

GBU10A THRU GBU10M

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE: FORWARD CURRENT:

50 to 1000 VOLTS 10.0 AMPERE

FEATURES

- · Glass passivated chip junction
- · Reliable low cost construction utilizing molded plastic technique
- · Ideal for printed circuit board
- · Low forward voltage drop
- · Low reverse leakage current
- · High surge current capability

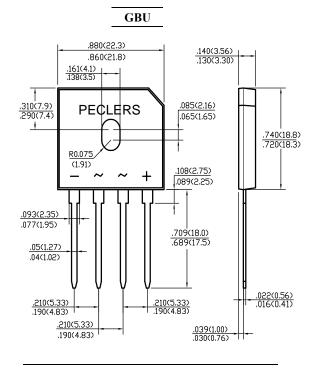
MECHANICAL DATA

Case: Molded plastic, GBU

Epoxy: UL 94V-O rate flame retardant

Terminals: Leads solderable per MIL-STD-202,

method 208 guaranteed Mounting position: Any Weight: 0.15ounce, 4.0gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

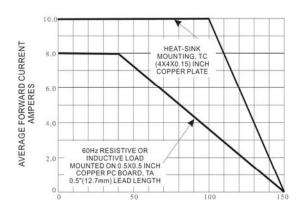
	Symbols	GBU10A	GBU10B	GBU10D	GBU10G	GBU10J	GBU10K	GBU10M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward	$I_{(AV)}$	10.0							A
Rectified Current at T _C =100°C					10.0			Amp	
Peak Forward Surge Current,									
8.3ms single half-sine-wave	I_{FSM}				200				Amp
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage	V_{F}	1.0							Volts
at 5.0A DC and 25 ℃									
Maximum Reverse Current at T _A =25°C	т	5.0 500							uAmp
at Rated DC Blocking Voltage TA=125°C	I_R								
Typical Junction Capacitance (Note 3)	C_{J}	255 125						pF	
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	8.6							°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	3.1							°C/W
Operating and Storage Temperature Range	T _J , Tstg	-55 to +150							ပ

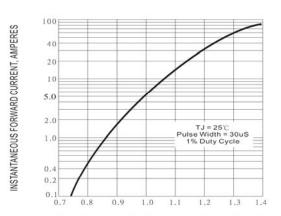
NOTES:

- 1- Units Mounted in free air, no heatsink, P.C.B at 0.375"(9.5mm) lead length with 0.5 x 0.5"(12 x 12mm)copper pads.
- 2- Units Mounted on a 2.6 x 1.4" x 0.06" thick (6.5 x 3.5 x 0.15cm) AL plate.
- 3- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 4- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws

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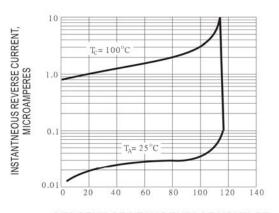
RATINGS AND CHARACTERISTIC CURVES





INSTANTANEOUS FORWARD VOLTAGE, VOLTS

Fig.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT



PERCENT OF PEAK REVERSE VOLTAGE

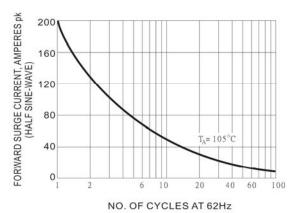
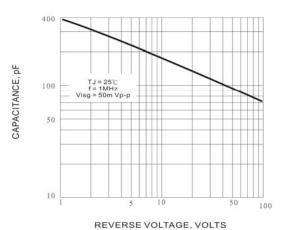


Fig.4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT





REVERSE VOLIAGE, VOLIS

Fig.5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT