

35.0A Glass Passivated Single Phase Bridge Rectifiers - 50 - 1000V

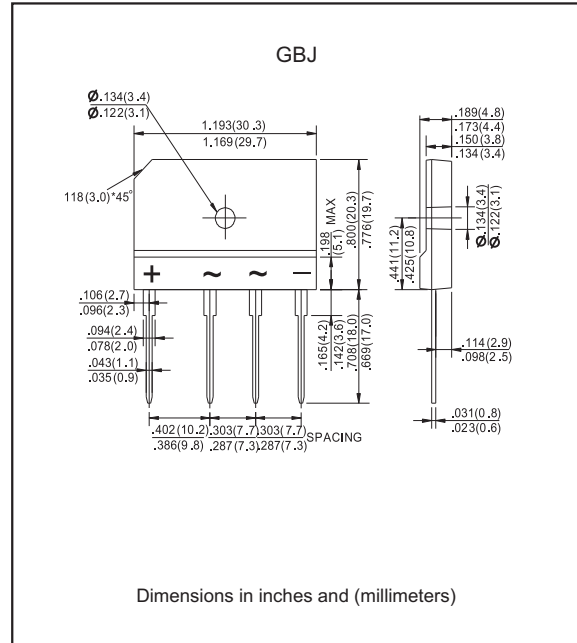
Features

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Glass passivated chip junction.
- Lead-free parts meet RoHS requirements.
- Suffix "-H" indicates Halogen free parts, ex. GBJ35005-H.

Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, GBJ
- 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
Maximum average forward rectified current	with heatsink Note 1	$I_{F(AV)}$			35.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			400	A
Reverse current	$V_R = V_{RRM}$ $T_J = 25^{\circ}\text{C}$	I_R			5.0	μA
	$V_R = V_{RRM}$ $T_J = 125^{\circ}\text{C}$				500	
Rating for fusing	$t < 8.3$ ms	I^2t			510	A^2s
Typical Junction capacitance Per Element	Measured at 1.0MHz and applied reverse voltage of 4.0V DC	C_J		85		pF
Typical thermal resistance	Junction to case	$R_{\theta JC}$		1.0		$^{\circ}\text{C}/\text{W}$
Storage temperature		T_{STG}	-65		+175	$^{\circ}\text{C}$

Note: 1. Device mounted on 100mm*50mm*30mm Cu plate heatsink.

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^{\circ}\text{C}$)
GBJ35005	50	35	50	1.0	-55 to +150
GBJ3501	100	70	100		
GBJ3502	200	140	200		
GBJ3504	400	280	400		
GBJ3506	600	420	600		
GBJ3508	800	560	800		
GBJ3510	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=17.5\text{A}$

Rating and characteristic curves (GBJ35005 THRU GBJ3510)

FIG.1-FORWARD CURRENT DERATING CURVE

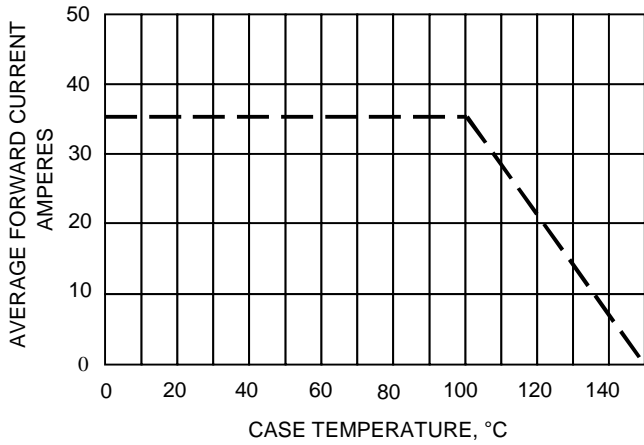


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

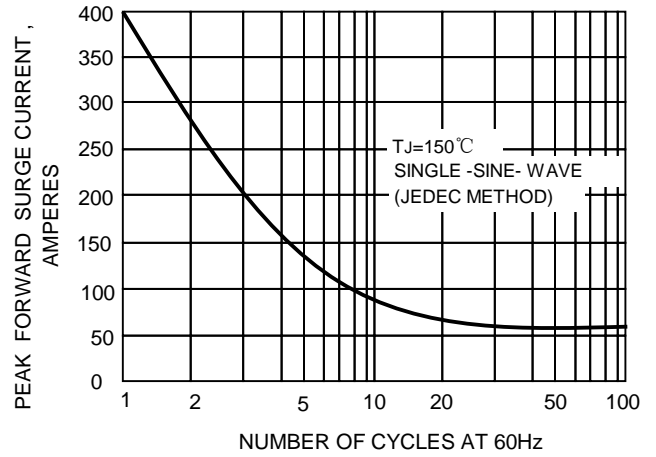


FIG.3-TYPICAL REVERSE CHARACTERISTICS

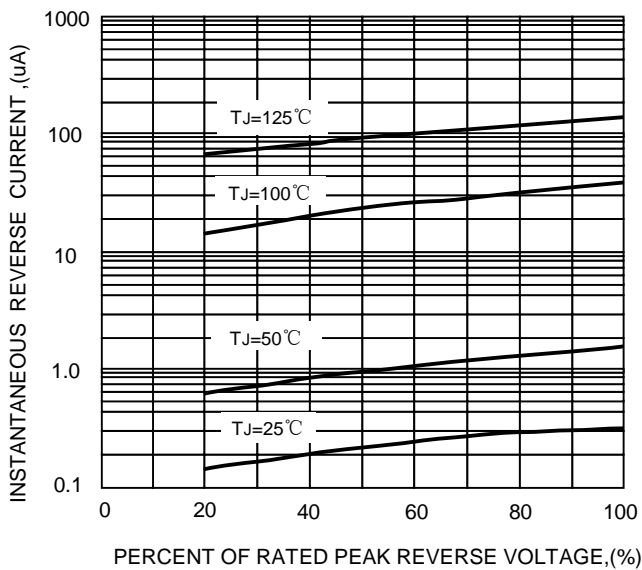
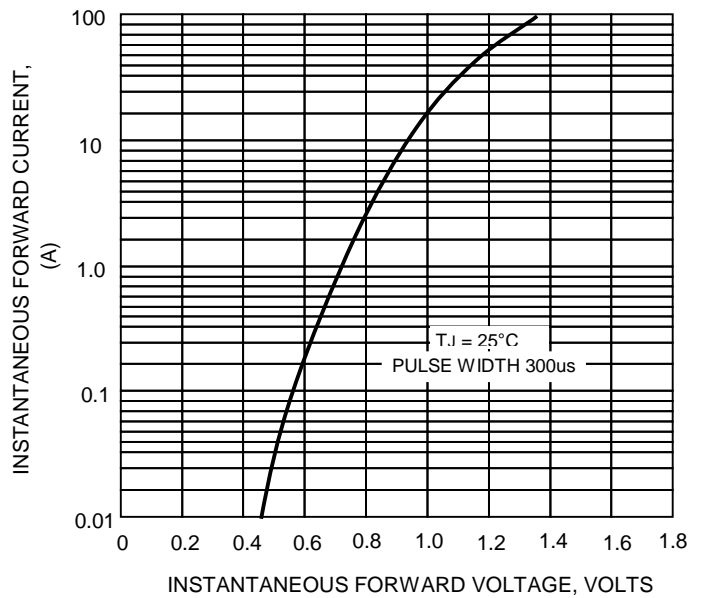
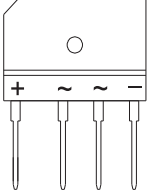
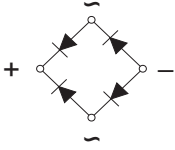


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
GBJ35005	GBJ35005
GBJ3501	GBJ3501
GBJ3502	GBJ3502
GBJ3504	GBJ3504
GBJ3506	GBJ3506
GBJ3508	GBJ3508
GBJ3510	GBJ3510