GBU10VK-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 800V Current: 10.0A

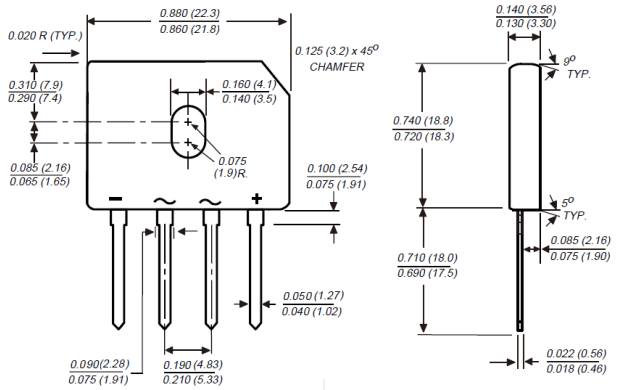
Features

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

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	GBU10VK-E	units
Maximum repetitive peak reverse voltage	Vrrm	800	V
Maximum RMS voltage	Vrms	560	V
Maximum DC blocking voltage	Vdc	800	V
Maximum average forward rectified output current at Tc = 80℃ (Note 1)	If(av)	10.0	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	250	A
Maximum instantaneous forward voltage drop per leg at 5A	Vf	0.92	V
Rating for fusing (t < 8.3ms)	I^2t	260	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	123	pF
Maximum thermal resistance (Note1)	Rth(jc) Rth(jl) Rth(ja)	4.0 1.8 8.0	℃/W
Maximum thermal resistance (Note2)	Rth(jc) Rth(jl) Rth(ja)	10 5.5 30	℃/W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150	℃

Note:
1. Unit mounted on 150 mm x 150 mm x 2 mm Cu Plate Heatsink
2. Without heatsink

RATINGS AND CHARACTERISTIC CURVES GBU10VK-E

Fig. 1 – Derating Curve Output Rectified Current

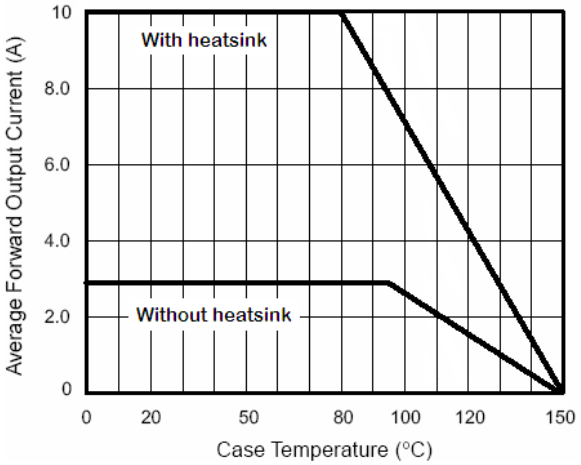


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

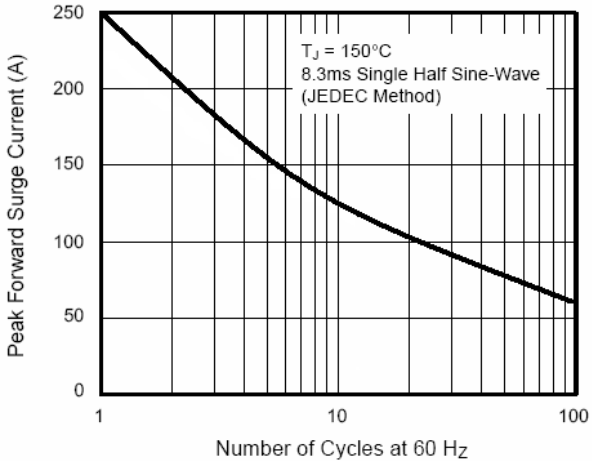


Fig. 3 – Typical Forward Characteristics Per Leg

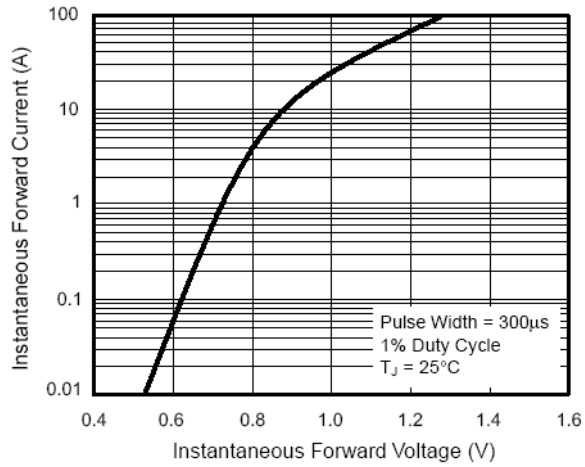


Fig. 4 – Typical Reverse Characteristics Per Leg

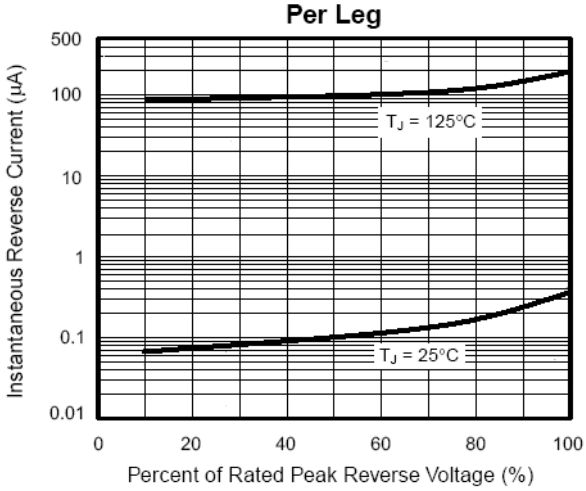


Fig. 5 – Typical Junction Capacitance Per Leg