

**GBL06L**  
**Low VF Bridge Rectifier**
**FEATURES**

- \* Internal structure with GPRC (glass passivated rectifier chip) inside
- \* Lead free product, compliance to RoHS
- \* Low forward voltage drop
- \* Superior thermal conductivity
- \* High current capability with small package
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

**MECHANICAL DATA**

**Case :** Molded Plastic

**Terminals :** Tin Plated, solderable per MIL-STD-750, Method 2026.

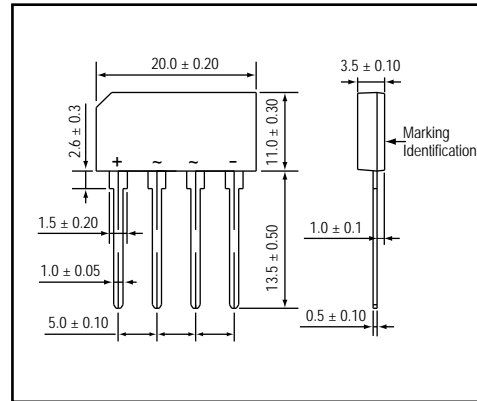
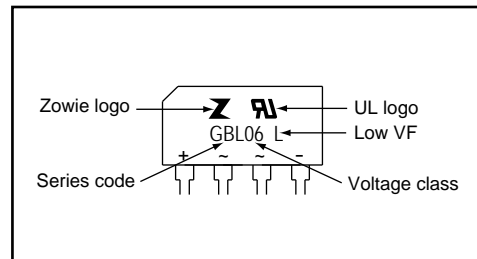
**Polarity :** As marked on Body

**Weight :** 2.0 grams(approx)

**OUTLINE DIMENSIONS**

**Case : GBL-L**

Unit : mm


**MARKING**

**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Conditions	Rating	Unit
			GBL06L	
Repetitive peak reverse voltage	VRRM		600	V
Average forward current at See fig.1	IF(AV)	Notes (1)	4.0	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	160	A
Operating storage temperature Range	Tj,TSTG		-55 to +175	°C

**Electrical characteristics (Ta = 25 °C)**

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 2.0A	-	0.87	0.89	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C	-	-	5	uA
Rating for fusing ( t<8.3ms)	I²t		-	-	106	A²sec
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	-	55	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 2)	-	22	-	°C/W
	Rth(JC)	Junction to lead (NOTE 1)	-	4.2	-	
Power dissipation	PD			6.8		W

NOTES : (1) Unit mounted on 3.0 x 3.0 x 0.11" thick (7.5 x 7.5 x 0.3 cm) aluminum plate  
 (2) Unit mounted on P.C.B. at 0.375" (9.5 mm) lead length and 0.5 x 0.5" (12 x 12 mm) copper pads  
 (3) Preliminary

FIG.1 - FORWARD CURRENT DERATING CURVE

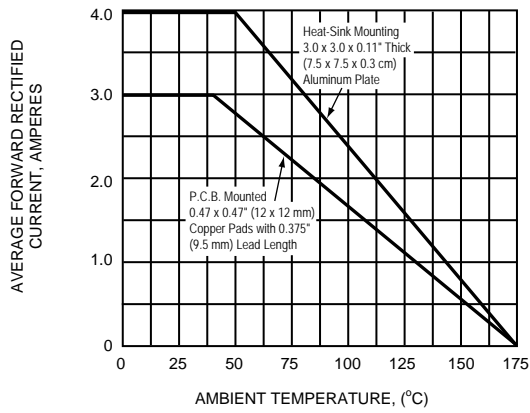


FIG.2 - FORWARD CURRENT DERATING CURVE

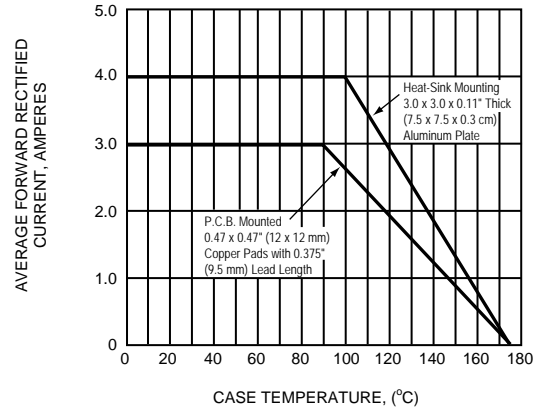


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

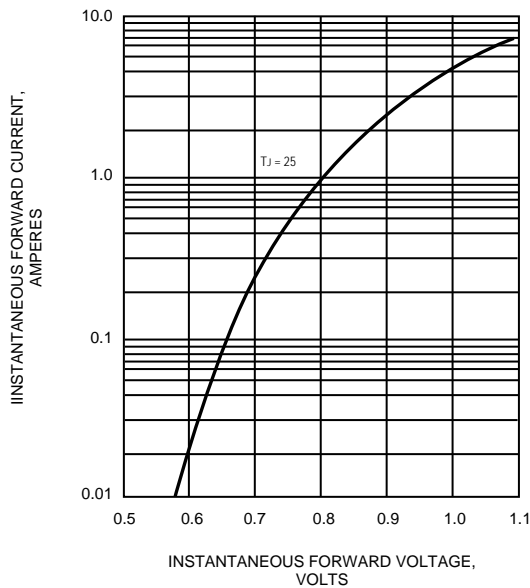


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

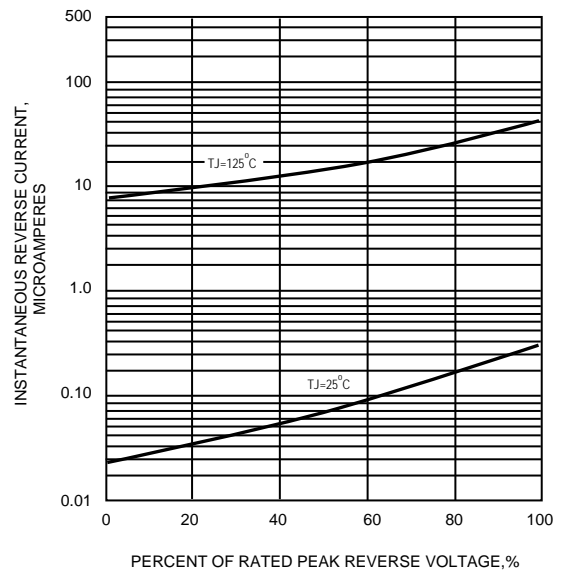


FIG.5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

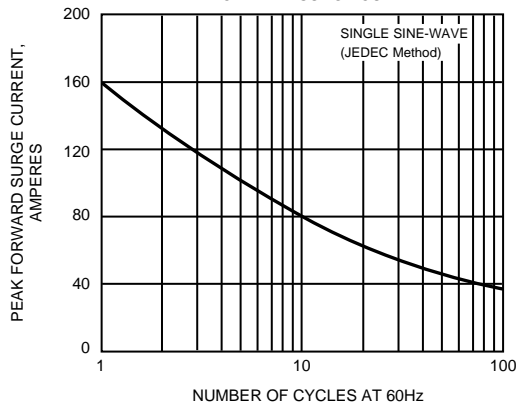


FIG.6 - TYPICAL JUNCTION CAPACITANCE

