

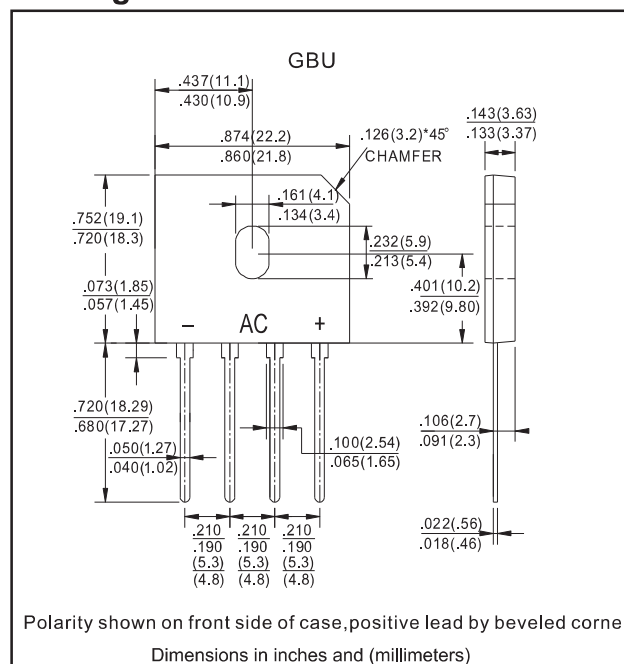
Features

- Surge overload ratings to 150 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.
- Lead-free parts meet RoHS requirements.
- Suffix "-H" indicates Halogen free parts.

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
- Mounting Position : Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	at $T_C=100^{\circ}\text{C}$ Note 1	I_O			4.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			150	A
Reverse current	$V_R = V_{RRM} \quad T_J = 25^{\circ}\text{C}$	I_R			5.0	uA
	$V_R = V_{RRM} \quad T_J = 125^{\circ}\text{C}$				500	
I^2t Rating for fusing	$t < 8.3 \text{ ms}$	I^2t			93	A^2s
Typical Junction capacitance per element	Measured at 1.0MHz and applied reverse voltage of 4.0 VDC	C_J		45		pF
Typical thermal resistance	Junction to case	$R_{\theta JC}$		2.2		$^{\circ}\text{C/W}$
Storage temperature		T_{STG}	-65		+175	$^{\circ}\text{C}$

Note 1. Device mounted on 50mm*50mm*1.6mm Cu plate heatsink.

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature $T_J, (^{\circ}\text{C})$
GBU4005	50	35	50	1.0	-55 to +150
GBU401	100	70	100		
GBU402	200	140	200		
GBU404	400	280	400		
GBU406	600	420	600		
GBU408	800	560	800		
GBU410	1000	700	1000		

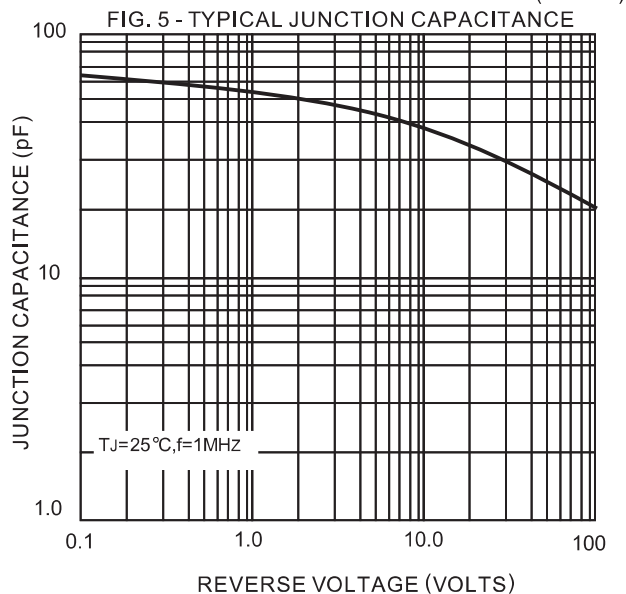
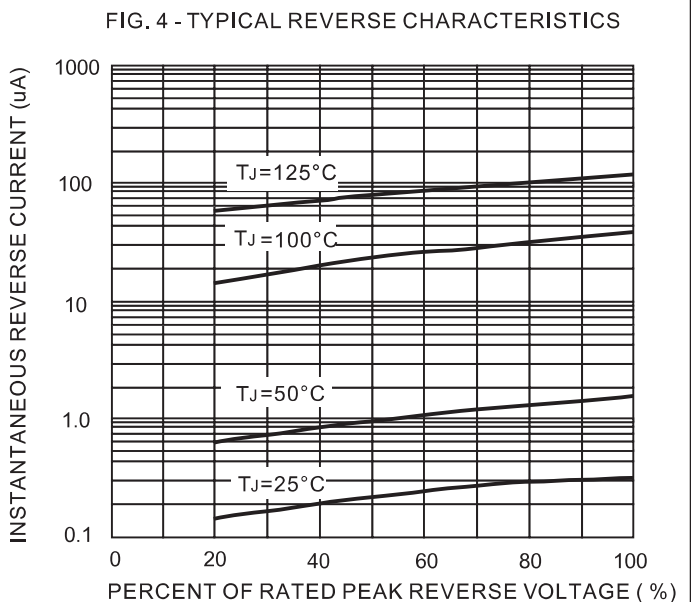
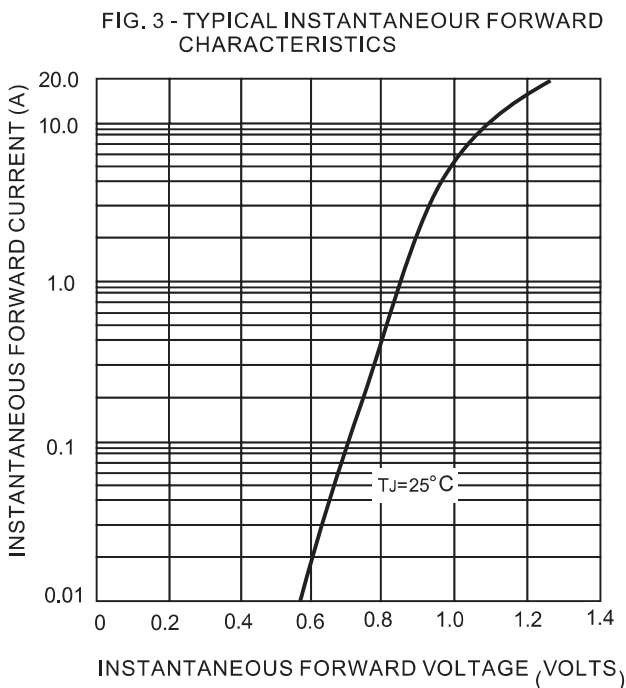
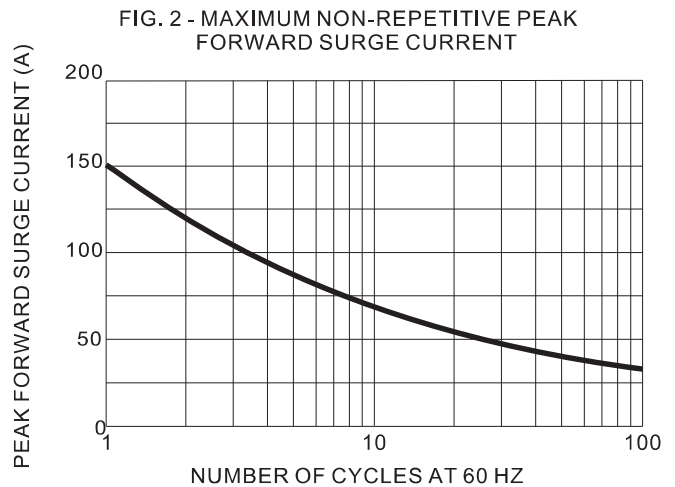
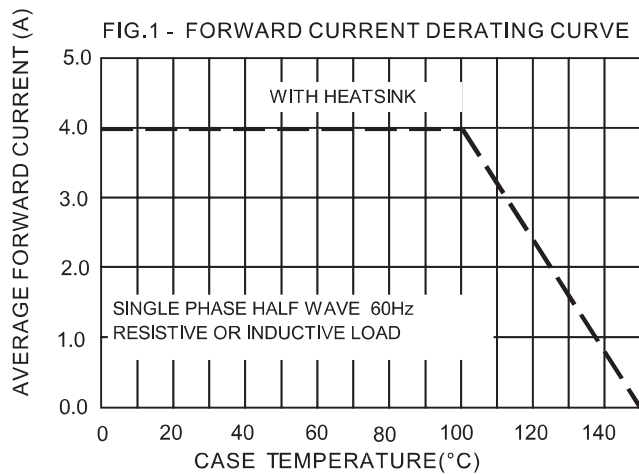
*1 Repetitive peak reverse voltage

*2 RMS voltage

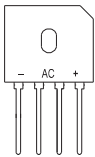
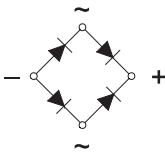
*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=2.0\text{A}$

Rating and characteristic curves (GBU4005 THRU GBU410)



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
GBU4005	GBU4005
GBU401	GBU401
GBU402	GBU402
GBU404	GBU404
GBU406	GBU406
GBU408	GBU408
GBU410	GBU410