Current Derating Curve

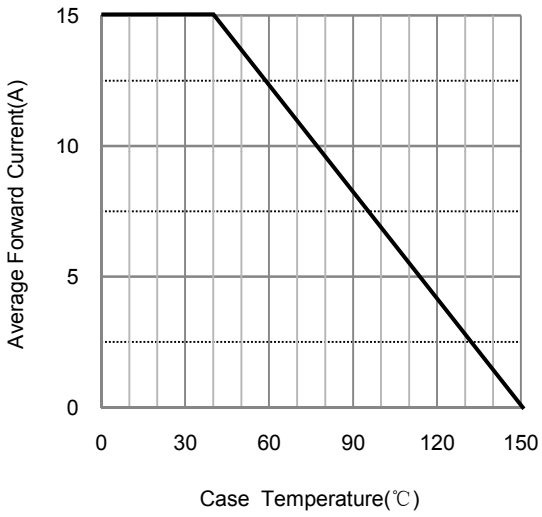


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

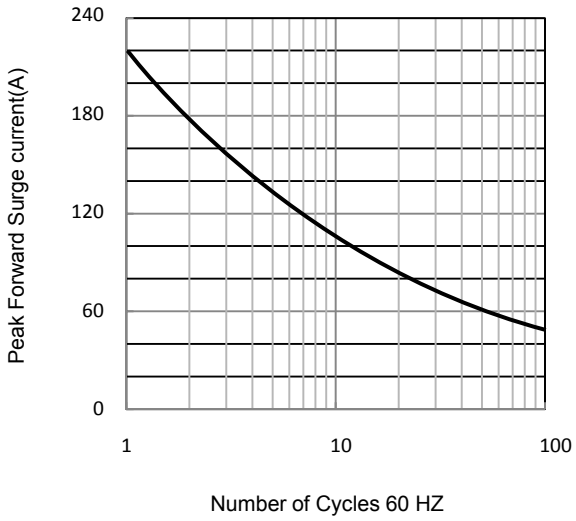


Fig.3 Typical Instantaneous Forward Characteristics

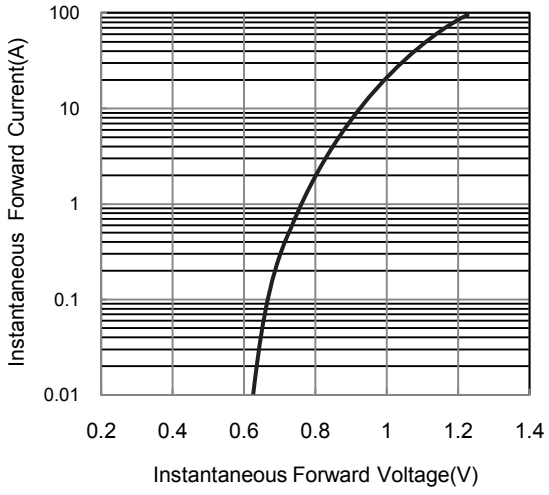
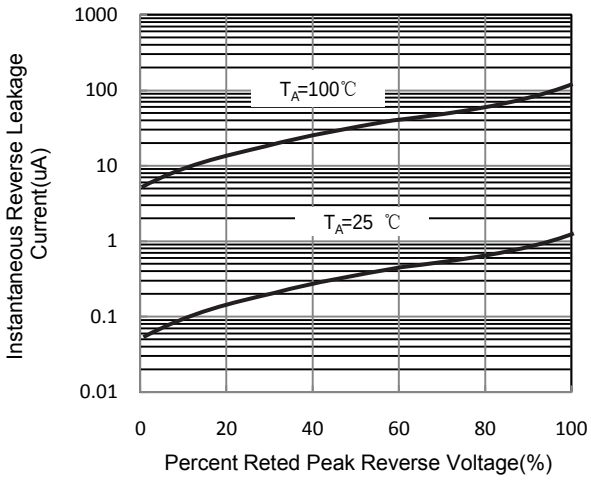
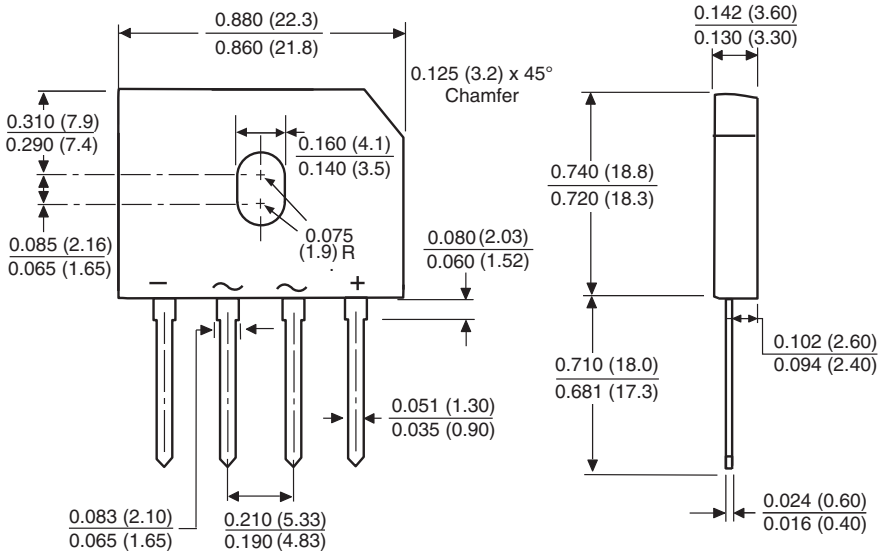


Fig.4 Typicl Reverse Leakage Characteristics



Package Outline

GBU



Dimensions in inches and (millimeters)