

### ■ Features

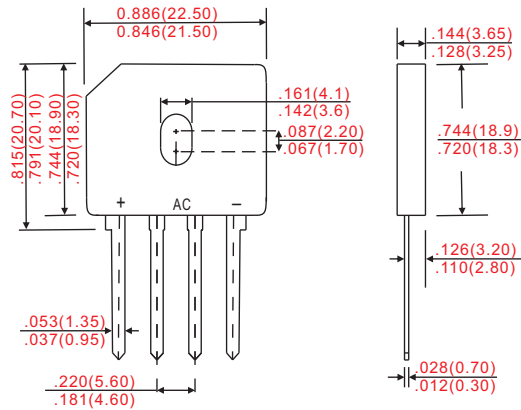
- Surge overload ratings to 200 amperes peak.
- Recommended for non-automatic applications.
- Ideal for & save space on printed circuit board.
- Applicable for automatic insertion.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex. GBU8005G.
- 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



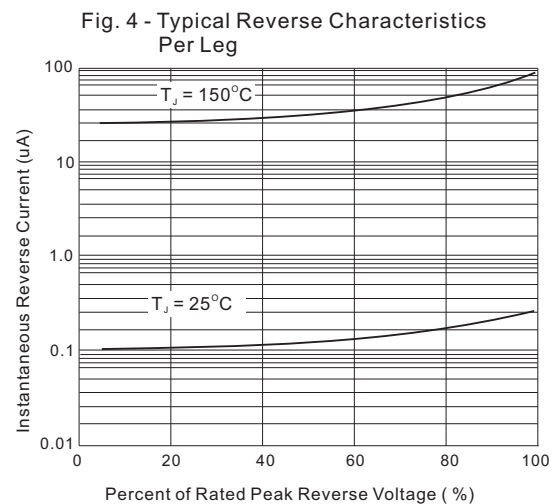
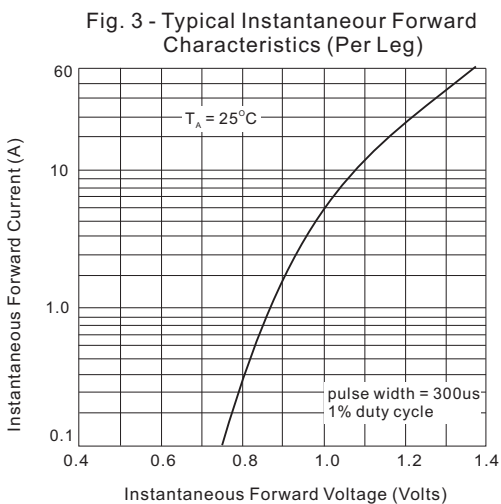
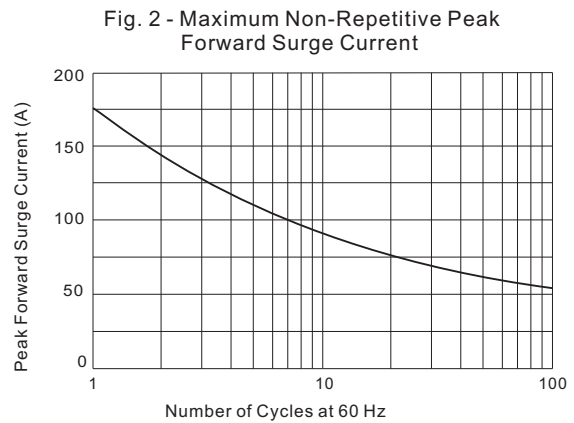
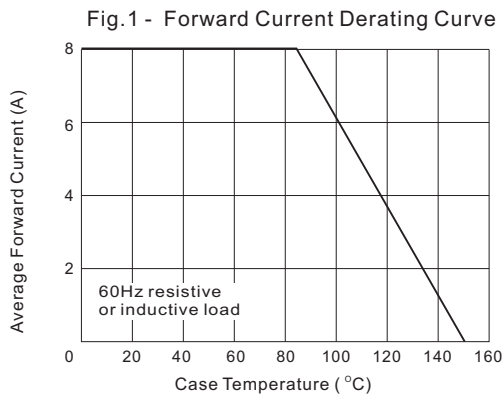
### ■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	with heatsink $T_c = 82^\circ\text{C}$	$I_o$			8.0	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	$\text{A}^2\text{S}$
Thermal resistance	junction to ambient	$R_{BJA}$			25	$^\circ\text{C}/\text{W}$
Storage temperature		$T_{STG}$	-55		+150	$^\circ\text{C}$

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 @4A, $T_A = 25^\circ\text{C}$ $V_F$ (V)	Operating temperature $T_j$ ( $^\circ\text{C}$ )
GBU8005	GBU8005	50	35	50	1.1	-55 ~ +150
GBU801	GBU801	100	70	100		
GBU802	GBU802	200	140	200		
GBU804	GBU804	400	280	400		
GBU806	GBU806	600	420	600		
GBU808	GBU808	800	560	800		
GBU810	GBU810	1000	700	1000		

■ Rating and characteristic curves



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