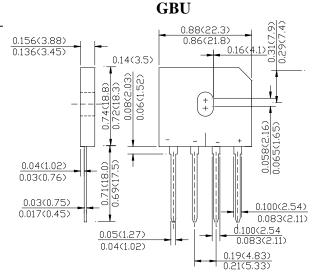


GLASS PASSIVATED BRIDGE RECTIFIERS GBU 20A SERIES 50 to 1000 V

FEATURES

- Surge overload rating-150 amperes peak
- · Ideal for printed circuit board
- Reliable low cost construction utilizing Molded plastic technique
- Plastic material has Underwriters Laboratory Flammability classification 94V-O
- Mounting Position: Any



Dimensions in inches and Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase , half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

CHARACTERISTICS	Symbol	GBU 20005 20A	GBU 2001 20B	GBU 2002 20D	GBU 2004 20G	GBU 2006 20J	GBU 2008 20K	GBU 2010 20M	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward (with heatsink Note2)	I _(AV)	20.0							Amp
Peak Forward Surge Current,8.3ms single half- sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	250							Amp
Maximum Forward Voltage at 10A DC	V _F	1.0							Volts
Maximum DC Reverse Current at rated @ T _J =25°C DC Blocking Voltage Per Element @ T _J =125°C	IR	5 500							uAmp
I 2t Rating for fusing (t<8.3ms)	I ² T	200							A ² S
Typical Junction Capacitance (Note 1)	CJ	70							pF
Typical Thermal Resistance (Note 2)	R₀Jc	2.2							°C/W
Operating Temperature Range	TJ	-55 to +150							$^{\circ}$
Storage Temperature Range	T _{STG}	-55 to +150							$^{\circ}$

Notes:

- 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 2. Device mounted on 100mm x 100mm X 1.6mm Cu Plate Heatsink.

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RATINGS AND CHARACTERISTIC CURVES(GBU 20A SERIES)

FIG.1 -- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

AVERAGE FORWARD CURRENT,

AMPERES

AMPERES

10

10

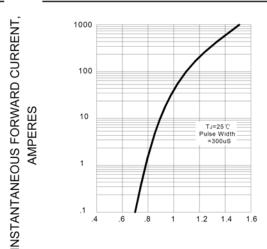
15

10

150

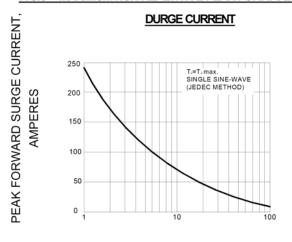
TEMPERATURE, °C

FIG.2 -- TYPICAL FORWARD CHARACTERISTIC



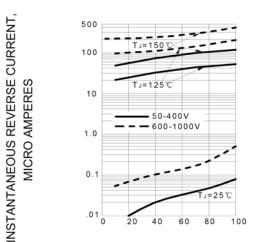
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD



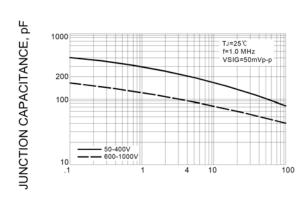
NUMBER OF CYCLES AT 60Hz

FIG.4 - TYPICAL REVERSE CHARACTERISTIC



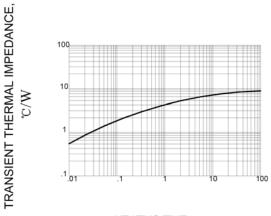
PERCENT OF RATED PEAK REVERSE VOLTAGE

FIG.5 - TYPICAL JUNCTION CAPACITANCE PER LEG



Cent

FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



2

REVERSE VOLTAGE, VOLTS t, HEATING TIME, sec.