DESCRIPTION

The GBJ2501~GBJ2510 bridge rectifier are available in GBJ Package.

FEATURE

- Surge Overload Rating-300 Amperes Peak
- Polarity: As Marked on Body
- Ideal for Printed Circuit Board

MECHANICAL DATA

- Case: GBJ
- Terminals: Solderable per MIL-STD-202, Method 208
- Weight: 6.79g / 0.24oz

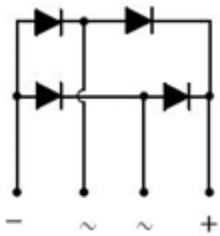
ORDERING INFORMATION

Package Type	Part Number
GBJ	GBJ2501
	GBJ2502
	GBJ2504
	GBJ2506
	GBJ2508
	GBJ2510
Note	SPQ: 250pcs/Box
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION

GBJ

FUNCTIONAL DIAGRAM



Pin #	Description
1	Output pin **+**
2	Input Pin **~**
3	Input Pin **~**
4	Output pin **-**

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

T_A = 25℃ unless otherwise noted

Parameter		Symbol	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_A =85℃		$I_{F(AV)}$	25						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	300						A
Forward Voltage Per Leg @I_{FM} =15A DC		V_F	1.10						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J=25°C	I_R	5						μA
	T_J=125°C		500						
12t Rating for Fusing(t≤8.3ms)		I^2t	210						A^2S
Typical Junction Capacitance (1)		Cj	85						V
Typical Thermal Resistance (2)		$R_{\theta JC}$	0.60						°C/W
Operating Temperature Range		T_J	-55 ~+150						°C
Storage Temperature Range		T_{STG}	-55 ~+150						°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
(2) Device mounted on 75mm*75mm*1.6mm cu plate heatsink

TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Maximum Forward Current Derating Curve

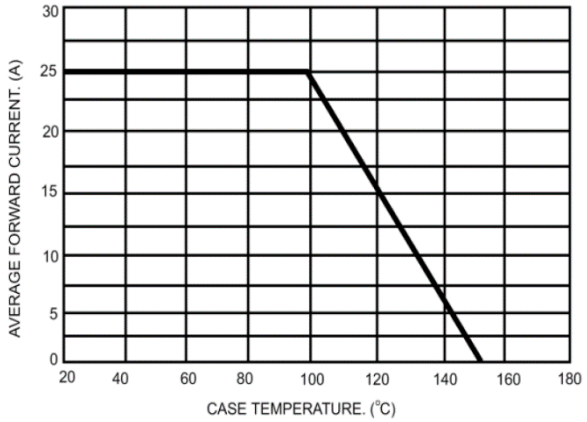


Fig 2. Maximum Non-Repetitive Forward Surge Current Per Bridge Element

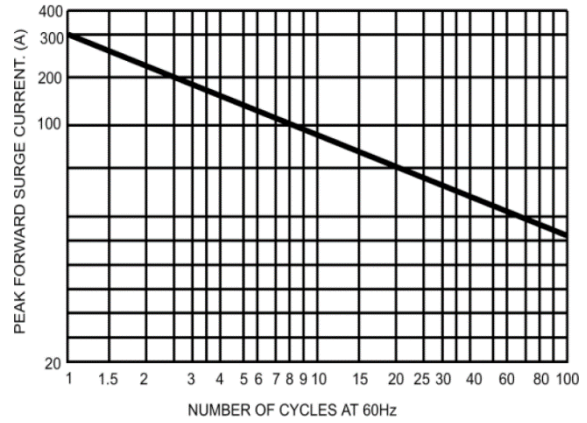


Fig 3. Typical Reverse Characteristics Per Bridge Element

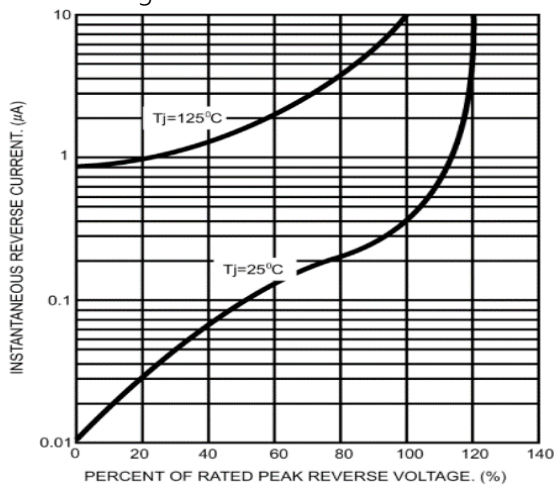
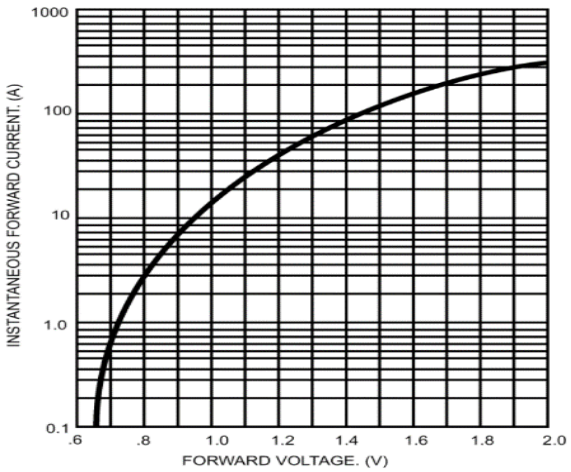
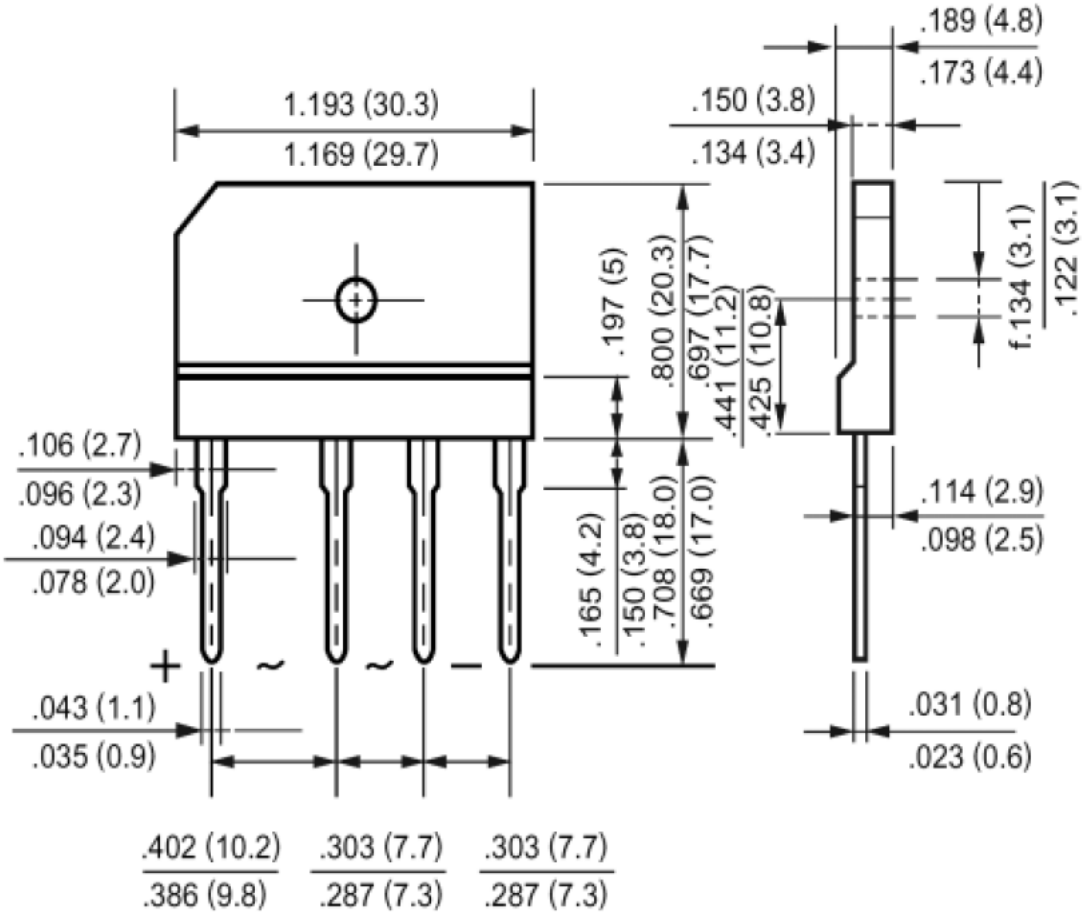


Fig 4. Typical Forward Characteristics Per Bridge Element



PACKAGE INFORMATION

Dimension in GBJ Package



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