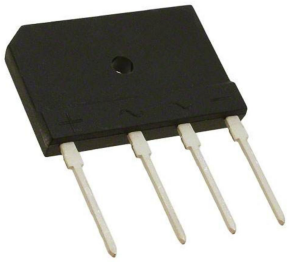
GBJ1001 THRU GBJ1010

SINGLE-PHASE SILICON BRIDGE RECTIFIER

Features

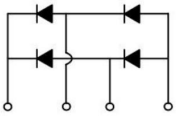
- Glass passivated die construction
- Reverse Voltage - 100 to 1000Volts
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed:
- 265℃/10 seconds, 0.375” (9.5mm) lead length, 5lbs. (2.3kg) tension
- Plastic material has U/L flammability classification 94V-0



Mechanical Data

- Case: Molded plastic case
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Marked on Body
- Mounting postition:Any
- specified.Single phase, half wave ,60Hz, resistive or inductive
- load.For capacitive load, derate current by 20%

Circuit



Maximum Ratings and Electrical Characteristics

- Rating at 25℃ ambient temperature unless otherwise

TYPE NUMBER		SYMBOLS	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	UNIT
Maximum Reverse Peak Repetitive Voltage		V_{RRM}	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, 0.06”(1.5mm) lead length at		$I_{(AV)}$	10.0						Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)		I_{FSM}	180						Amps
Rating for Fusing (t < 8.3ms)		I^2t	188						A^2s
Maximum Instantaneous Forward Voltage drop Per Bridge element 5.0A		V_F	1.0						Volts
Maximum Reverse Current at rated DC blocking voltage per element	TA=25℃	I_R	10						μAmps
	TA=125℃		500						
Typical Junction Capacitance Per Element(Note1)		C_J	211			94			pF
Typical Thermal Resistance (NOTE 2)		$R_{\Theta JC}$	4.3						℃/W
Mounting Torque (Recommended torque:0.5 N.m)		T_{OR}	0.8						N.m
Operating and Storage Temperature Range		T_J ,T_{STG}	(-55 to +150)						℃

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Junction to case with heatsink.
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

Fig.1- Forward Current Derating Curve

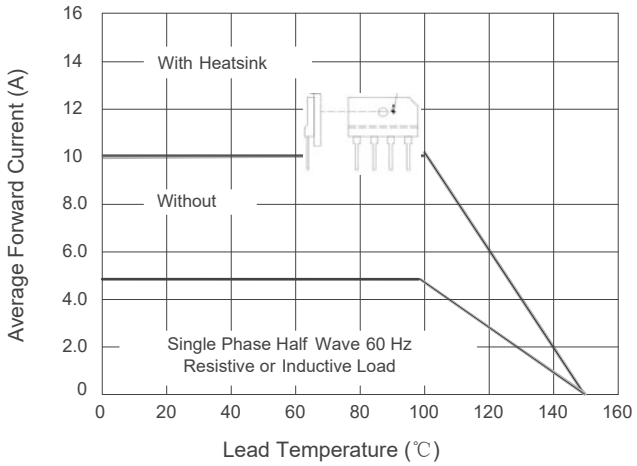


Fig. 2- Maximum Non-Repetitive Peak Forward Surge Current

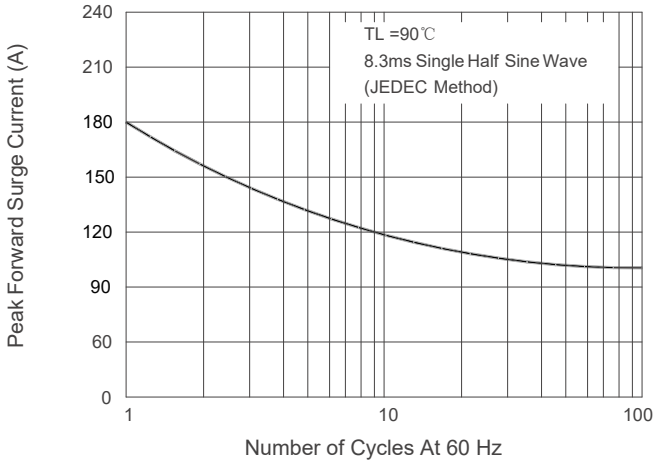


Fig.3-Typical Instantaneous Forward Characteristics

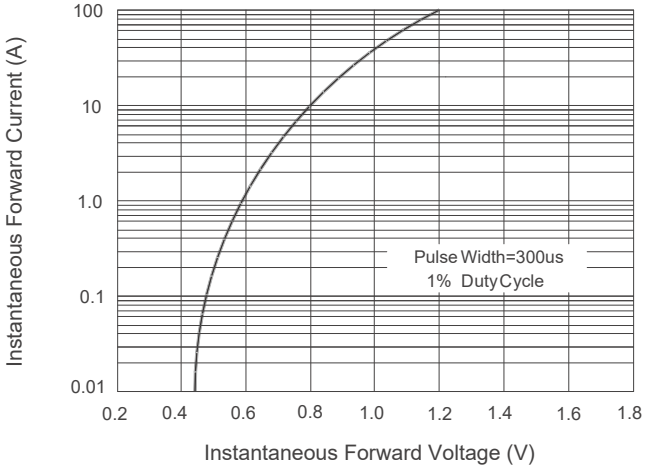


Fig. 4- Typical Reverse Characteristics

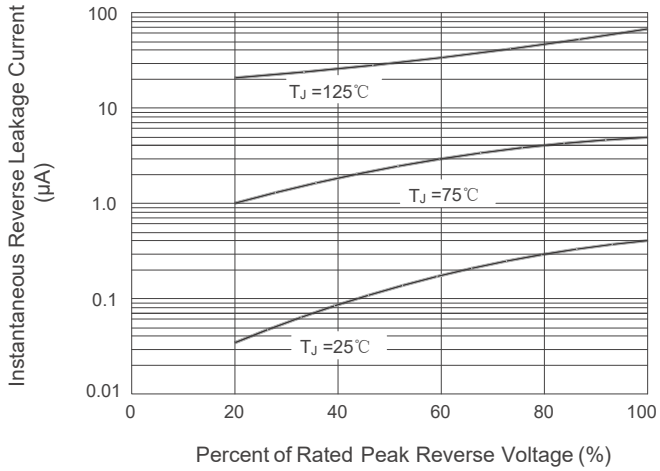
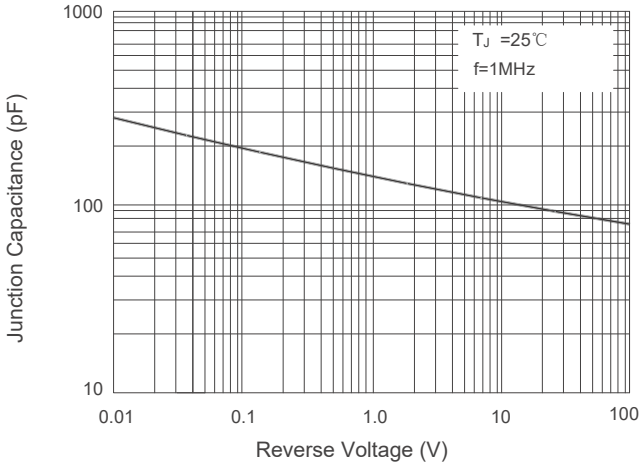
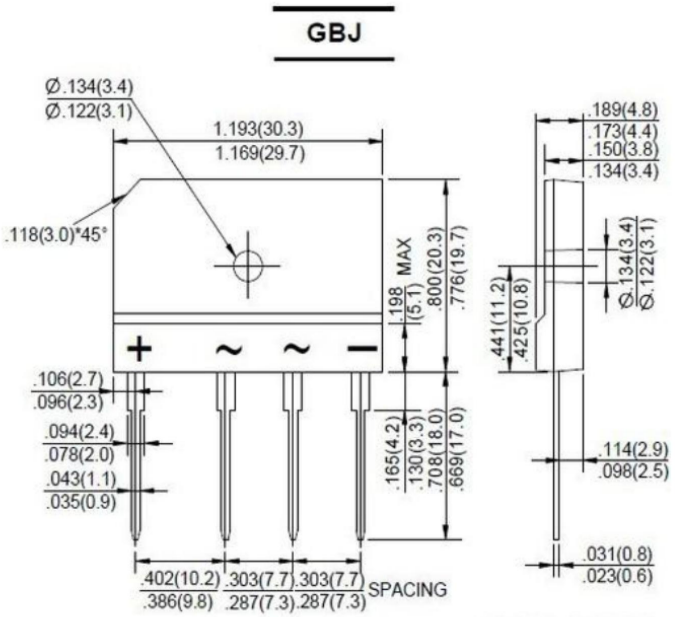


Fig.5- Typical Junction Capacitance



Package Outline Dimensions in inches (millimeters)



Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON	DELIVERY MODE
GBJ	B1	Approximate 3.96	20	1000	2000	TUBE

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