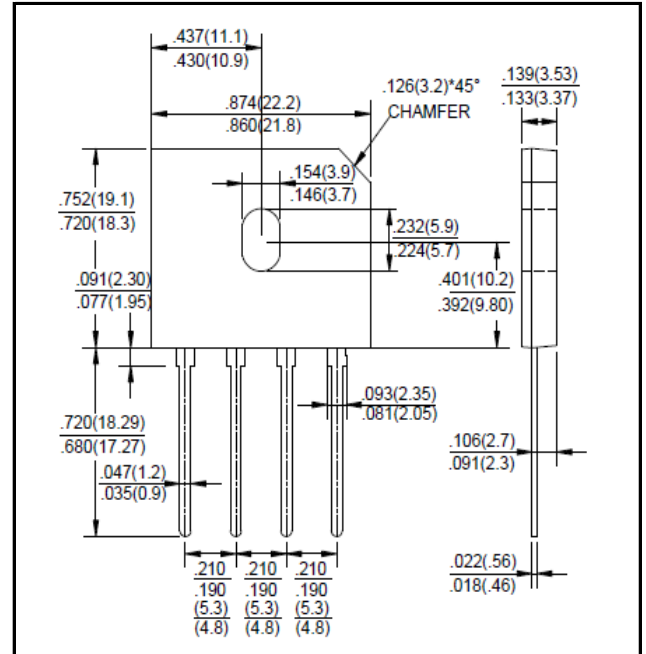


3.0A Single-Phase GLass Passivated Bridge Rectifiers



Recifier Reverse Voltage 50V to 1000V

GBU



Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 100 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)

Maximum Ratings & Thermal Characteristics

Dimensions in inches and (millimeters)

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.
 For Capacitive load derate current by 20%

Parameter	Symbol	GBU3005	GBU301	GBU302	GBU304	GBU306	GBU308	GBU310	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)	3.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	100							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 045~0.65)	Tor	Rating Torque:0.8(Suggests 045~0.65)							N.m
Typical thermal resistance per element(2)	Cj	45.0							PF
Operating junction and stroage 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	GBU3005	GBU301	GBU302	GBU304	GBU306	GBU308	GBU310	unit
Maximum instantaneous forward voltage drop per leg at 3.0A	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

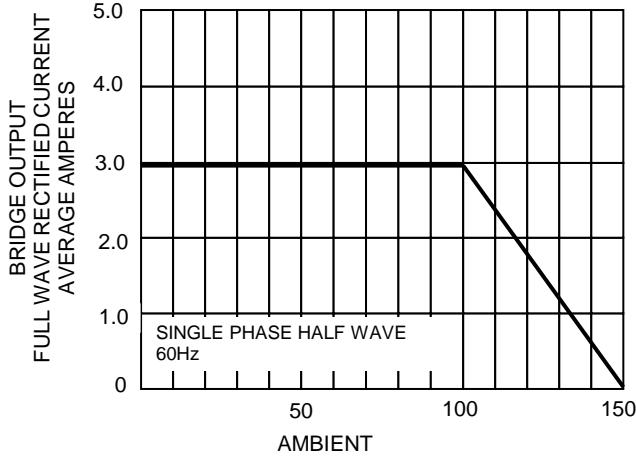


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

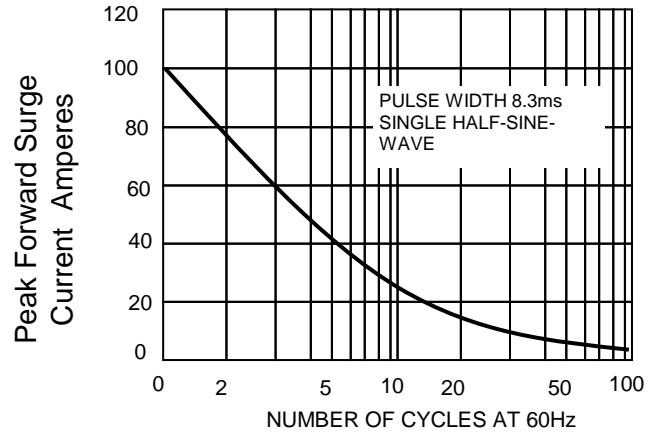


FIG.3-TYPICAL JUNCTION

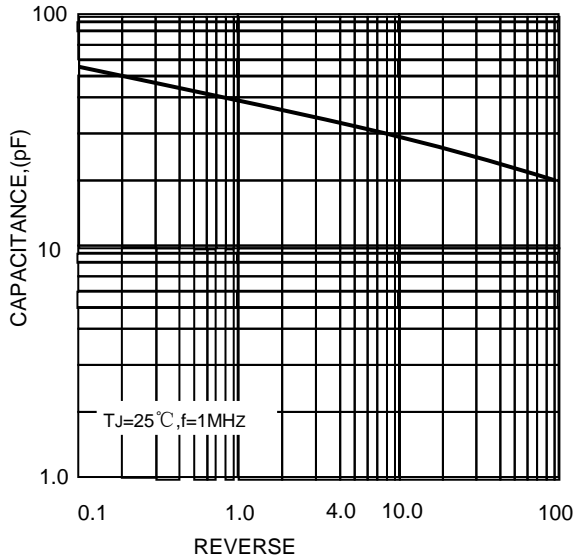


FIG.4-TYPICAL FORWARD CHARACTERISTICS

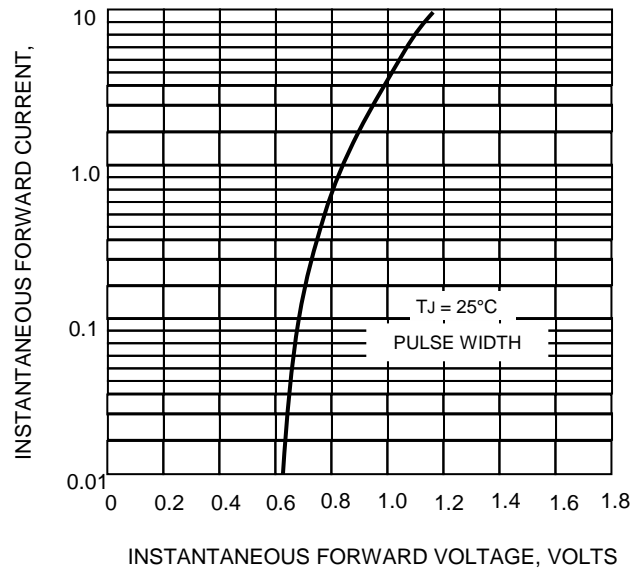


FIG.5-TYPICAL REVERSE CHARACTERISTICS

