

GBU4005 THRU GBU410

Single-Phase GLass Passivated Bridge Rectifiers

Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 150 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10

Mechanical Data

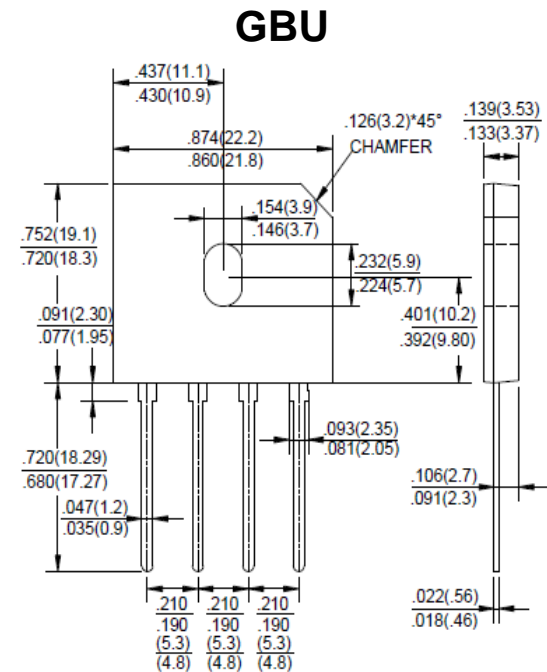
Case: Molded plastic

Terminals: Platde leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols molded or Marked on body

Mounting Position: Any

Weight: 0.138ounce, 3.9 grams (approx)



Dimensions in inches and (millimeters)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	unit	
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V	
Maximum average forward rectified output current at TA=40°C	IF(AV)	4.0				2.4				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	150								A
Rating for fusing (t<8.3ms)	I ² t	93								A ² sec
Typical thermal resistance per element(1)	ReJA	2.2								°C/w
Mounting torque (Suggests 0.45~0.65)	Tor	Rating Torque: 0.8 (Suggests 0.45~0.65)								N.m
Typical thermal resistance per element(2)	Cj	45.0								PF
Operating junction and storage temperature range	TJ, TSTG	-55to+150								°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	unit	
Maximum instantaneous forward voltage drop per leg at 4.0A	VF	1.1								V
Maximum DC reverse current at ratde TA=25°C	IR	10								UA
DC blocking voltage per element TA=125°C		500								

Notes: (1) Device mounted on 50mm*50mm*1.6mm Cu plate heatsink.

(2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG.1-DERATING CURVE FOR

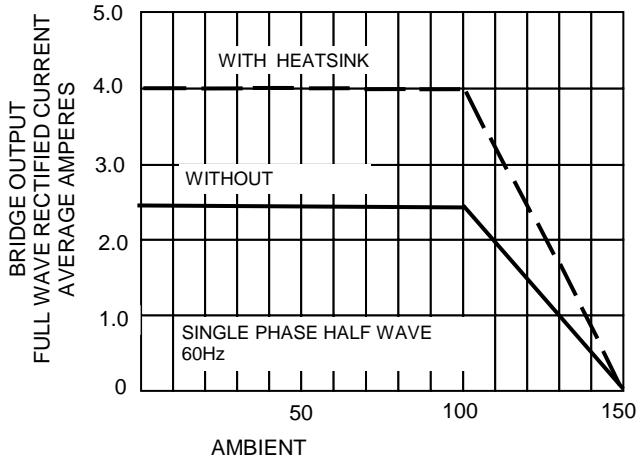


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

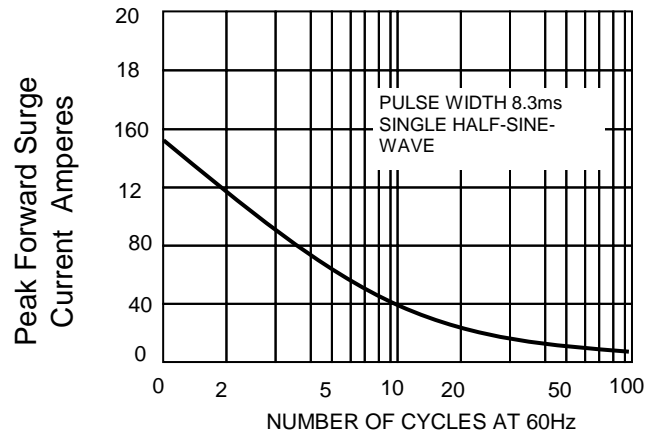


FIG.3-TYPICAL JUNCTION

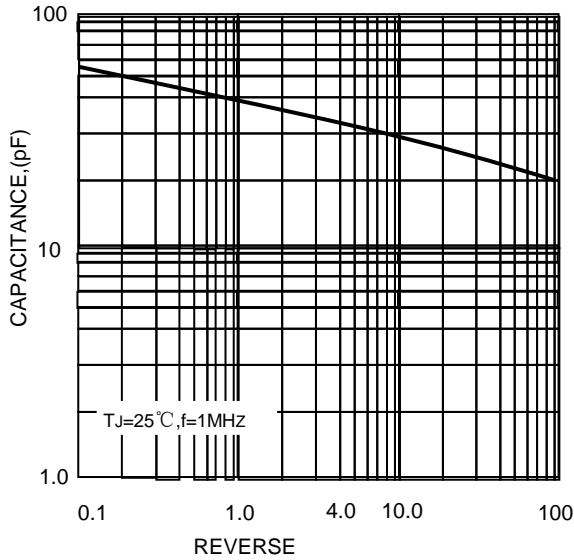


FIG.4-TYPICAL FORWARD CHARACTERISTICS

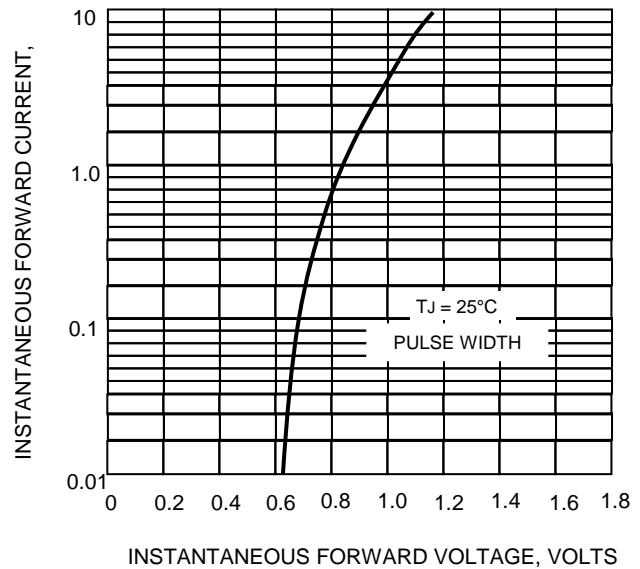


FIG.5-TYPICAL REVERSE CHARACTERISTICS

