PANJIT SEMI CONDUCTOR

DATA SHEET

GBL400~GBL408

IN-LINE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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

Recongnized File #E228882

FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- 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

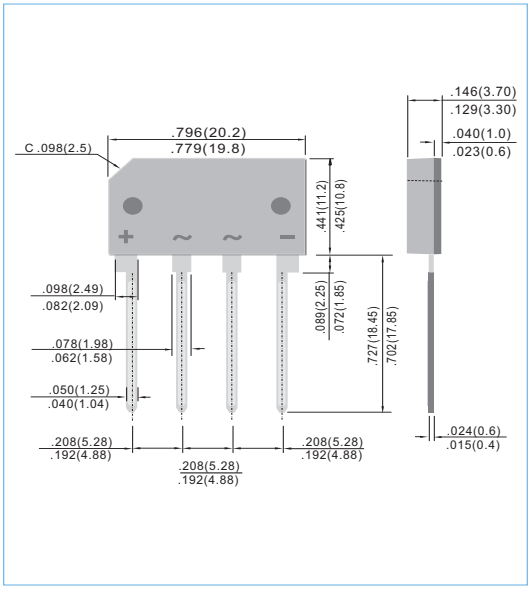
MECHANICALDATA

Terminals: Leads solderable per MIL-STD-202, Method 208

Mounting position: Any

Weight: 0.2 ounce, 5.6 grams.

GBL Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°Cambient 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 Tc=50 °C Rectified Output Current at TJ=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^2t Rating for fusing (t<8.3ms)	I^2t	93						A^2sec
Maximum Instantaneous Forward Voltage Drop per element at 2.0A	V_F	1.0						Vpk
Typical Junction Capacitance per Leg (Note 1)	C_J	65				25		pF
Maximum Reverse Leakage Current at Rated @ TA=25°C Dc Blocking Voltage @ TA=100°C	I_R	5.0 500						uA
Typical Thermal Resistance per leg (Note 2) (Note 3)	$R\theta JA$ $R\theta JL$	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

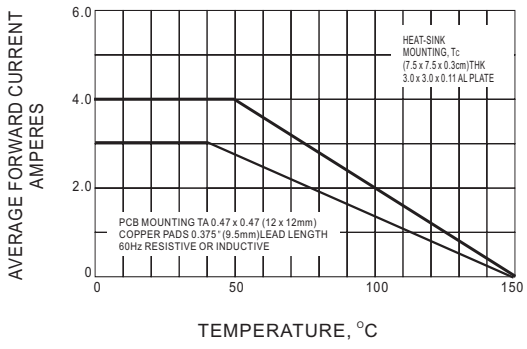


Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

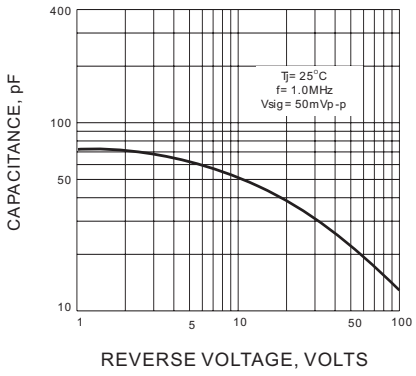


Fig.5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

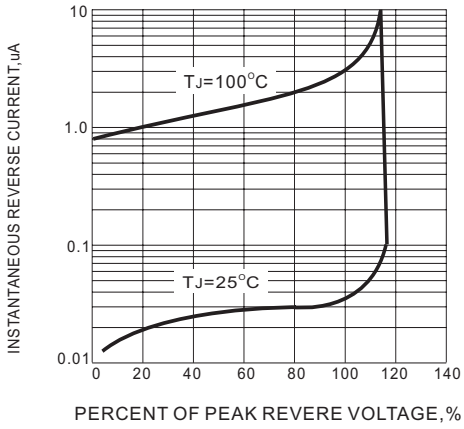


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

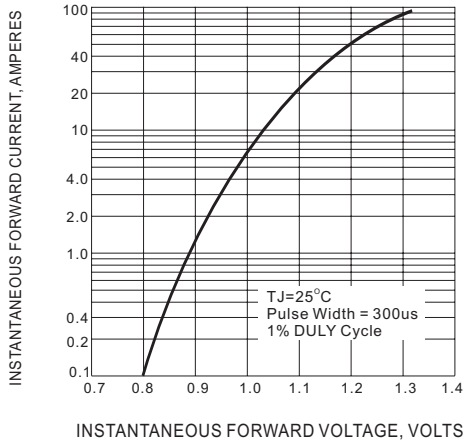


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT