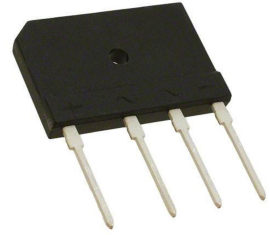


25A Glass Passivated Single-Phase Bridge Rectifiers

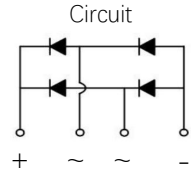
Features

- Glass passivated die construction
- Reverse Voltage - 200 to 1000Volts
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed:
265°C/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 position: Any specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load, derate current by 20%



Bridge Type

TYPE	VRRM	VRSM
GBJ 2502	200V	300V
GBJ 2504	400V	500V
GBJ 2506	600V	700V
GBJ 2508	800V	900V
GBJ 2510	1000V	1100V

Maximum Ratings and Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Conditions	Values	Units
I(AV)	Maximum average forward output rectified current $T_c = 87^\circ\text{C}$	25	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	350	A
I^2t	Rating for fusing ($t < 10\text{ms}$)	330	A
Visol	a.c. 50HZ; r.m.s.; 1min	2500	V
R θ JC	Maximum thermal resistance per leg (1)	1.5	$^\circ\text{C}/\text{W}$
TOR	Mounting Torque (Recommended torque: 0.5 N.m)	0.8	N.m
T _j , TSTG	Operating Junction and storage temperature range	-55 to +150	$^\circ\text{C}$
Weight	Approximate Weight	7	g

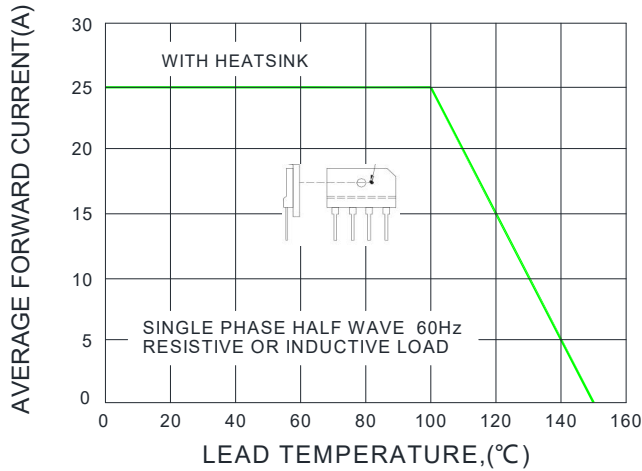
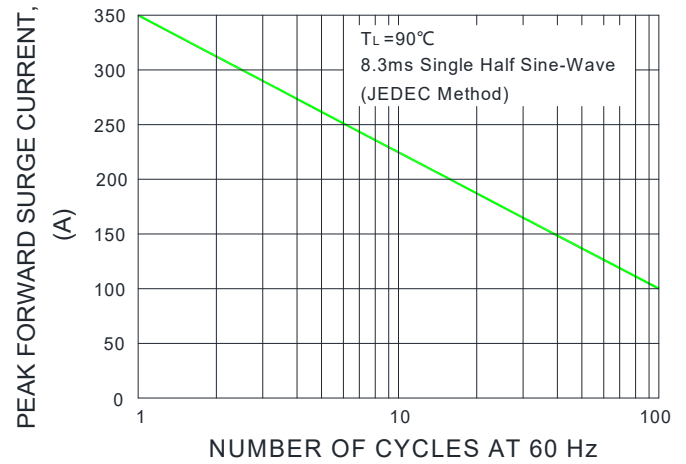
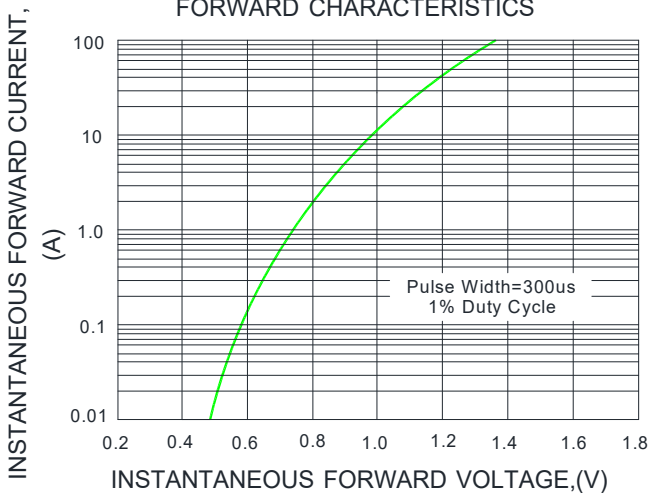
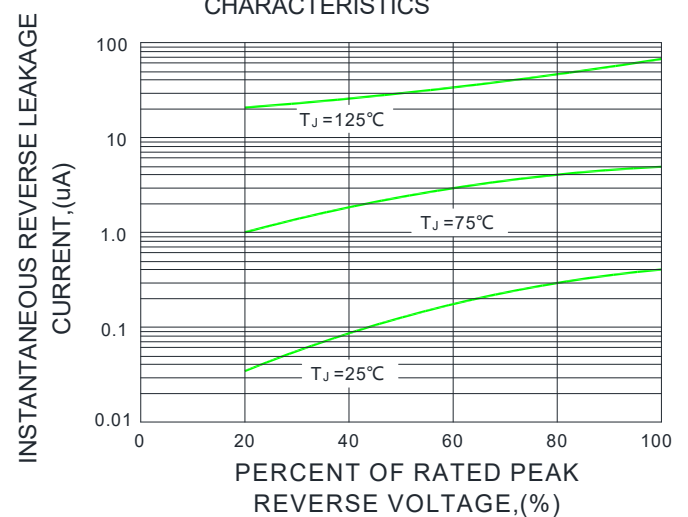
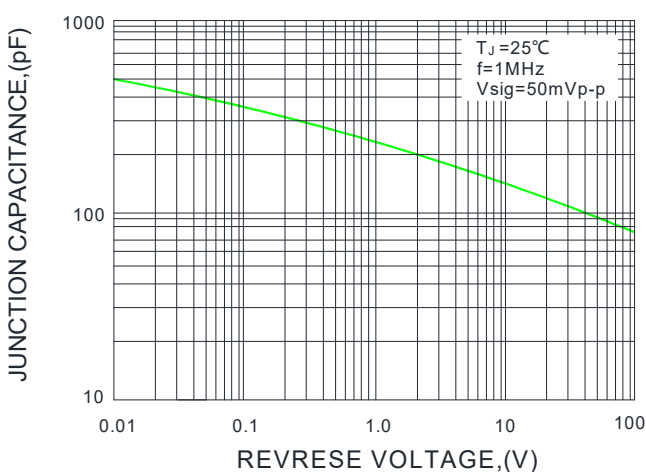
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

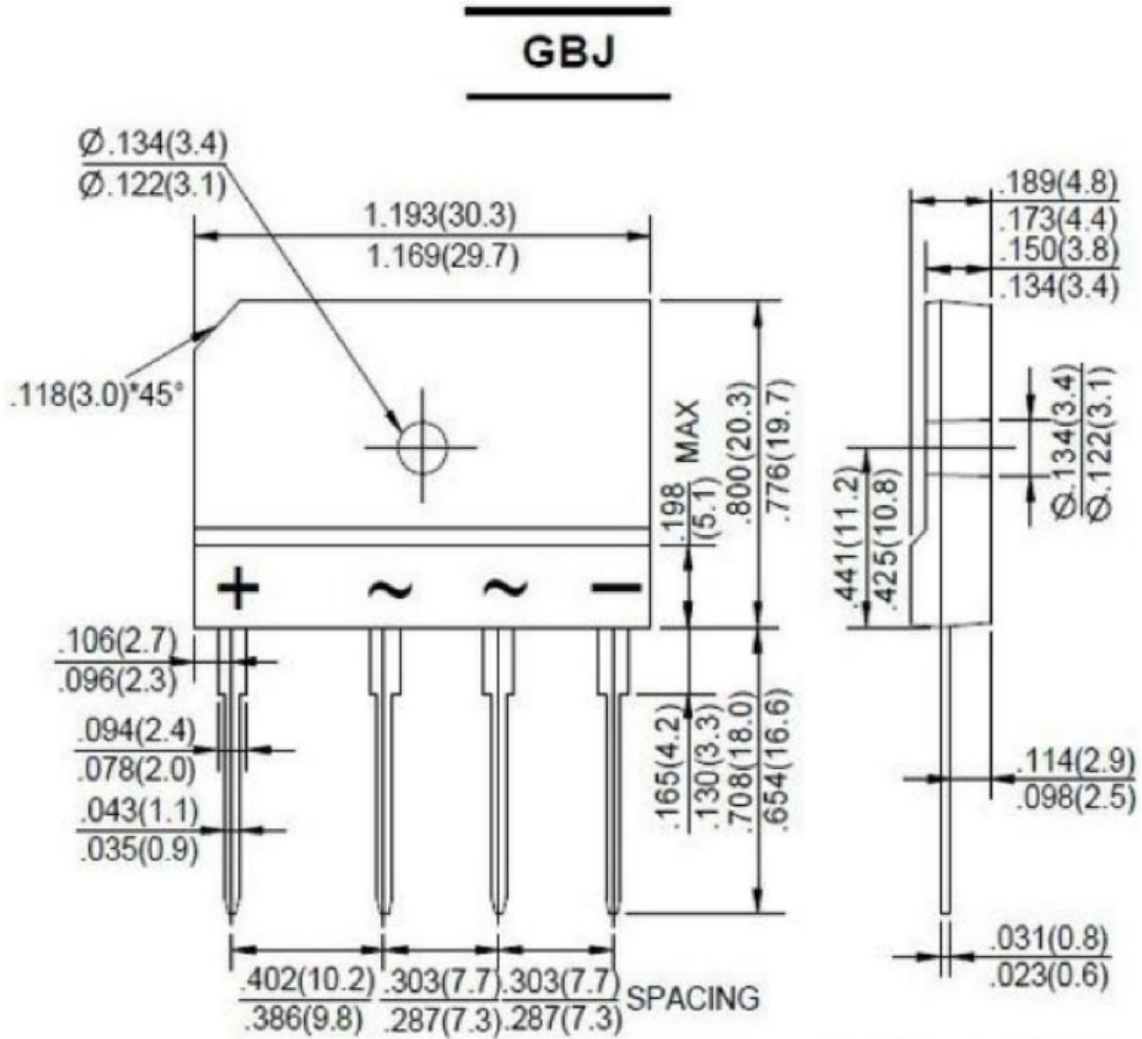
Symbol	Conditions	Values	Units
VF	Maximum Instantaneous Forward Voltage per leg IFM = 12.5A	1.0	V
IR	Maximum DC reverse current at rated DC blocking voltage per leg $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	5.0 500	μA

Notes:

1. Junction to case with heatsink.
2. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

F1G.1-FORWARD CURRENT DERATING CURVE

F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

F1G.4-TYPICAL REVERSE CHARACTERISTICS

F1G.5-TYPICAL JUNCTION CAPACITANCE


Package Outline Dimensions in inches (millimeters)


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