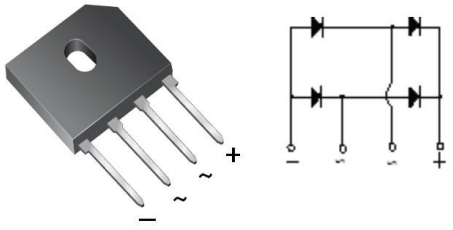
Single Phase Glass Passivated Bridge Rectifier

Features

- UL recognized under component index, file Number E54124
- High forward surge capability
- Glass passivated chip junction
- High case dielectric strength
- High temperature soldering guaranteed: 260℃/10 seconds



Case Style GBU

Mechanical Data

Case:	Transfer molded plastic
Polarity	Polarity symbols marked on case
Terminals:	Lead solderable per MIL-STD-750 method 2026
Mounting torque	/
Mounting position:	Thru hole for #6 screw, 5-in-lbs torque max (Note 3)
Weight:	0.15 ounce, 4.0 gram

Maximum Ratings *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	GBU4A	GBU4B	GBU4D	GBU4G	GBU4J	GBU4K	GBU4M	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	**V**	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	**V**	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	**V**	
I(AV)	Max Average Forward Rectified Current	4.0/3.0							**A**	@Tc=100℃(Note1) @ Tc=40℃(Note 2)
IFSM	Peak Forward Surge Current	150							**A**	8.3ms single half sine-wave (JEDEC method)
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150							**℃**	
I2t	Rating for Fusing	93							**A2s**	T<8.3mS

Electrical Characteristics *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	GBU4A	GBU4B	GBU4D	GBU4G	GBU4J	GBU4K	GBU4M	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.0							**V**	Drop per Bridge element 4.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							**μA**	TA=25℃
		0.5								Tc=125℃
VISO	Isolation Voltage from case to lugs	2500							**V**	
RθJC	Typical Thermal Resistance per leg	2.0							**℃/W**	
CJ	Typical Junction capacitance per leg	100				45			**pF**	Measured at 1.0MHz/4.0V

Note:

1. Unit mounted on 1.6” x 1.6” x 0.06” (4cm x 4cm x 0.15cm) AL plate
2. Unit mounted on PCB with 0.5” x 0.5” (12mm x 12mm) copper pads and 0.375 (9.5mm) lead length
3. Recommended mounting position is to bolt down on heatsink using #6 screw and silicon thermal compound for maximum heat transfer

GBU4A ~ GBU4M

RATINGS AND CHARACTERISTIC CURVES GBU4A THRU GBU4M

Fig. 1 — Derating Curve Output Rectified Current

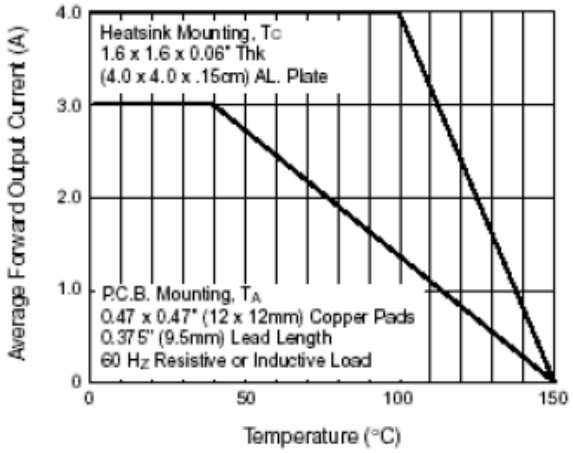


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current Per Leg

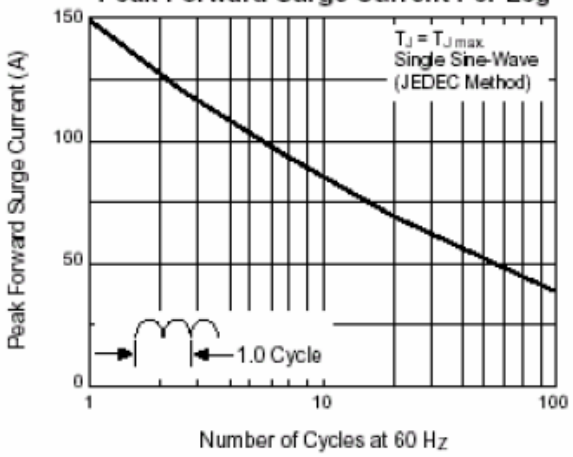


Fig. 3 — Typical Forward Characteristics Per Leg

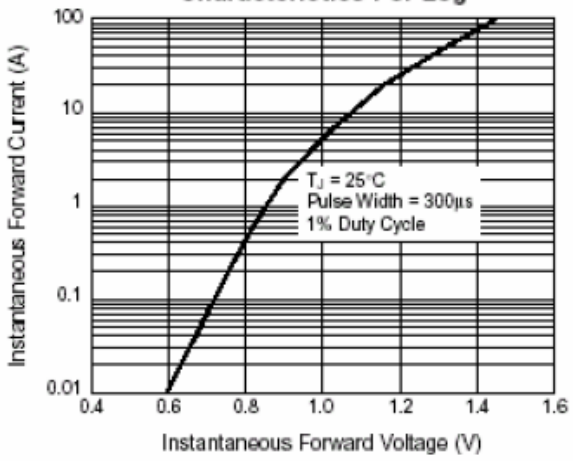


Fig. 4 — Typical Reverse Leakage Characteristics Per Leg

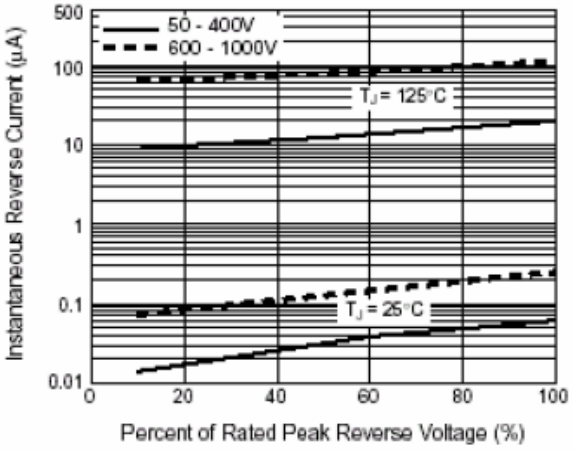


Fig. 5 — Typical Junction Capacitance Per Leg

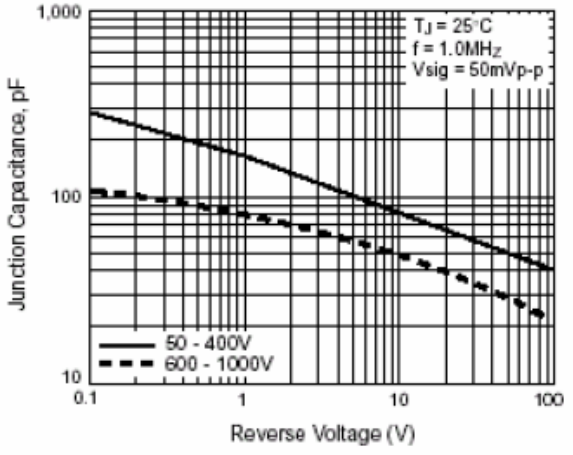
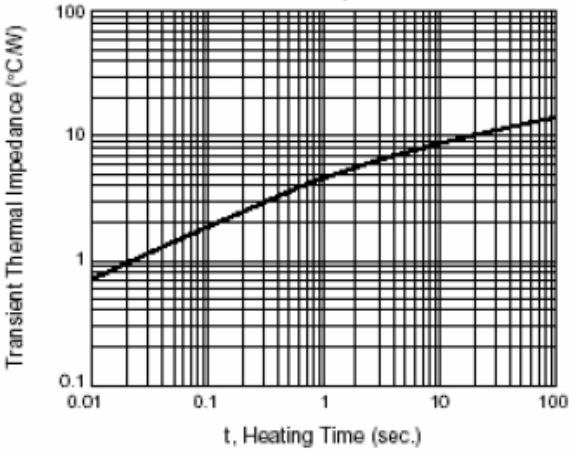
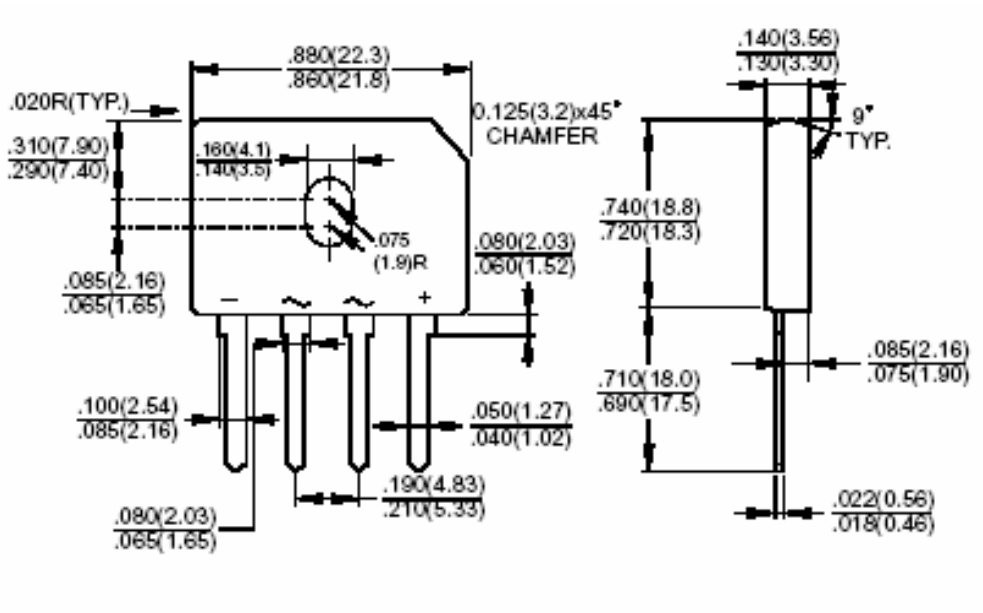


Fig. 6 — Typical Transient Thermal Impedance



GBU4A ~ GBU4M

Dimensions in inches (mm)



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