

**GBU402LC THRU GBU406LC**  
**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

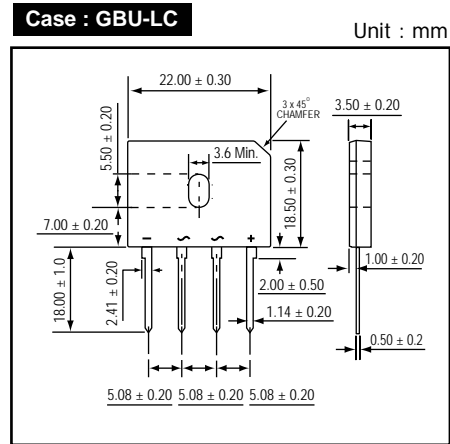
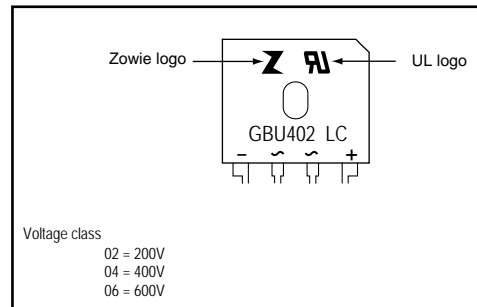
**MECHANICAL DATA**

**Case :** Molded Plastic

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

**Polarity :** As marked on Body

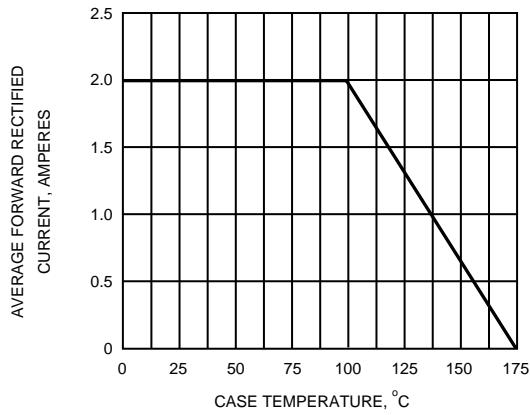
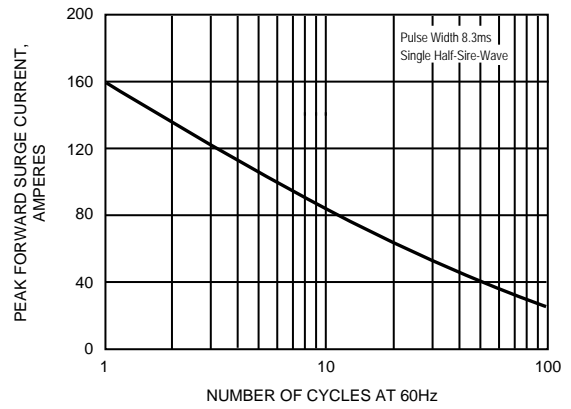
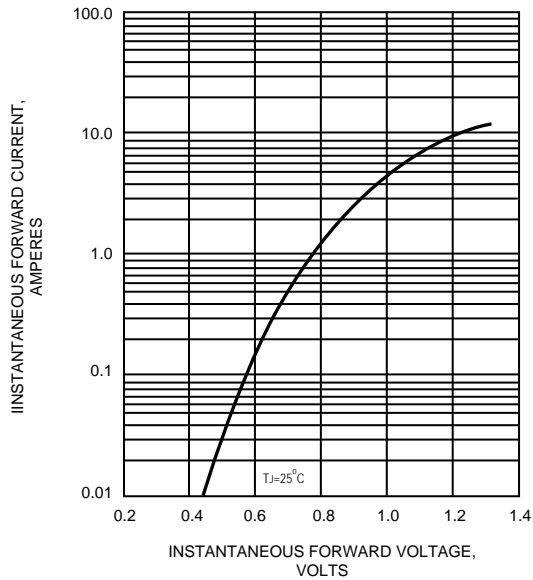
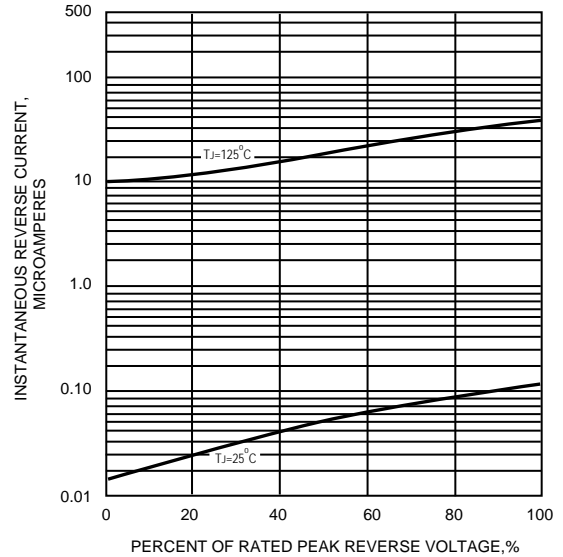
**Weight :** 4.0 grams(approx)

**OUTLINE DIMENSIONS**

**MARKING**

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

ITEM	Symbol	Conditions	Rating			Unit
			GBU402LC	GBU404LC	GBU406LC	
Repetitive peak reverse voltage	VRRM		200	400	600	V
Average forward current at See fig.1	IF(AV)	T <sub>A</sub> = 50	4.0			A
Peak forward surge current	IFSM	8.3ms single half sine-wave	160			A
Operating junction and storage temperature Range	T <sub>J</sub> ,TSTG		-55 to +175			°C

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

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 2.0A	-	0.87	0.89	V
Repetitive peak reverse current	I <sub>RRM</sub>	V <sub>R</sub> = Max. VRRM , T <sub>A</sub> = 25 °C	-	-	5	uA
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t		-	-	106	A <sup>2</sup> sec
Junction capacitance	C <sub>j</sub>	V <sub>R</sub> = 4V, f = 1.0 MHz	-	45	-	pF
Thermal resistance	R <sub>th</sub> (JA)	Junction to ambient (Without heatsink)	-	16	-	°C/W
	R <sub>th</sub> (JC)	Junction to lead (With heatsink)	-	3.0	-	

**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**
