GBLA005 THRU GBLA10

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range
50 to 1000 Volts
Current
4.0 Amperes

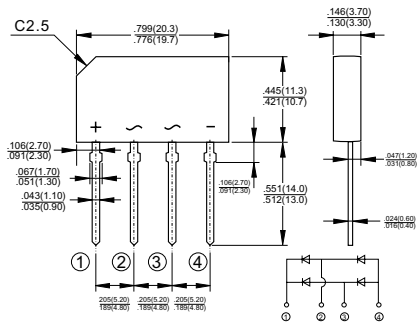
Features

- ✧ Glass passivated chip junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Typical IR less than 0.1μA
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths.

Mechanical Data

- ✧ Case: Molded plastic body.
- ✧ Terminals: Plated leads solderable per MIL-STD-750, Method 2026.
- ✧ Weight: 0. 071 ounce, 2.0 grams
- ✧ Mounting position: Any

GBL



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	GBLA 005	GBLA 01	GBLA 02	GBLA 04	GBLA 06	GBLA 08	GBLA 10	Units
Maximum Recurrent 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 Current @T_C = 50℃ (Note 1) @T_A = 40℃ (Note 2)	$I_{(AV)}$	4.0 3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) T_J=150℃	I_{FSM}	120							A
Maximum Instantaneous Forward Voltage @ 4.0A	V_F	1.0							V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=125℃	I_R	5.0 500							uA uA
Typical Thermal Resistance Per Leg (Note 1) (Note 2)	$R\theta JA$ $R\theta JL$	47 10							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to + 150							℃

Notes 1. Unit Mounted on 3.0 x 3.0 x 0.11" thick (7.5 x 7.5 x 0.3cm) Al. plate.
2. Units Mounted on P.C.B. 0.5 x 0.5 " (12x12mm) Copper Pads, 0.375"(9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES (GBLA005 THRU GBLA10)

FIG.1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

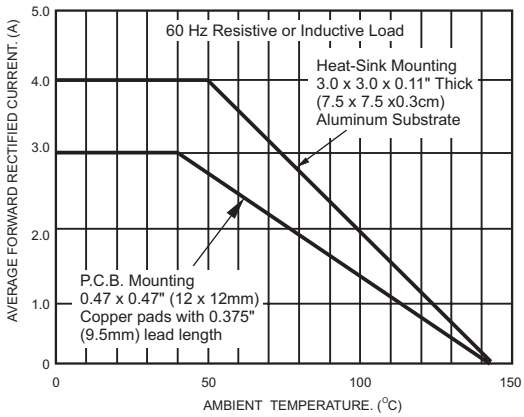


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

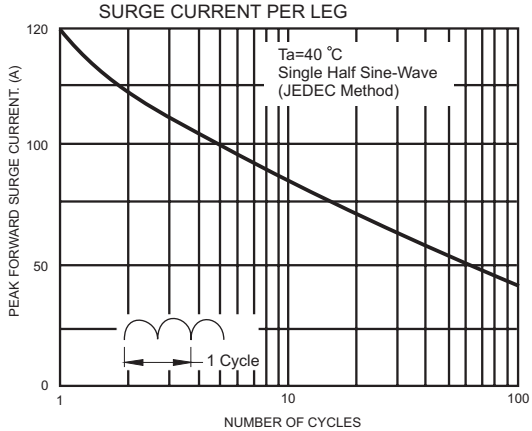


FIG.3- TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

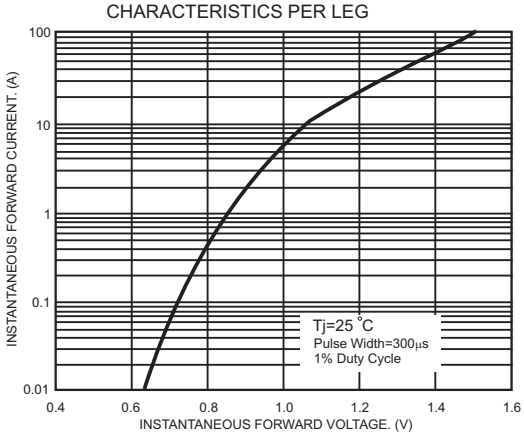


FIG.4- TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

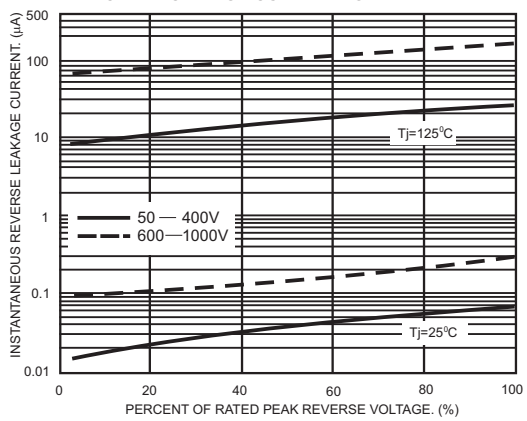


FIG.5- TYPICAL JUNCTION CAPACTITANCE PER LEG

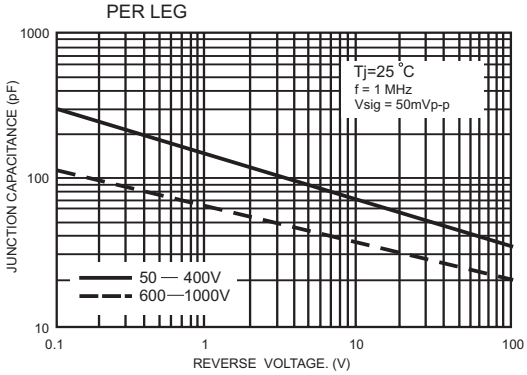


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS