

■ Features

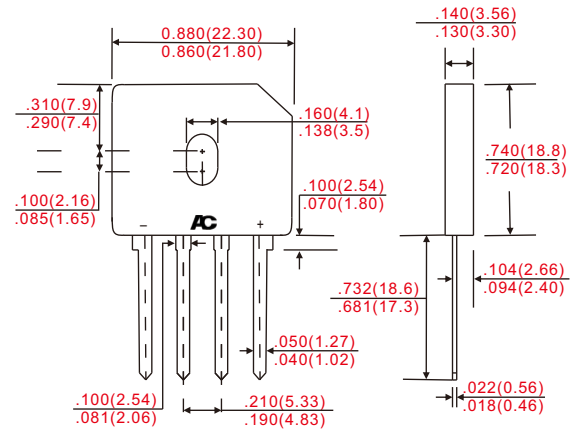
- Surge overload ratings to 240 amperes peak.
- Recommended for non-automatic applications.
- Ideal for & save space on printed circuit board.
- Applicable for automatic insertion.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex. GBU15005G.
- Lead-free parts meet RoHS requirements.

■ Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, GBU
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body
- Weight : Approximated 4.0 gram

■ Outline

GBU



■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	with heatsink $T_c = 80^\circ\text{C}$	I_o			15	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			200	A
Reverse current	$V_R = V_{RRM}$, $T_A = 25^\circ\text{C}$	I_R			10	uA
	$V_R = V_{RRM}$, $T_A = 125^\circ\text{C}$				500	
Current squared time	$t < 8.3\text{ms}$, $T_J = 25^\circ\text{C}$	I^2t			166	A ² S
Thermal resistance	Junction to case with heatsink	R_{BJC}			2.2	°C/W
Storage temperature		T_{STG}	-55		+150	°C

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @7.5A, $T_A = 25^\circ\text{C}$ V_F (V)	Operating Junction temperature T_J (°C)
GBU15005	GBU15005	50	35	50	1.1	-55 ~ +150
GBU1501	GBU1501	100	70	100		
GBU1502	GBU1502	200	140	200		
GBU1504	GBU1504	400	280	400		
GBU1506	GBU1506	600	420	600		
GBU1508	GBU1508	800	560	800		
GBU1510	GBU1510	1000	700	1000		

Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

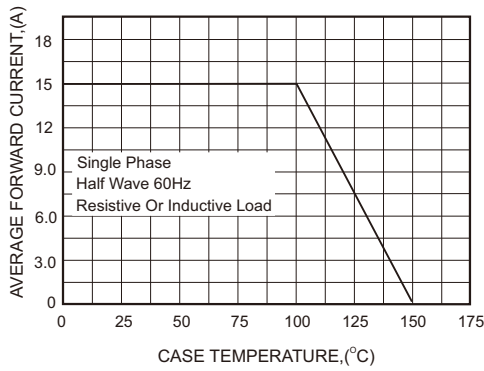


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

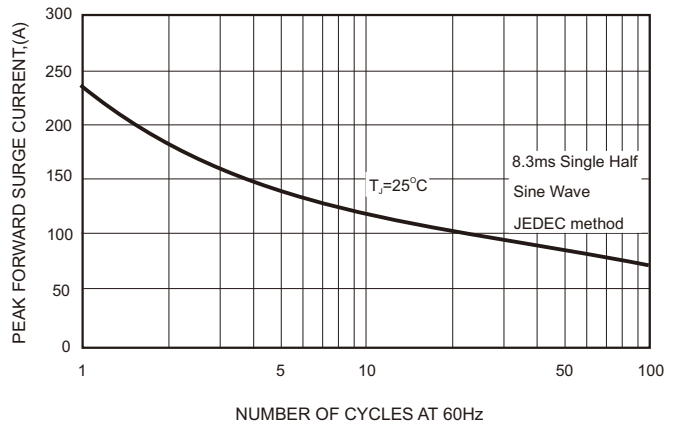


Fig. 3 - Typical Instantaneous Forward Characteristics (Per Leg)

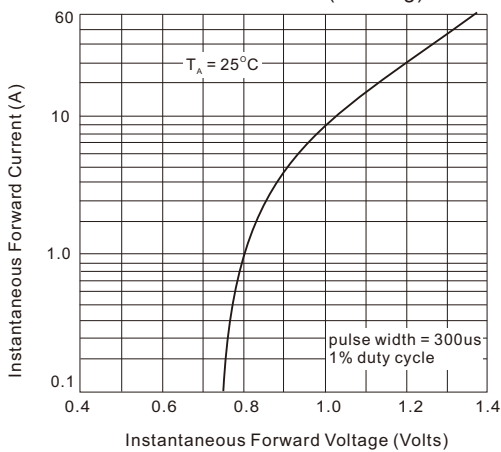
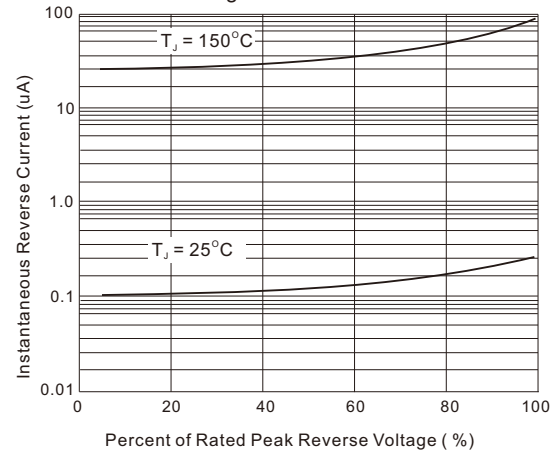


Fig. 4 - Typical Reverse Characteristics Per Leg



■ Ordering/Packing information

	Part number	Case	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Halogen	GBU2005 Series	GBU	300	3000
Halogen free	GBU2005G Series			

Notes : 1. For packaging details please reference our website at <http://www.citcorp.com.tw/tchinese/products/index.php>

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