

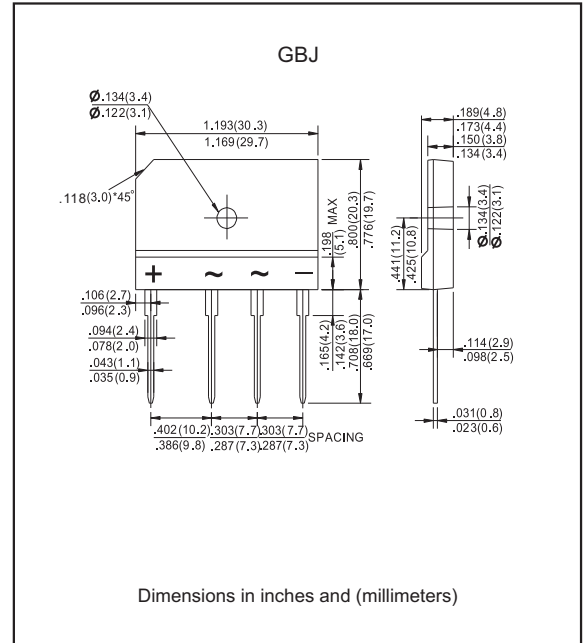
Features

- 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. GBJ1510-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	$I_{F(AV)}$			15.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC method)	I_{FSM}			240	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			240	A^2s
Typical Junction capacitance Per Element	Measured at 1.0MHz and applied reverse voltage of 4.0V DC	C_J		60		pF
Typical thermal resistance	Junction to case	$R_{\theta JC}$		0.8		$^\circ\text{C/W}$
Storage temperature		T_{STG}	-65		+175	$^\circ\text{C}$

Note: 1. Device mounted on 300mm*300mm*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 , ($^\circ\text{C}$)
GBJ15005	50	35	50	1.0	-55 to +150
GBJ1501	100	70	100		
GBJ1502	200	140	200		
GBJ1504	400	280	400		
GBJ1506	600	420	600		
GBJ1508	800	560	800		
GBJ1510	1000	700	1000		

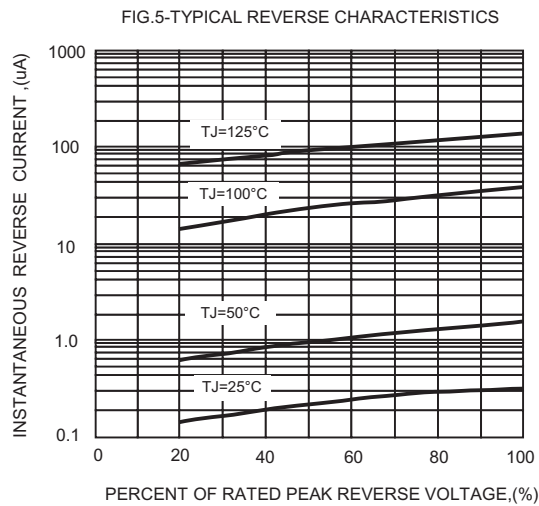
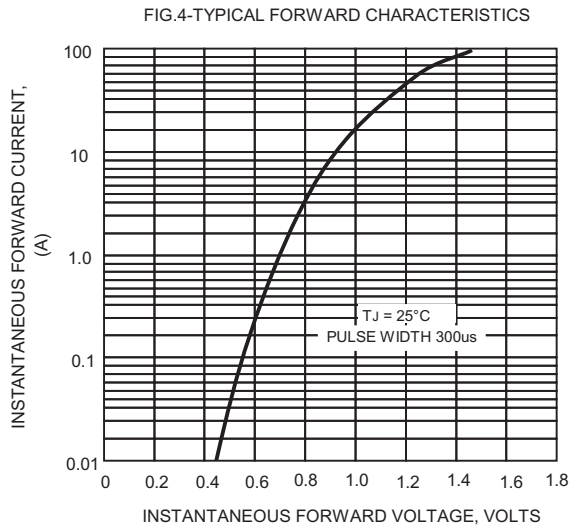
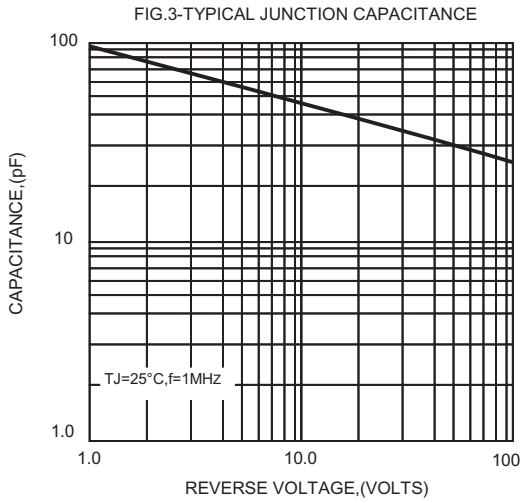
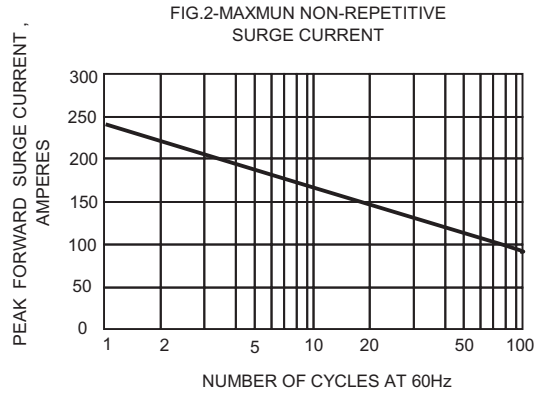
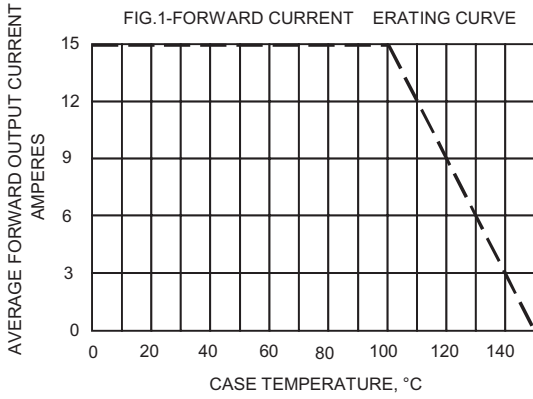
*1 Repetitive peak reverse voltage

*2 RMS voltage

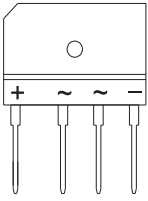
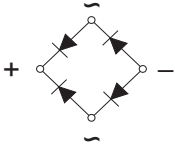
*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=7.5\text{A}$

Rating and characteristic curves (GBJ15005 THRU GBJ1510)



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
GBJ15005	GBJ15005
GBJ1501	GBJ1501
GBJ1502	GBJ1502
GBJ1504	GBJ1504
GBJ1506	GBJ1506
GBJ1508	GBJ1508
GBJ1510	GBJ1510