

**GBU1002LC THRU GBU1010LC**

● **FEATURES**

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

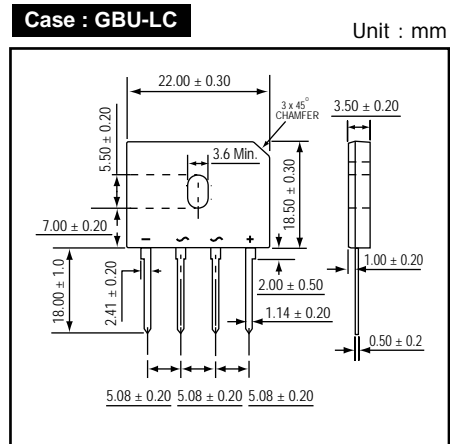
● **MECHANICAL DATA**

**Case :** Molded Plastic  
**Terminals :** Tin Plated, solderable per MIL-STD-750, Method 2026.  
**Polarity :** As marked on Body

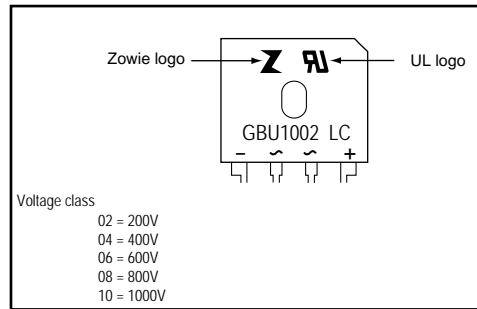
● **PACKING**

- Bulk :**
- \* 20 pces per tube pack
  - \* 720 pcs per boxes
  - \* 2,880 pcs per carton

● **OUTLINE DIMENSIONS**



● **MARKING**

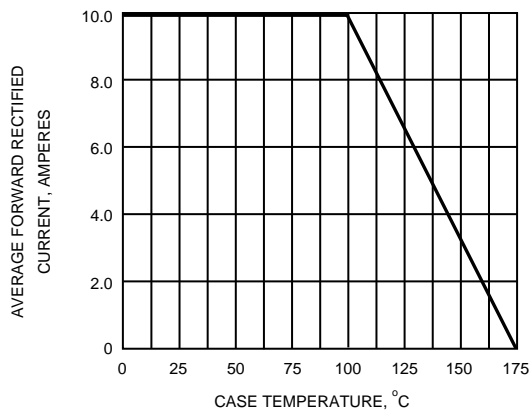
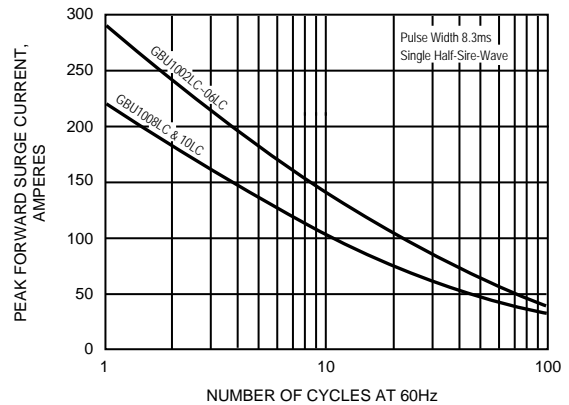
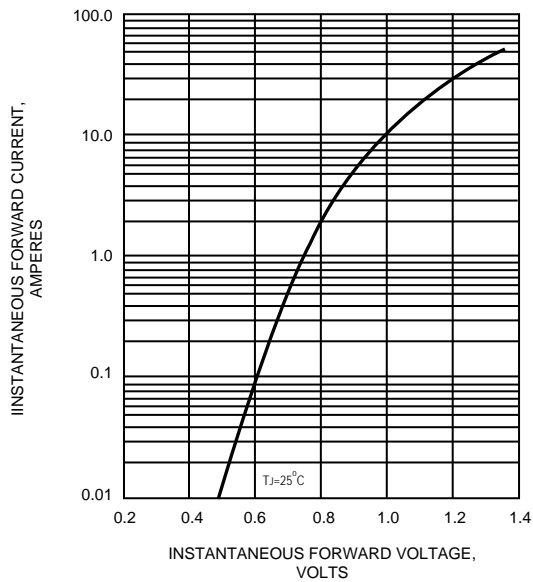
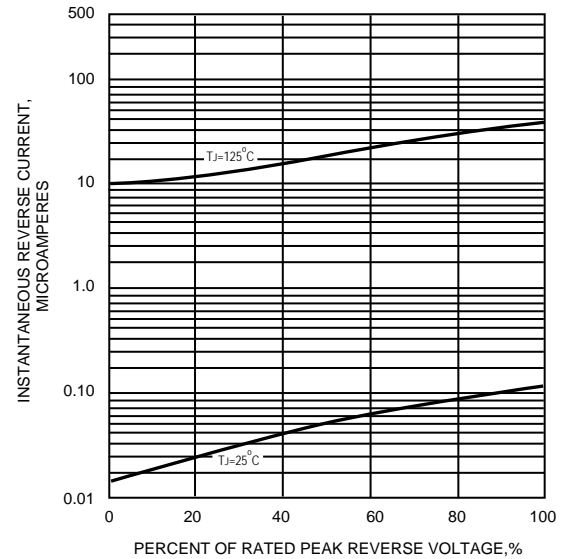


**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Conditions	GBU					Unit
			1002LC	1004LC	1006LC	1008LC	1010LC	
Repetitive peak reverse voltage	VRRM		200	400	600	800	1000	V
Average forward current at Tc = 100	IF(AV)		10					A
Peak forward surge current	IFSM	8.3ms single half sine-wave	290			220		A
Operating junction and storage temperature Range	Tj,TSTG		-55 to +175					°C

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

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 5.0A	GBU1002LC / GBU1006LC	-	0.90	0.91	V
			GBU1008LC / GBU1010LC	-	0.91	0.92	
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		-	-	5	uA
Rating for fusing ( t<8.3ms)	I²t		GBU1002LC / GBU1006LC GBU1008LC / GBU1010LC	-	-	349 200	A²sec
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	69	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (Without heatsink)		-	25	-	°C/W
	Rth(JC)	Junction to lead (With heatsink)		-	3.2	-	

**FIG.1 - FORWARD CURRENT DERATING CURVE**

**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**

**FIG.5 - TYPICAL JUNCTION CAPACITANCE**
