

**GLASS PASSIVATED BRIDGE RECTIFIERS**

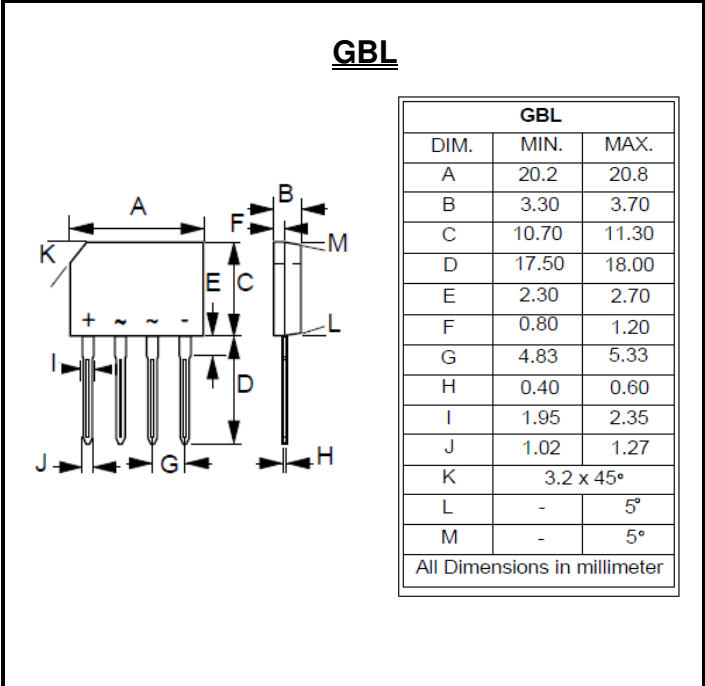
**REVERSE VOLTAGE – 1000Volts**  
**FORWARD CURRENT – 6 Amperes**

**FEATURES**

- Rating to 1000V PRV
- Ideal for printed circuit board
- UL recognition file # E95060
- Reliable low cost construction utilizing molded plastic technique

**MECHANICAL DATA**

- Case: GBL
- Polarity indicator: As marked on the body
- Weight: 0.09 ounces, 2.52 grams
- Component in accordance to RoHs 2002/95/EC
- Mounting position: Any



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
 Ratings at 25°C ambient temperature unless otherwise specified.

**ABSOLUTE RATINGS**

PARAMETER	SYMBOL	GBL610	UNIT
Device marking code	Note	GBL610	---
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Average Rectified Output Current	$I_{F(AV)}$	6	A
Peak Forward Surge Current @ $T_j = 25^\circ C$	$I_{FSM}$	160	A
8.3ms single half sine-wave @ $T_j = 125^\circ C$		128	
Peak Forward Surge Current @ $T_j = 25^\circ C$	$I_{FSM}$	320	A
1.0ms single half sine-wave @ $T_j = 125^\circ C$		256	
$I^2t$ Rating for fusing ( t = 8.3ms)	$I^2t$	68	$A^2S$
Operating junction temperature range	$T_j, T_{STG}$	-55 to +150	$^\circ C$

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITIONS	SYMBOL	Max.	UNIT
Forward Voltage (1)	$I_F=3A$ $T_j=25^\circ C$ $T_j=125^\circ C$	$V_F$	0.95 0.80	V
Leakage Current	$V_R$ at rated $T_j=25^\circ C$ $T_j=125^\circ C$	$I_R$	5 100	$\mu A$
Typical Junction Capacitance per element (Note 1)		$C_j$	47	pF

**THERMAL CHARACTERISTICS**

THERMAL CHARACTERISTIC	SYMBOL	Typical	UNIT
Typical thermal resistance (Note3)	$R_{thJC}$	3	$^\circ C/W$
	$R_{thJL}$	2	
	$R_{thJA}$	10	

Note : (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC  
 (2) Thermal resistance junction to case, lead and ambient in accordance with JESD-51.  
 Unit mounted on 100mmx75mmx27mm Fin heatsink.

FIG.1- FORWARD CURRENT DERATING CURVE

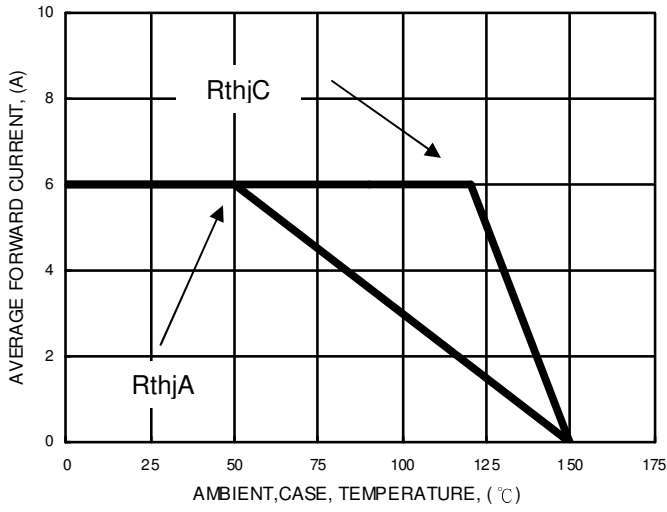


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

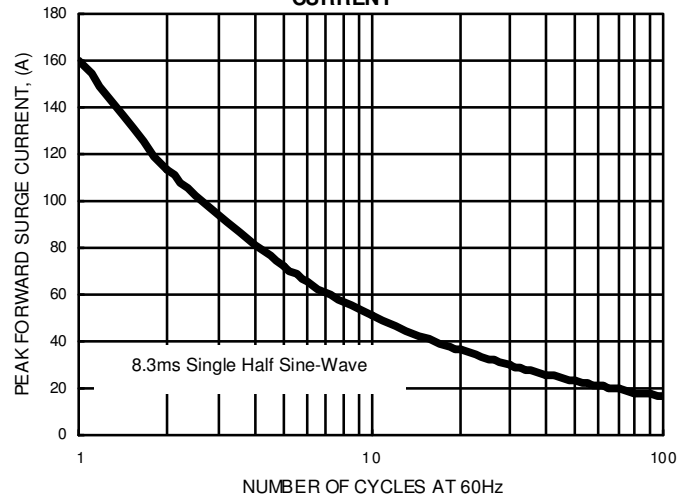


FIG.3- TYPICAL FORWARD CHARACTERISTICS

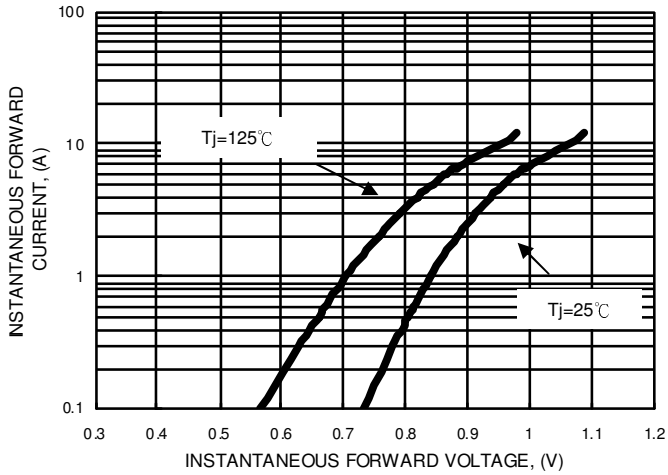


FIG.4- TYPICAL JUNCTION CAPACITANCE

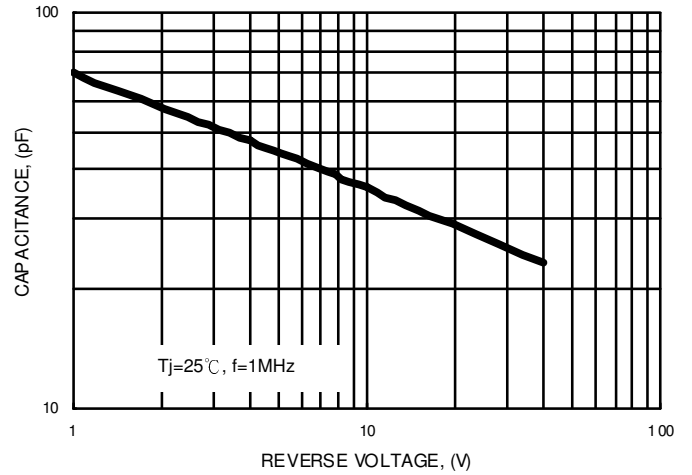
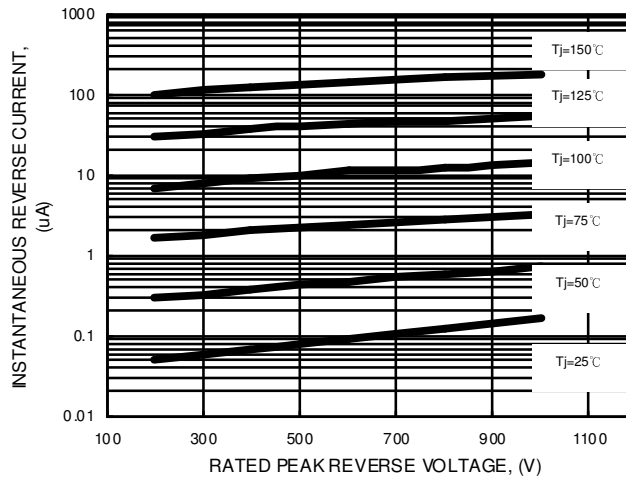


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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