

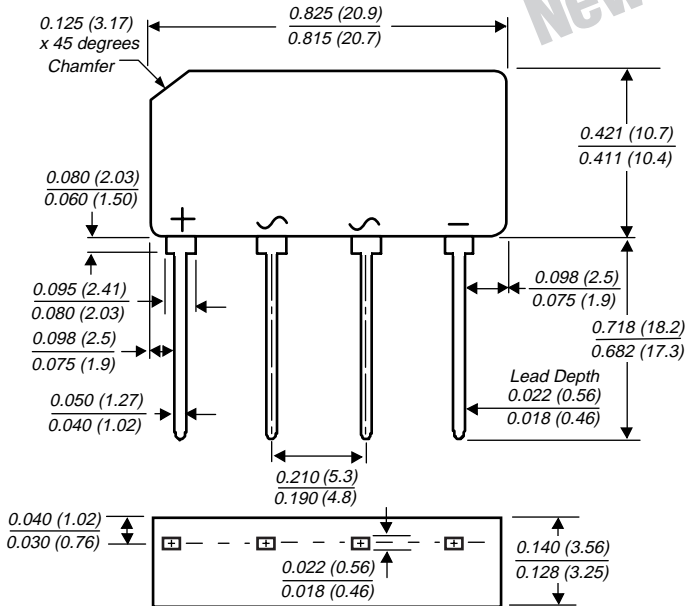


Case Type GBL

Glass Passivated Single-Phase Bridge Rectifiers

Reverse Voltage 50 and 1000V
Forward Current 4.0A

New Product



Polarity shown on front side of case, positive lead beveled corner.

Dimensions in inches and (millimeters)

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component Index, file number E54214
- Glass passivated chip junction
- High case dielectric strength
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any

Weight: 0.071oz., 2.0g

Packaging codes/options:

1/400 ea. per Bulk Tray Stack

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GBLA 005	GBLA 01	GBLA 02	GBLA 04	GBLA 06	GBLA 08	GBLA 10	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at T _C = 50°C Note 1 T _A = 40°C Note 2	I _{F(AV)}	4.0 3.0						A	
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	120						A	
Rating for fusing (t < 8.3ms)	I ² t	60						A ² sec	
Typical thermal resistance per leg	R _{θJA} R _{θJL}	47 10						°C/W	
Operating junction storage and temperature range	T _J , T _{STG}	-55 to +150						°C	

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GBLA 005	GBLA 01	GBLA 02	GBLA 04	GBLA 06	GBLA 08	GBLA 10	Unit
Maximum instantaneous forward drop per leg at 4.0A	V _F	1.0						V	
Maximum DC reverse current at rated DC blocking voltage per leg T _A = 25°C T _A = 125°C	I _R	5.0 500						μA	

Notes: (1) Unit mounted on 3.0 x 3.0 x 0.11" thick (7.5 x 7.5 x 0.3cm) Aluminum plate
(2) Unit mounted on P.C.B. at 0.375" (9.5mm) lead length and 0.5 x 0.5" (12 x 12mm) copper pads

Glass Passivated Single-Phase Bridge Rectifiers

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

Fig. 1 – Derating Curves Output Rectified Current

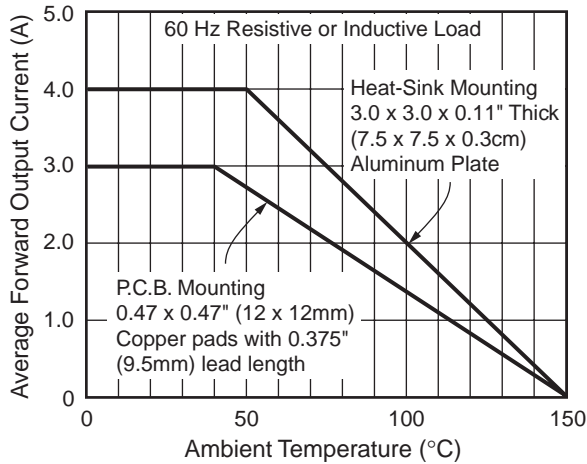


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

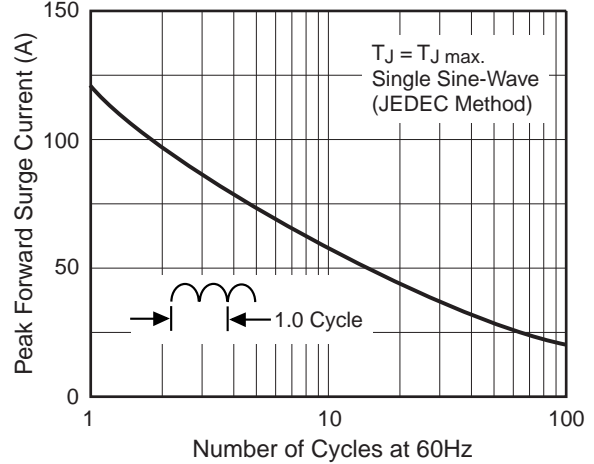


Fig. 3 – Typical Forward Voltage Characteristics Per Leg

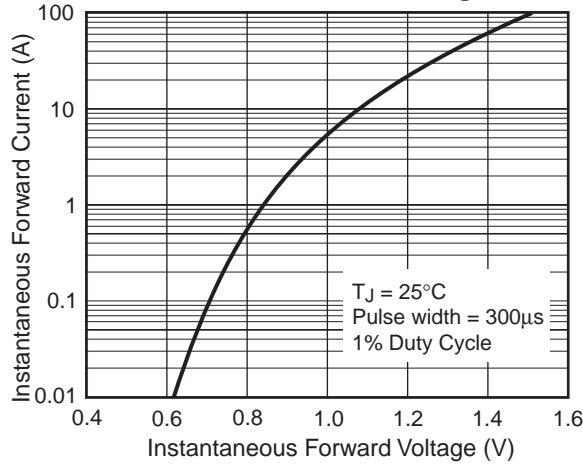


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

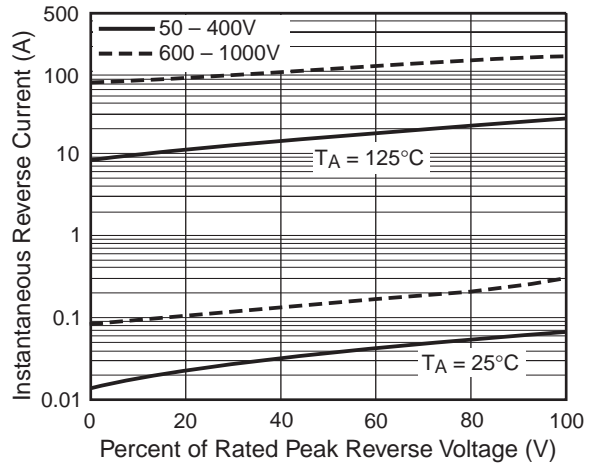


Fig. 5 – Typical Junction Capacitance Per Leg

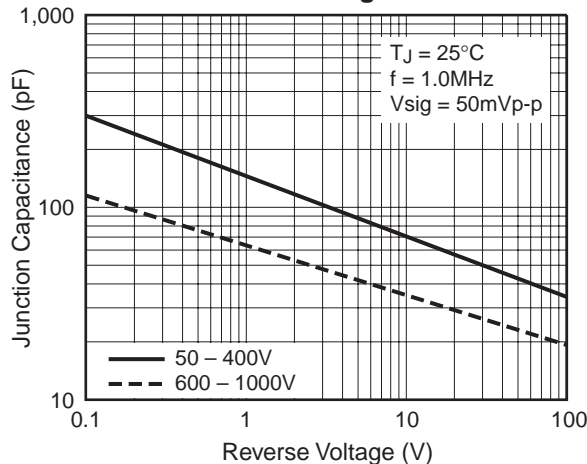


Fig. 6 – Typical Transient Thermal Impedance Per Leg

