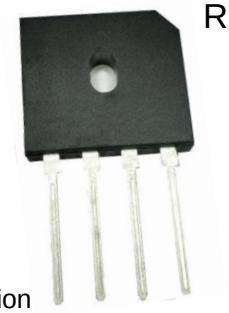
GBU20005 thru GBU2010

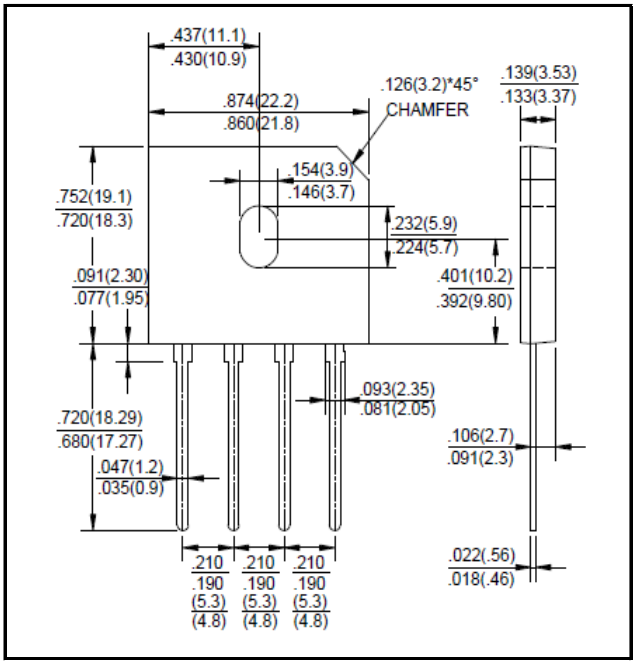
RoHS COMPLIANT

20.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifiter Reverse Voltage 50V to 1000V



GBU



Dimensions in inches and (milimeters)

Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 200 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265℃/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

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

Parameter	Symbol	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	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℃	IF(AV)	20.0 3.5							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	220							A
Rating for fusing(t<8.3ms)	I^2t	201							A^2sec
Typical thermal resistance per element(1)	ReJA	2.2							℃/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	60.0							PF
Operating junction and stroage temperature range	TJ, TSTG	-55to+150							℃

Electrical Characteristics

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

Parameter	Symbol	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	unit
Maximum instantaneous forward voltage drop per leg at 10.0A	VF	1.1							V
Maximum DC reverse current at ratde TA=25℃ DC blocking voltage per element TA=125℃	IR	5 100							UA

Notes:(1)Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.
(2)Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves(TA=25℃ Uniless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

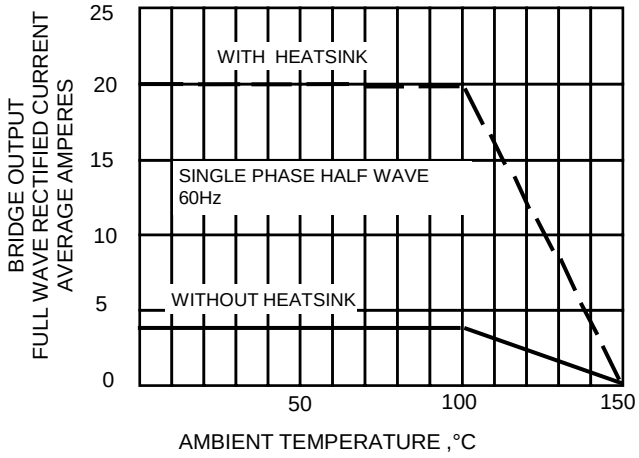


FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

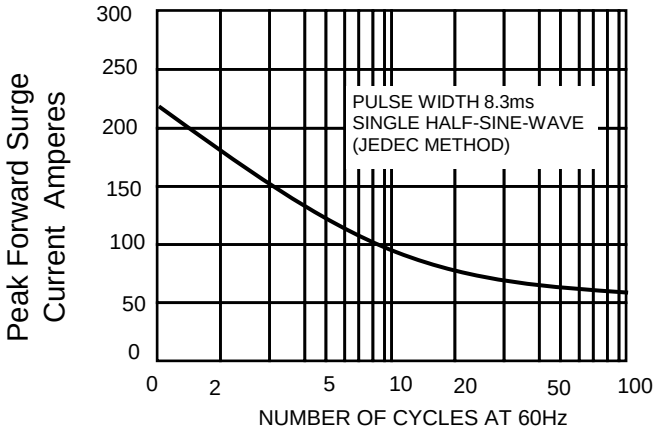


FIG.3-TYPICAL JUNCTION CAPACITANCE

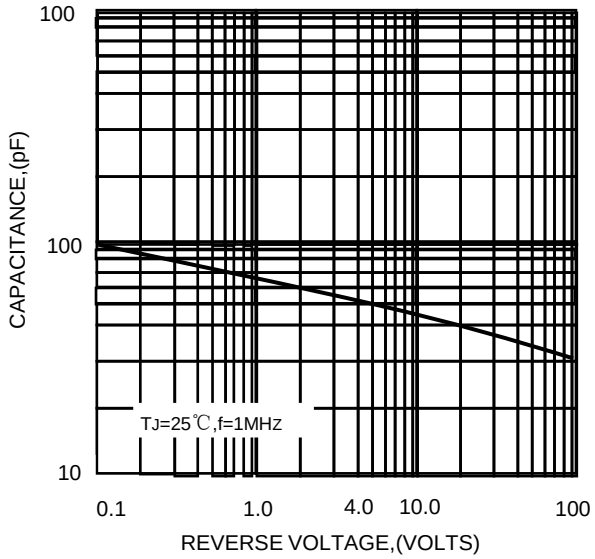


FIG.4-TYPICAL FORWARD CHARACTERISTICS

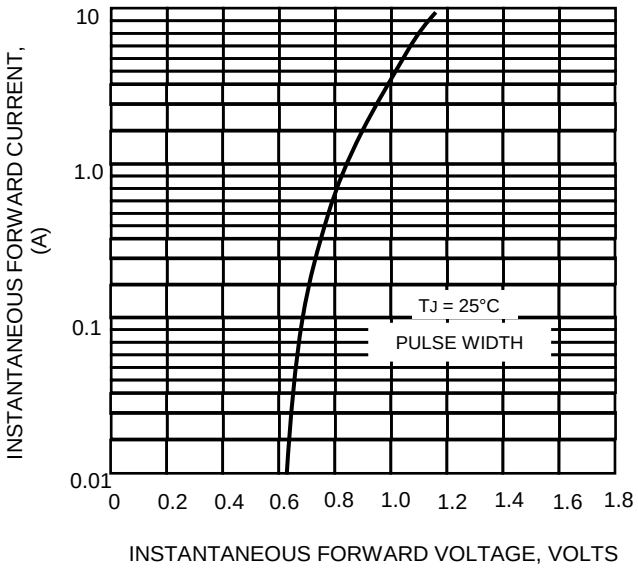


FIG.5-TYPICAL REVERSE CHARACTERISTICS