GBU15A-E THRU GBU15M-E

SINGLE PHASE GLASS PASSIVATED BR IDGE RECTIFIER

Voltage: 50 to 1000V Current: 15.0A

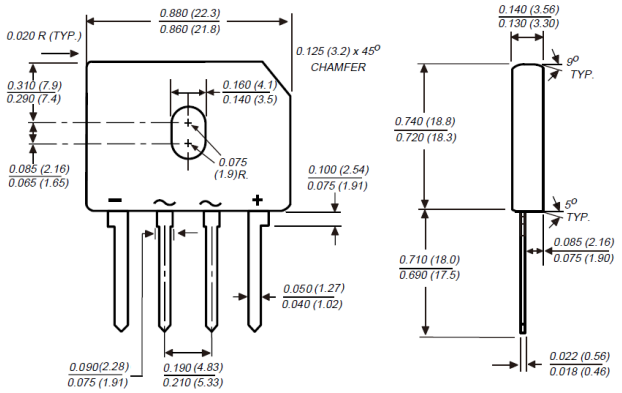
Features

Ideal for printed circuit board
Glass passivated chip junction
High case dielectric strength
High surge overload rating
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

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	GBU 15A-E	GBU 15B-E	GBU 15D-E	GBU 15G-E	GBU 15J-E	GBU 15K-E	GBU 15M-E	units
Maximum repetitive peak reverse voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at Tc = 100℃ (Note 1)	If(av)	15.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	280							A
Maximum instantaneous forward voltage drop per leg at 7.5A	Vf	1.1							V
Rating for fusing (t < 8.3ms)	I^2t	166							A^2Sec
Maximum DC reverse current at Ta = 25°C rated DC blocking voltage per leg Ta = 125°C	Ir	10.0 500							μA
Maximum thermal resistance per leg (Note2) (Note3)	Rth(ja) Rth(jc)	35 1.5							℃/W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150							℃

Note:
1. with heatsink
2. without heatsink
3. with heatsink

Fig. 1 – Derating Curve Output Rectified Current

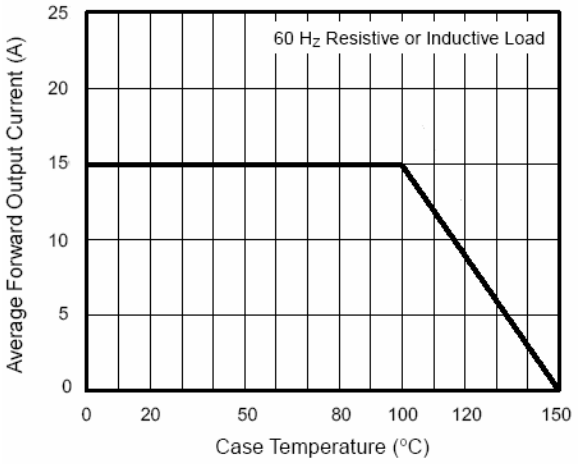


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

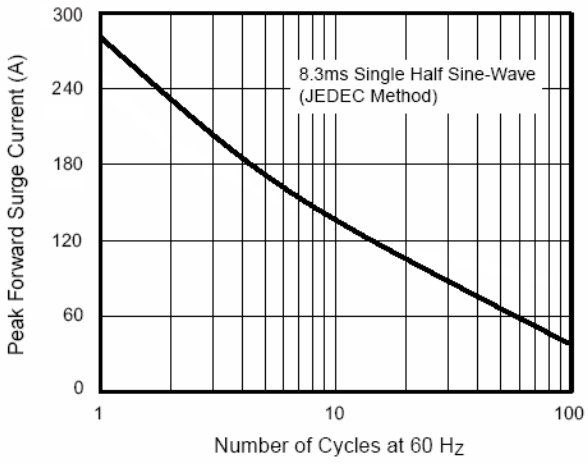


Fig. 3 – Typical Forward Characteristics Per Leg

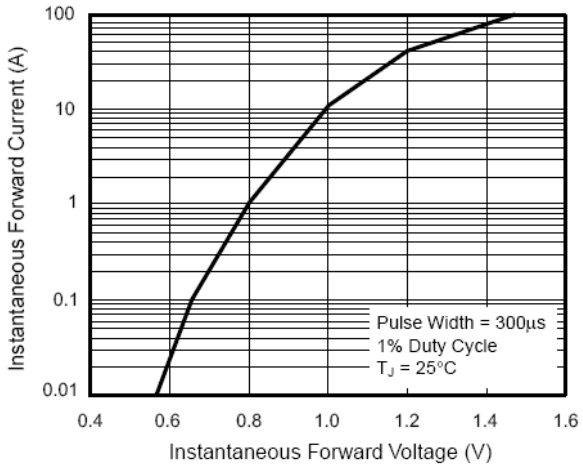


Fig. 4 – Typical Reverse Characteristics Per Leg

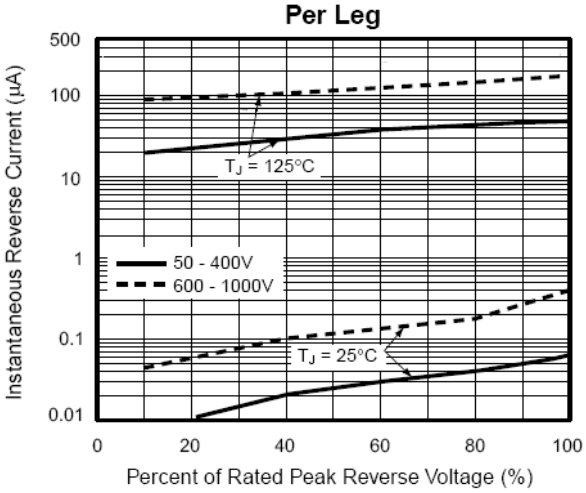


Fig. 5 – Typical Junction Capacitance Per Leg