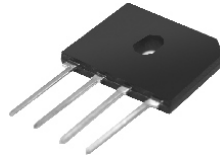




GBU 6005thru GBU 610

6.0 A Single-Phase Silicon Bridge Rectifier

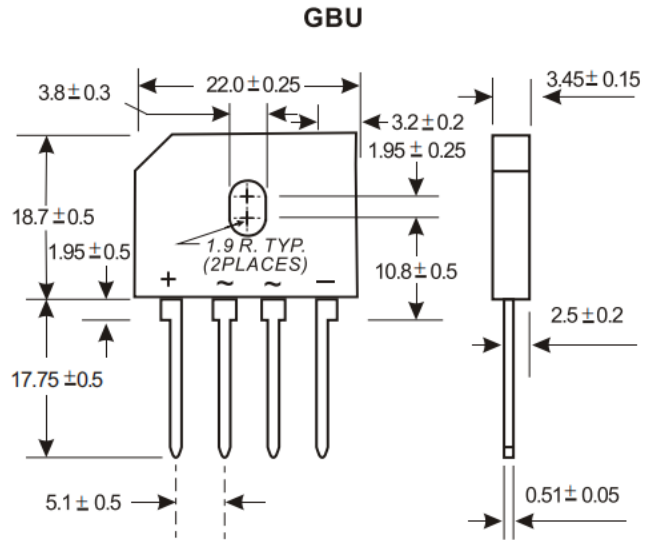


Features

- Ideal for P.C. Board mounting
- High surge current capability
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Molded plastic body
 Terminals: Plated leads solderable per MIL-STD-202, Method 208
 Polarity: Polarity symbols molded on body
 Mounting Position:: Any
 Mounting Torque: 5 in-lbs max.
 Weight: 3.8 grams (approx)



Dimensions in millimeters(1mm =0.0394")

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
 For Capacitive load derate current by 20%.

Parameter	Symbol	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input 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 TA=100°C	IF(AV)	6							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	220							A
Rating for fusing (t<8.3ms)	I ² t	200							A ² sec
Typical thermal resistance per element(1)	ReJA	2.2							°C / W
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
 For Capacitive load derate by 20 %.

		GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	
Maximum instantaneous forward voltage drop per leg at 10.0A	Symbol	1.05							Unit
Maximum DC reverse current at rated TA =25°C	IR	5.0							μA
DC blocking voltage per element TA =125°C		500							

Notes: (1) Thermal resistance from Junction to Ambient on P.C.board mounting.



GBU 6005thru GBU 610

6.0 A Single-Phase Silicon Bridge Rectifier

Rating and Characteristic Curves ($T_A = 25^{\circ}\text{C}$ Unless otherwise noted)

GBU6005 thru GBU610

Fig. 1 Derating Curve for Output Rectified Current

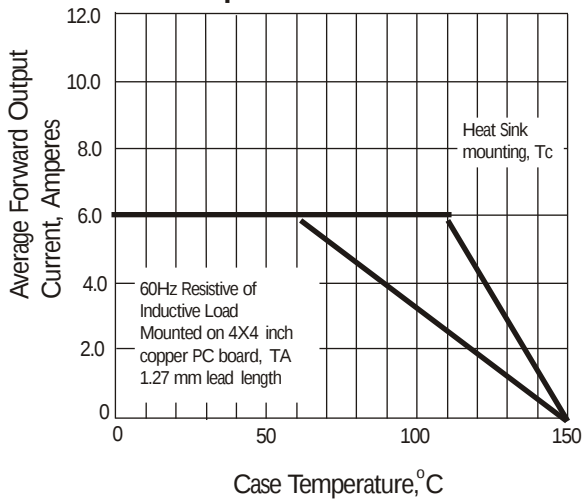


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

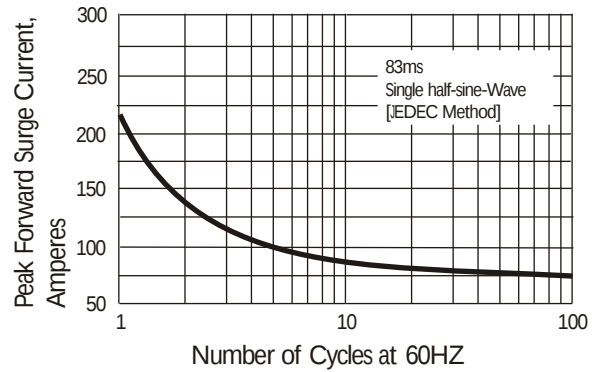


Fig. 3 Typical Instantaneous Forward Characteristics

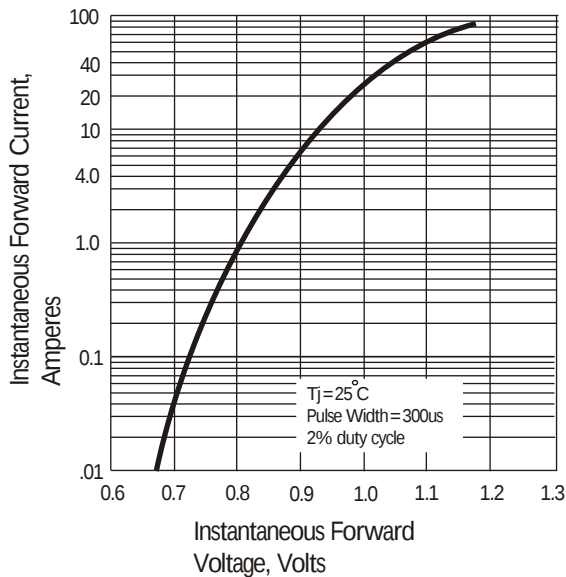


Fig. 4 Typical Reverse Characteristics

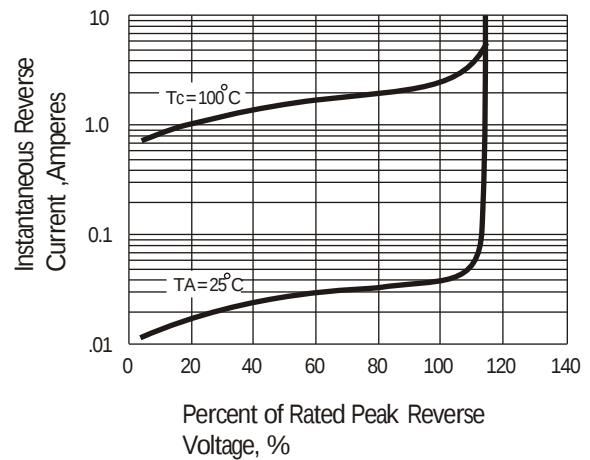


Fig. 5 Typical Junction Capacitance

