GBU6J-E THRU GBU6K-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 600V to 800V Current: 6.0A

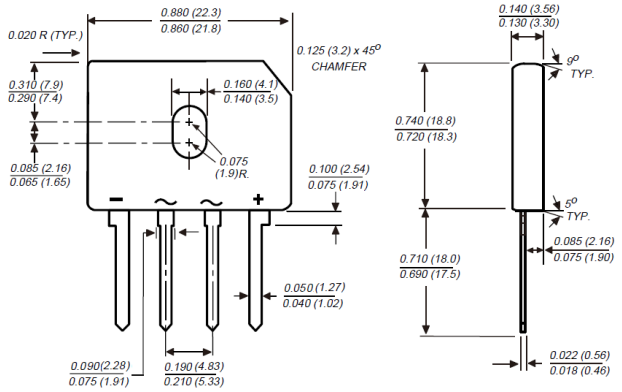
Features

Ideal for printed circuit board
Glass passivated chip junction
High case dielectric strength
High surge current capability
This series is UL listed under Recognized Component Index, file number E330278
Halogen Free

Mechanical Data

Terminal: Plated leads solderable per J-STD-002
Case: UL-94 Class V-0 recognized Halogen Free Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any

GBU



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	GBU6J-E	GBU6K-E	units
Maximum repetitive peak reverse voltage	Vrrm	600	800	V
Maximum RMS voltage	Vrms	420	560	V
Maximum DC blocking voltage	Vdc	600	800	V
Maximum average forward rectified output current at Tc = 100℃ (Note 1/2)	If(av)	6.0		A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	175		A
Maximum instantaneous forward voltage drop per leg at 6.0A	Vf	1.0		V
Rating for fusing (t < 8.3ms)	I^2t	127		A^2Sec
Maximum DC reverse current at Ta = 25°C rated DC blocking voltage per leg Ta = 125°C	Ir	5.0 500		μA
Typical junction capacitance per leg at 4V,1MHz	Cj	94		pF
Maximum thermal resistance per leg (Note1/2)	Rth(ja) Rth(jc)	7.4 2.2		℃/W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150		℃

Note:
1. Unit case mounted on 2.6 x 1.4 x 0.06" thick (6.5 x3.5 x 0.15cm) Al. Plate heatsink
2. Units mounted in free air, no heatsink on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

Fig. 1 – Derating Curve Output Rectified Current

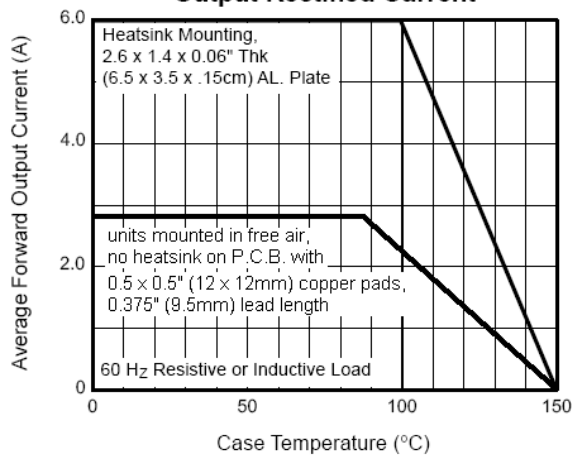


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

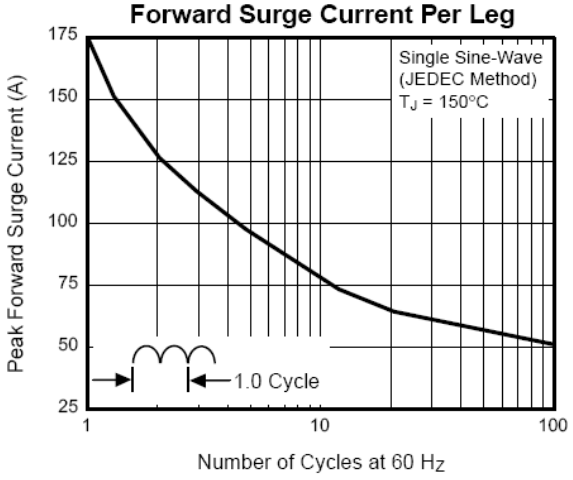


Fig. 3 – Typical Forward Characteristics Per Leg

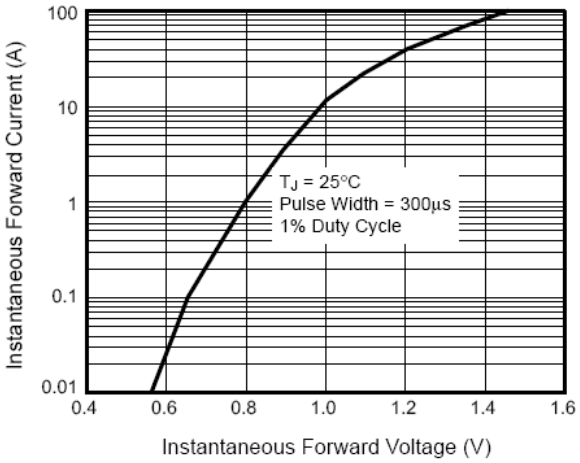


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

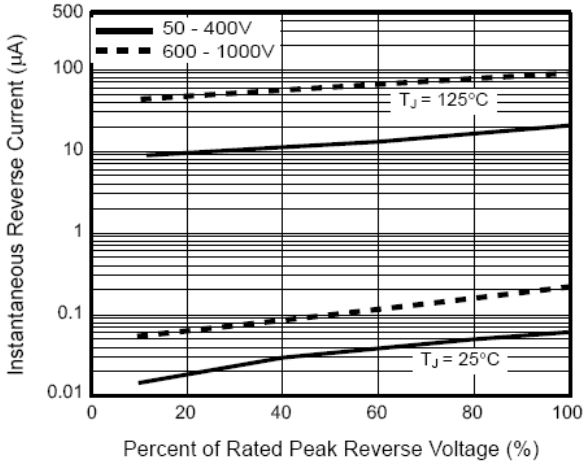


Fig. 5 – Typical Junction Capacitance Per Leg

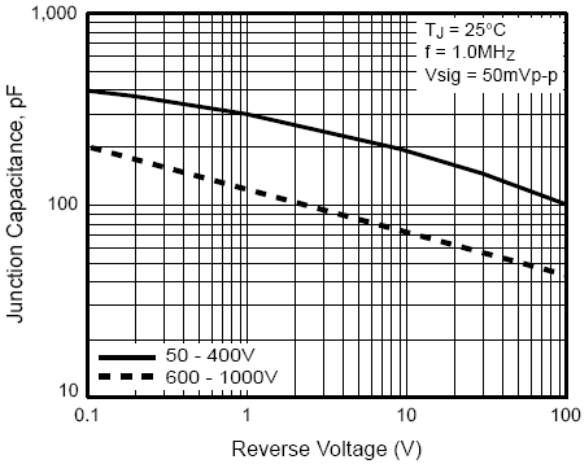


Fig. 6 – Typical Transient Thermal Impedance