PECLERS[®]

GBU15005 THRU GBU1510

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE: FORWARD CURRENT:

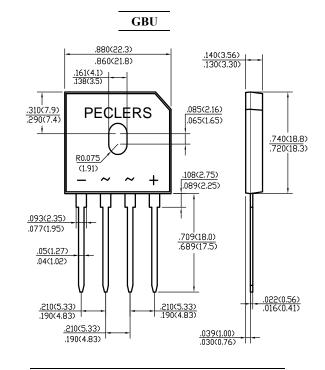
50 to 1000 VOLTS 15.0 AMPERE

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, $60H_Z$, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbols	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510	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	T	15.0							Amp
Rectified Current at T _C =100°C	I _(AV)								
Peak Forward Surge Current,									
8.3ms single half-sine-wave	I _{FSM}	I _{FSM} 240						Amp	
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage	V _F	1.0							Volts
at 7.5A DC and 25 °C	۷F								
Maximum Reverse Current at T _A =25℃	Т	5.0 500							uAmp
at Rated DC Blocking Voltage T _A =125°C	I _R								
Typical Junction Capacitance (Note 2)	CJ	70							pF
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$				2.2				°C/W
Operating and Storage Temperature Range	T _J , Tstg				-55 to +15	0			ĉ

NOTES:

1- Units Mounted on a 2.6 x 1.4" x 0.06" thick ($6.5 \ x \ 3.5 \ x \ 0.15 cm)$ AL plate.

2- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

3- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws

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FIG.2- DERATING CURVE

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RATINGS AND CHARACTERISTIC CURVES

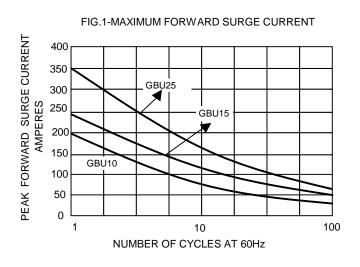


FIG.3-TYPICAL FORWARD CHARACTERISTICS GBU15 100 GBU25 GBU10 INSTANTANEOUS FORWARD CURRENT, 10 AMPERES 1.0 0.1 0.01 1.4 1.6 0.8 1.0 1.2 0.4 0.6

INSTANTANEOUS FORWARD VOLTAGE, VOLTS

OUTPUT RECTIFIED CURRENT 40 30 GBU25 GBU15 GBU10 10

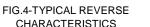
50

CASW

AVERAGR FORWARD OUTPUT CURRENT

AMPERES

0



100

150

