GBL600~GBL610

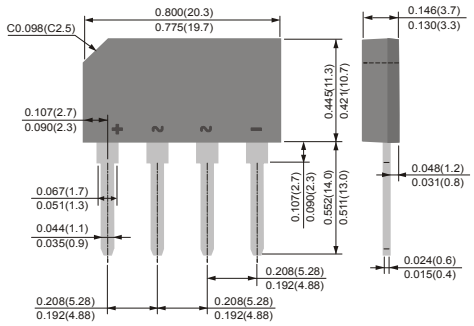
GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE **50 to 1000 Volts** **CURRENT** **6 Amperes**

Green

GBL

Unit : inch(mm)



FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Terminals: Leads solderable per MIL-STD-750,Method 2026
- Weight: 0.09 ounce, 2.58 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°Cambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GBL600	GBL601	GBL602	GBL604	GBL606	GBL608	GBL610	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Output Current T_C=50°C T_J=40°C	I_{AV}	6							A
Peak Forward Surge Current single sine-wave superimposed on rated load	I_{FSM}	130							A
I^2t Rating for fusing (t<8.3ms)	I^2t	93							A^2sec
Maximum Instantaneous Forward Voltage Drop per element at 3A	V_F	1							Vpk
Maximum Reverse Leakage Current at Rated Dc Blocking Voltage T_A=25°C T_A=100°C	I_R	10 500							μA
Typical Thermal Resistance per leg (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	34 15							°C/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to + 150							°C

NOTES :

1.Units Mounted in free air, no heatsink, P.C.B at 0.375" (9.5mm) lead length and 0.5 x 0.5" (12 x 12mm) copper pads.
2.Units Mounted 3 x 3 x 0.11" thick (7.5 x 7.5 x 0.3 cm) AL plate.

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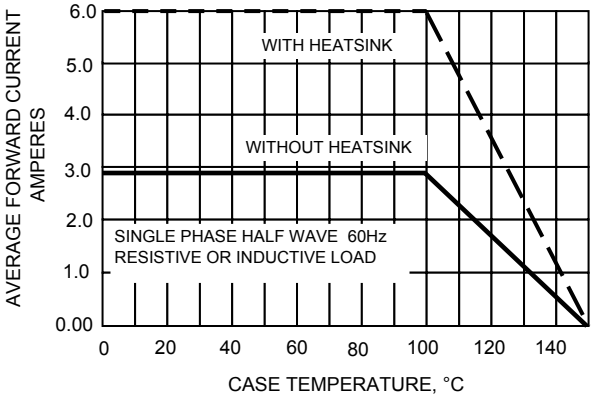
FIG.1-FORWARD CURRENT DERATING CURVE



FLG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

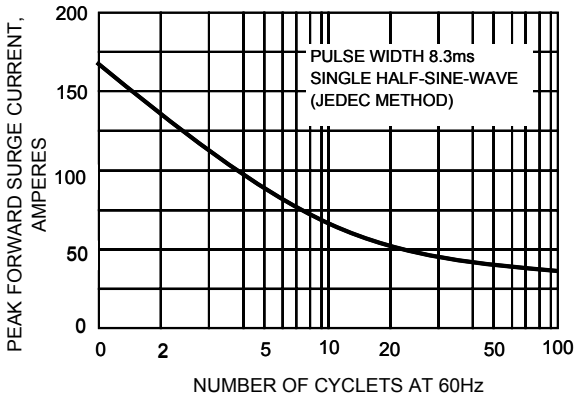


FIG.3-TYPICAL JUNCTION CAPACITANCE

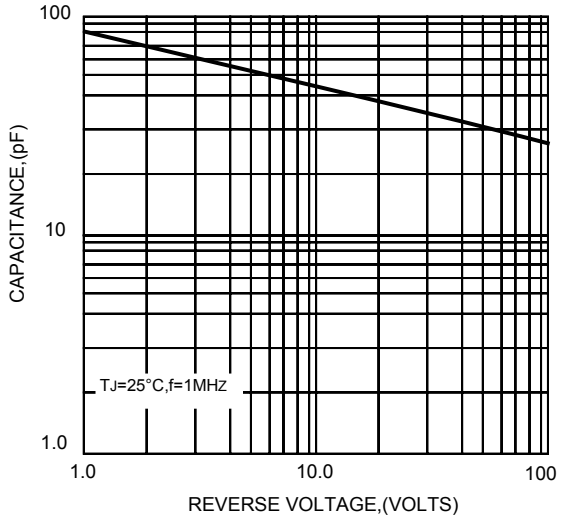


FIG.4-TYPICAL FORWARD CHARACTERISTICS

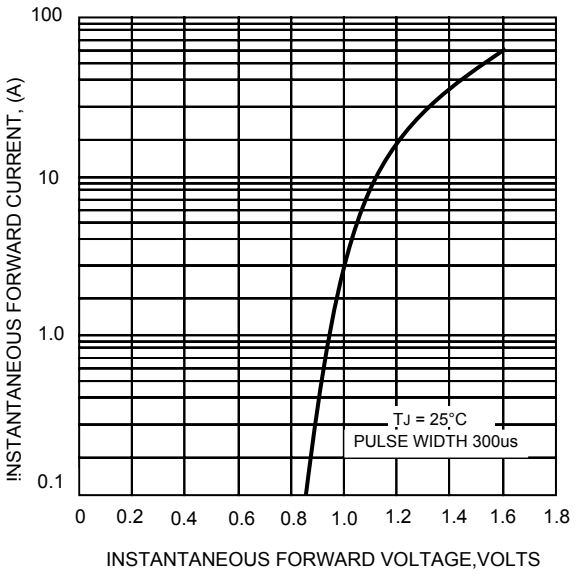
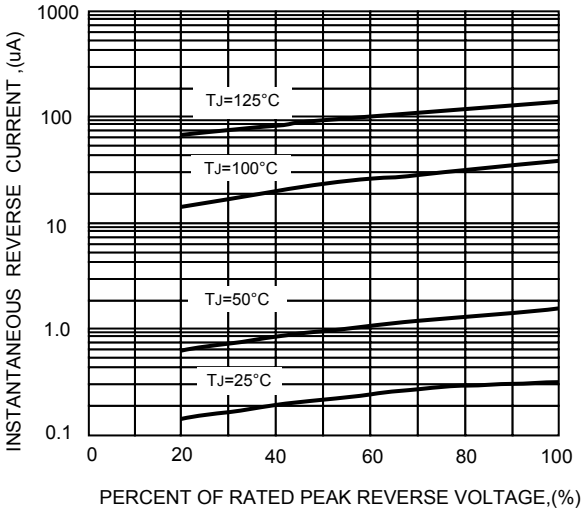



FIG.5-TYPICAL REVERSE CHARACTERISTICS