



DATA SHEET

GBL400~GBL408

IN-LINE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 800 Volts **CURRENT** 4.0 Ampere

GBL Unit: inch (mm)

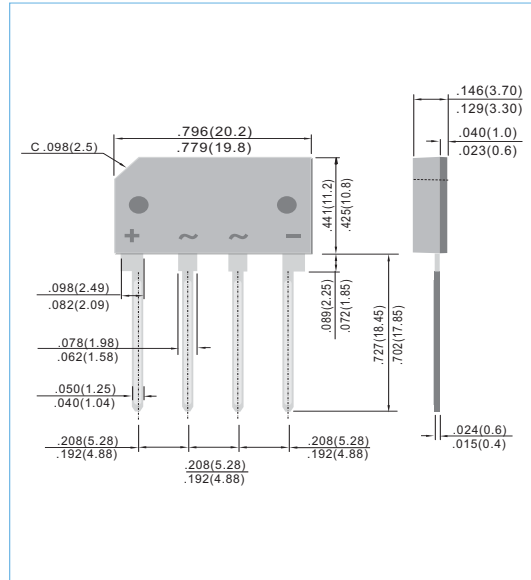
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FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Terminals: Leads solderable per MIL-STD-202, Method 208
Mounting position: Any
Weight: 0.2 ounce, 5.6 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GBL400	GBL401	GBL402	GBL404	GBL406	GBL408	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	V
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	V
Maximum Average Forward Rectified Output Current at T _C =50 °C at T _J =40 °C	I _{AV}	4.0				3.0		A
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150						A
I ² t Rating for fusing (t < 8.3ms)	I ² t	93						A ² sec
Maximum Instantaneous Forward Voltage Drop per element at 2.0A	V _F	1.0						V _{pk}
Typical Junction Capacitance per Leg (Note 1)	C _J	65				25		pF
Maximum Reverse Leakage Current at Rated @ T _A =25°C DC Blocking Voltage @ T _A =100°C	I _R	5.0				500		uA
Typical Thermal Resistance per leg (Note 2) (Note 3)	R _{θJA} R _{θJL}	34				15		°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150						°C

NOTES:

1. Mounted at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Units Mounted in free air, no heatsink, P.C.B at 0.375" (9.5mm) lead length and 0.5X0.5" (12X12mm) copper pads.
3. Units Mounted 3.0 X 3.0 X 0.11" thick (7.5 X 7.5 X 0.3 cm) AL plate.



RATING AND CHARACTERISTIC CURVES

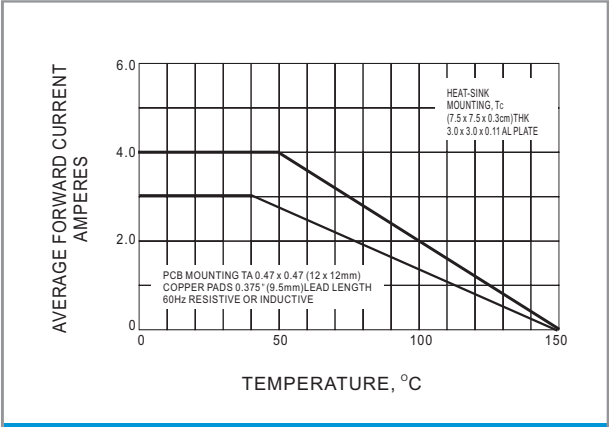


Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

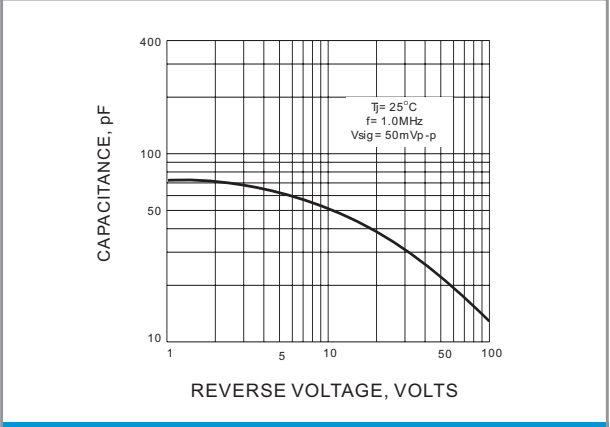


Fig.5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

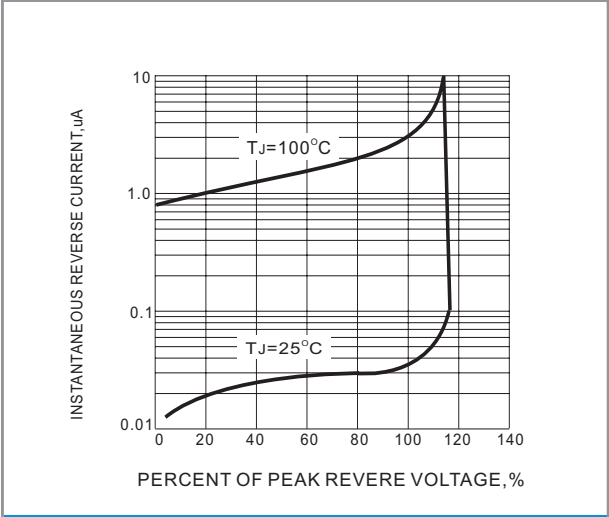


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

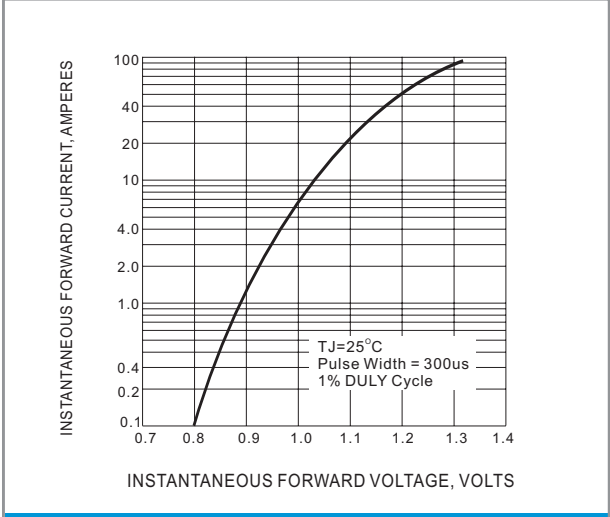


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT