PANJIT SEMICONDUCTOR

DATA SHEET

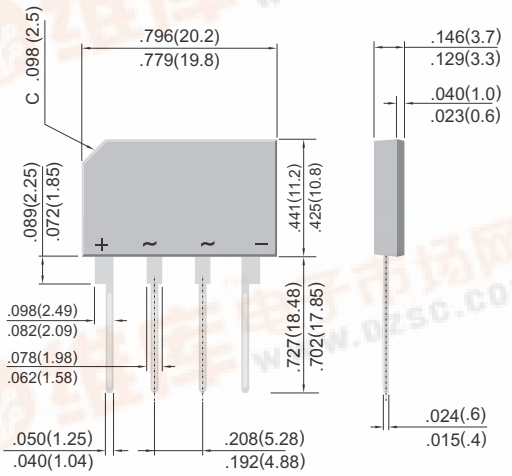
GBL400~GBL408

IN-LINE MINIATURE SINGLE PHASE SILICON BRIDGE RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 4.0 Amperes

Unit: inch (mm)

GBL



FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 70 Amperes peak

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°Cambient temperature unless otherwise specified.

	GBL400	GBL401	GBL402	GBL404	GBL406	GBL408	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V_{RRM}
Maximum RMS Input Voltage	35	70	140	280	420	560	V_{RMS}
Maximum DC Blocking Voltage	50	100	200	400	600	800	V_{DC}
Maximum Average Forward Rectified Output Current at Tc=50°C / T_J=40°C	4.0 / 3.0						$A_{(AV)}$ / $A_{(AV)}$
Rating for fusing (t<8.3ms)	20						A^2Sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method) T_J=150°C	70						A_{PK}
Maximum Instantaneous Forward Voltage Drop per element at 2.0A Ampers	1.0						V_{PK}
Typical Junction Capacitance per Leg (Note 1)	65.0				25.0		pF
Maximum Reverse Leakage at rated Dc Blocking Voltage per Leg T_A=25°C / T_C=100°C	5.0 / 500.0						μA
Typical Thermal Resistance per leg (Note 2) RθJL / (Note 3) RθJL	34.0 / 15.0						°C / W
Operating 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

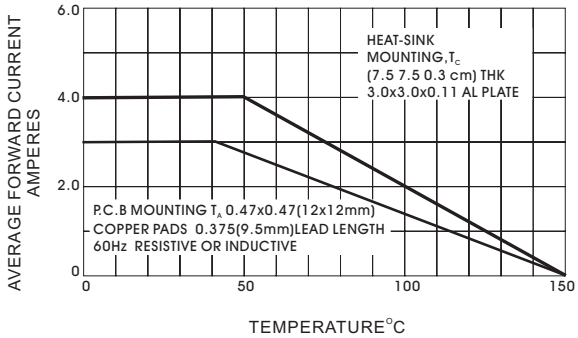


Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

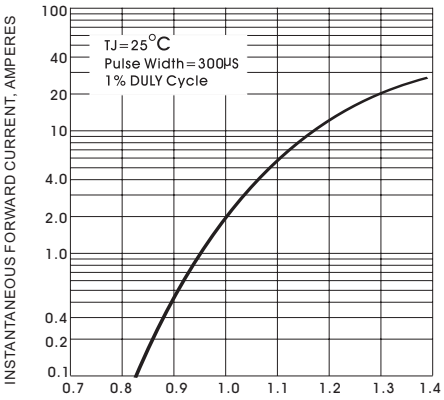


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS PER ELEMENT

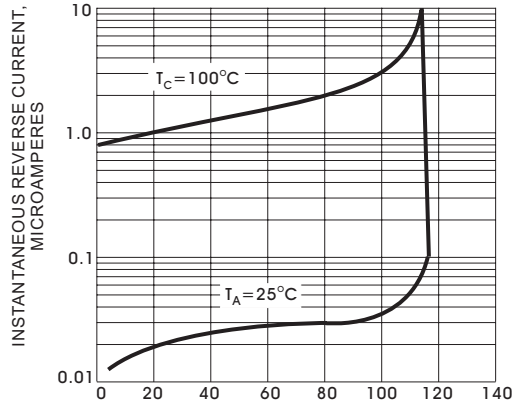


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

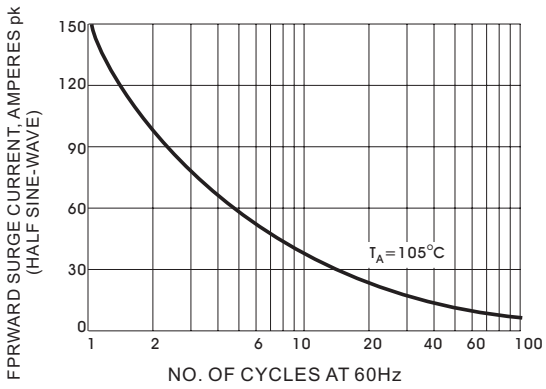


Fig. 4- MAXIMUM NON-REPETITEVE PEAK FORWARD SURGE CURRENT