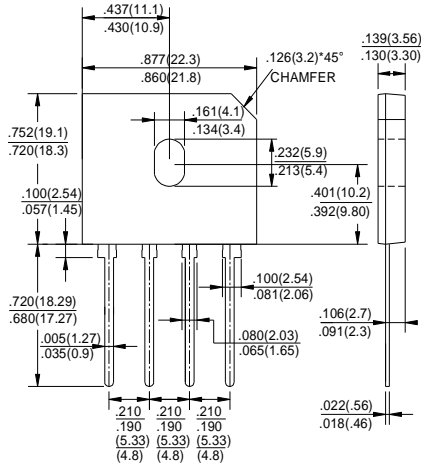


GBU20005 THRU GBU2010

GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 20.0 Amperes

GBU



Dimensions in inches and (millimeters)

FEATURES

- ◆ Surge overload rating -260 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L flammability classification 94V-0

MECHANICAL DATA

Case: Molded plastic body
Lead: Solder plated
Polarity: As marked

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 current derate by 20%.

CHARACTERISTICS	SYMBOL	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward (with heatsink Note1) Rectified Current @ T _c =100°C (without heatsink)	I <sub(av)< sub=""></sub(av)<>	20.0							3.6	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	260								A
Maximum Forward Voltage at 10.0A DC	V _F	1.0								V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R	10.0							500	µA
I ² t Rating for Fusing (t<8.3ms)	I ² t	280								A ² s
Typical Junction Capacitance Per Element (Note2)	C _J	70								pF
Typical Thermal Resistance	R _{θJC}	2.2								°C/W
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

NOTES: 1. Device mounted on 100mm*100mm*1.6mm cu plate heatsink.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

FIG.1-MAXIMUM FORWARD SURGE CURRENT

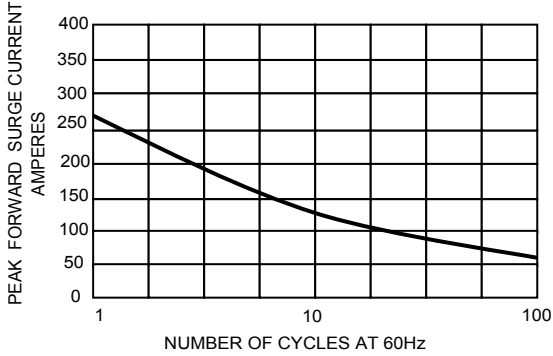


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

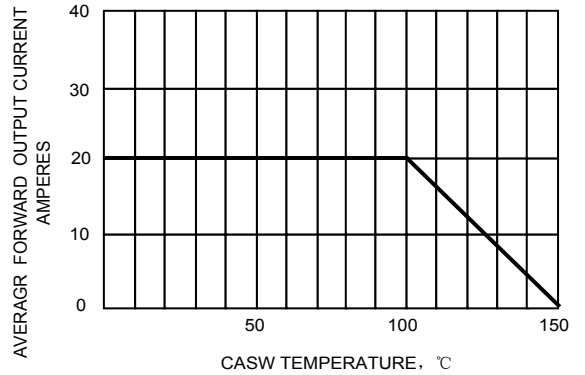


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

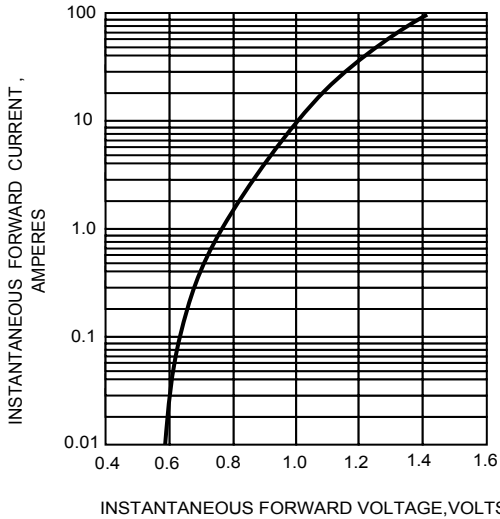


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

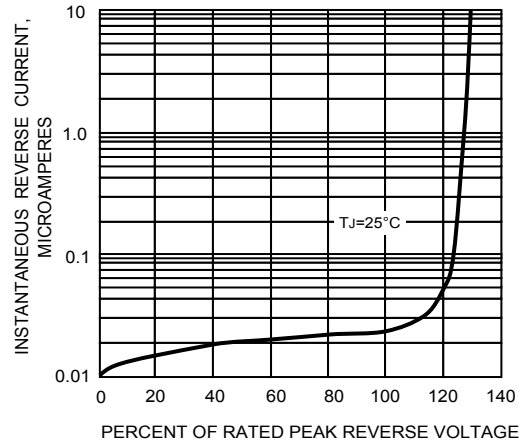


FIG.5-TYPICAL JUNCTION CAPACITANCE

