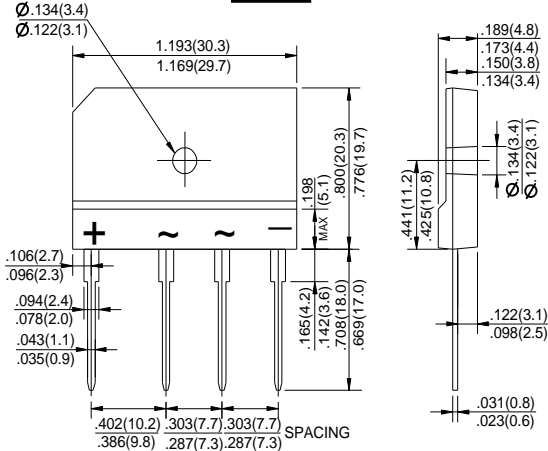


GBJ20005 THRU GBJ2010

Glass Passivated Bridge Rectifier

Voltage Range - 50 to 1000 Volts Current - 20.0 Ampere

GBJ



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic material has UL flammability classification 94V-0
- ◆ High surge forward current capability
- ◆ Low forward voltage drop
- ◆ Reliable low cost construction utilizing molded plastic technique results in inexpensive product

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	GBJ 20005	GBJ 2001	GBJ 2002	GBJ 2004	GBJ 2006	GBJ 2008	GBJ 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 Rectified Current @ T _C =100 (with heatsink Note 2)	I <sub(av)< sub=""></sub(av)<>	20.0							A
Rectified Current @ T _C =100 (without heatsink)		3.6							
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	1.1							V
Maximum DC Reverse Current @ T _J =25	I _R	10.0							uA
at Rated DC Blocking Voltage @ T _J =125		500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	240							A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	60							pF
Typical Thermal Resistance (Note2)	R _{JC}	0.8							/W
Operating Temperature Range	T _J	-55 to +150							
Storage Temperature Range	T _{STG}	-55 to +150							

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 300mm*300mm*1.6mm cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

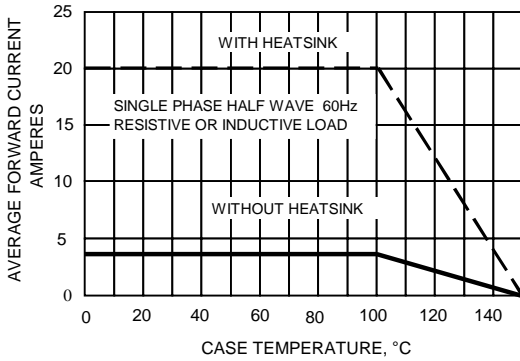


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

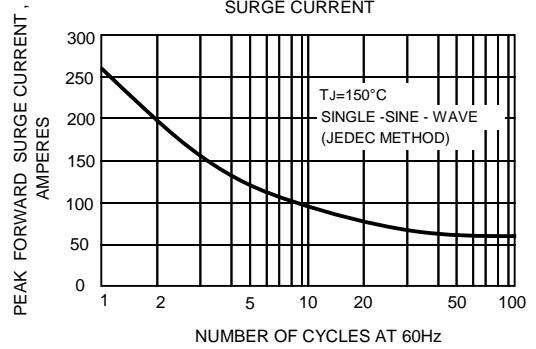


FIG.3-TYPICAL JUNCTION CAPACITANCE

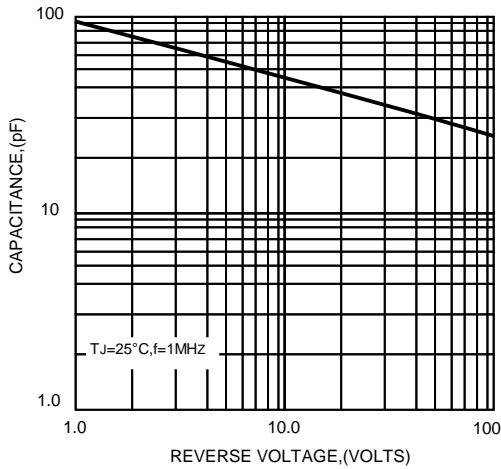


FIG.4-TYPICAL FORWARD CHARACTERISTICS

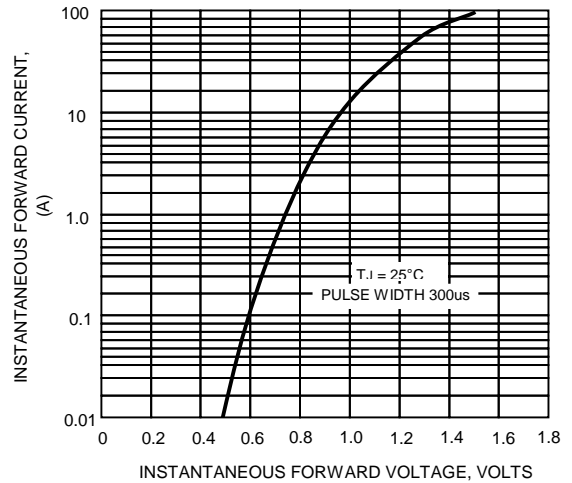
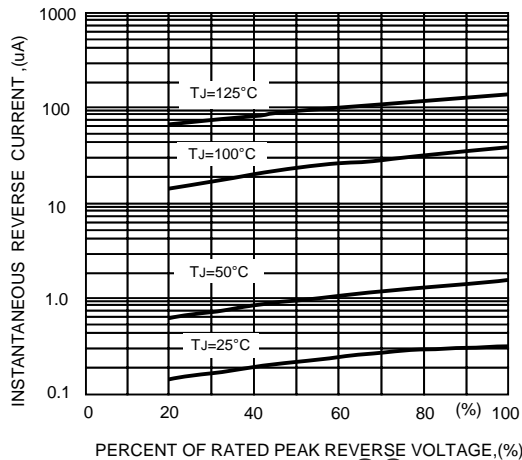


FIG.5-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)