

GBL04LS
Low VF Bridge Rectifier
FEATURES

- * Internal structure with GPRC (glass passivated rectifier chip) inside
- * Compliance to RoHS product
- * Low forward voltage drop
- * Superior thermal conductivity
- * High current capability with small package
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * This series is UL listed under the recognized component index, file number E335309

MECHANICAL DATA

Case : Molded Plastic

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

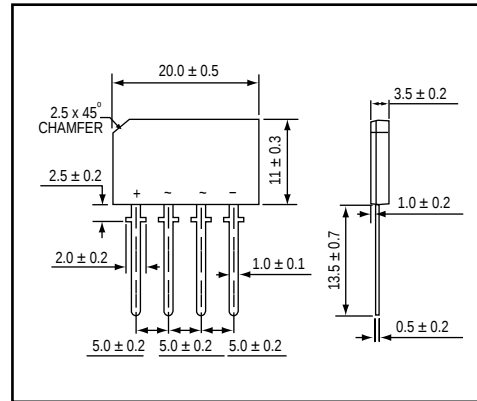
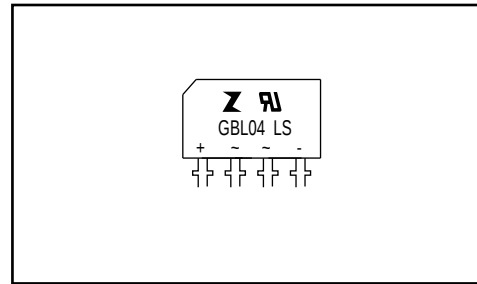
Polarity : As marked on Body

Weight : 2.0 grams(approx)

OUTLINE DIMENSIONS

Case : GBL-LS

Unit : mm


MARKING

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	VRRM		400	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 junction and storage temperature Range	TJ, TSTG		-55 to +175	°C

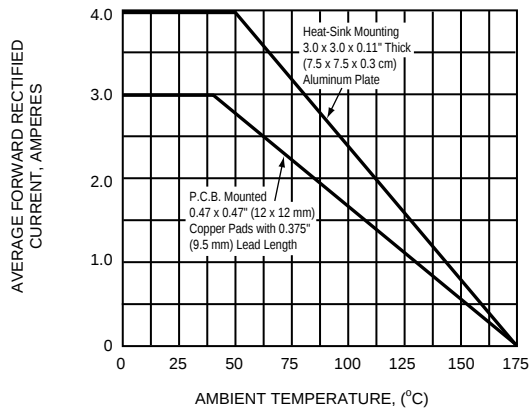
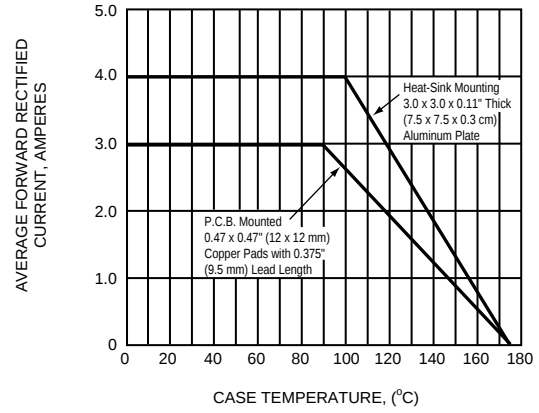
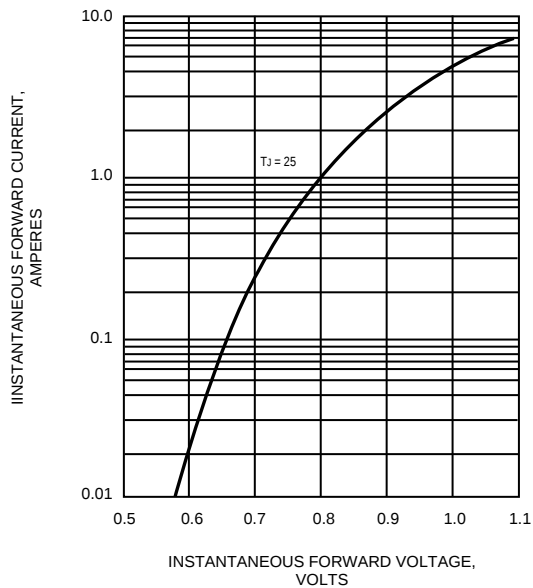
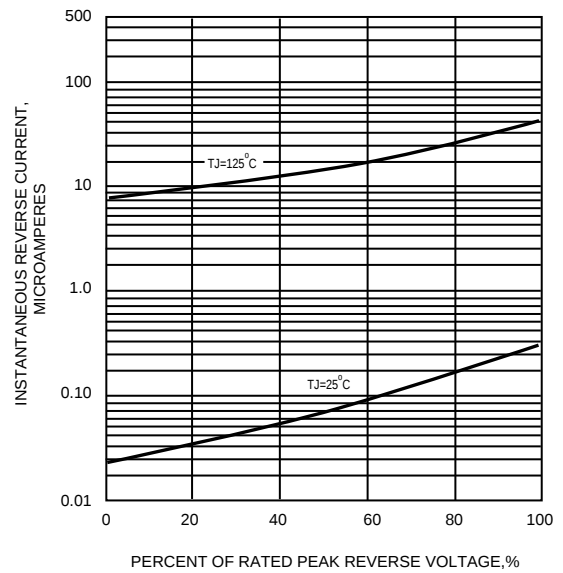
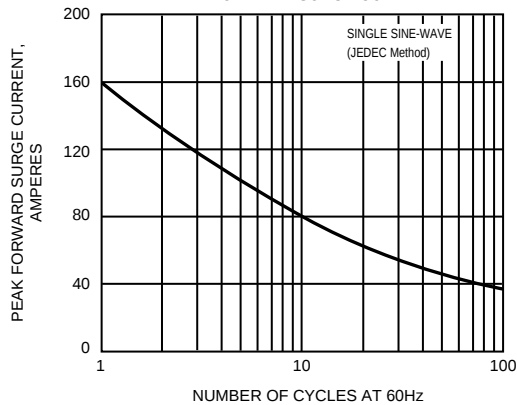
Electrical characteristics (Ta = 25 °C)

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 case (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
