



# GBJ20005 thru GBJ2010

## 20.0 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V

### Features

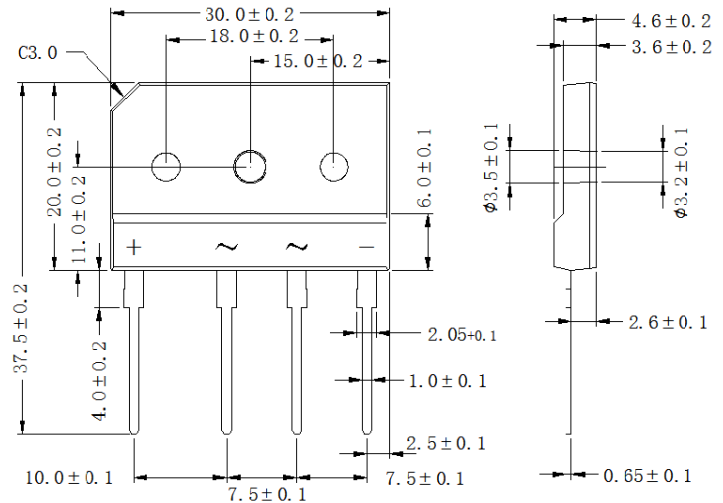
- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E484648
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 260°C/5 seconds at 5 lbs (2.3kg) tension

### Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting Position: Any



Dimensions in inches and (millimeters)

### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
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	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	30	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current (with heatsink Note 2) @ Tc=100°C (without heatsink)	I(AV)	20.0							3.5	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	IFSM	240								A
Maximum Forward Voltage at 10.0A DC	VF	1.1								V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ Tj=25°C @ Tj=125°C	IR	10							500	uA
Typical Thermal Resistance (Note2)	RθJC	1.5								°C/W
Operating Temperature Range	TJ	-55 to +150								°C
Storage Temperature Range	TSTG	-55 to +150								°C

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.

**Rating and Characteristic Curves** (  $T_A=25^{\circ}\text{C}$  Unless otherwise noted )  
**GBJ20005 thru GBJ2010**

FIG.1-FORWARD CURRENT DERATING CURVE

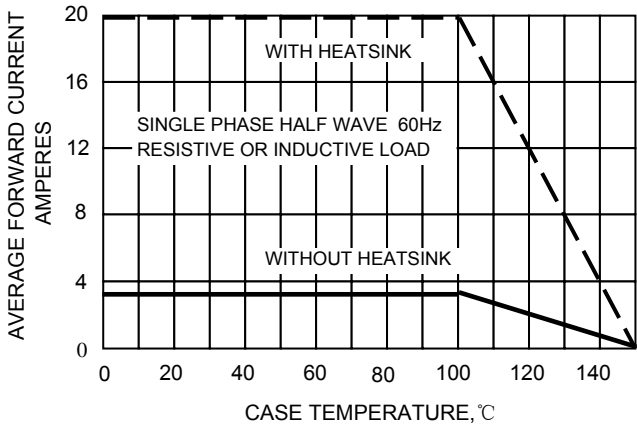


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

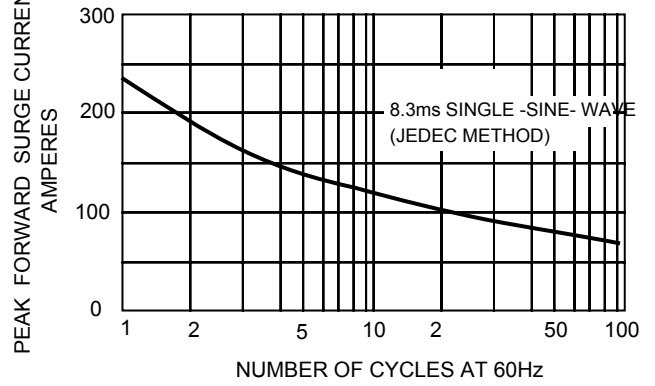


FIG.3-TYPICAL JUNCTION CAPACITANCE

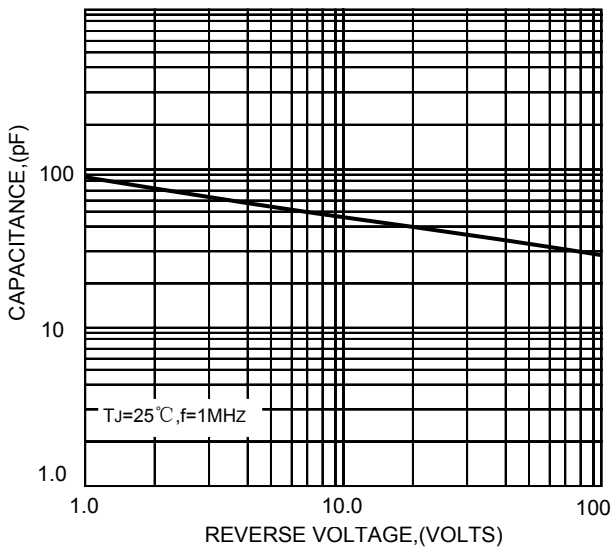


FIG.4-TYPICAL FORWARD CHARACTERISTICS

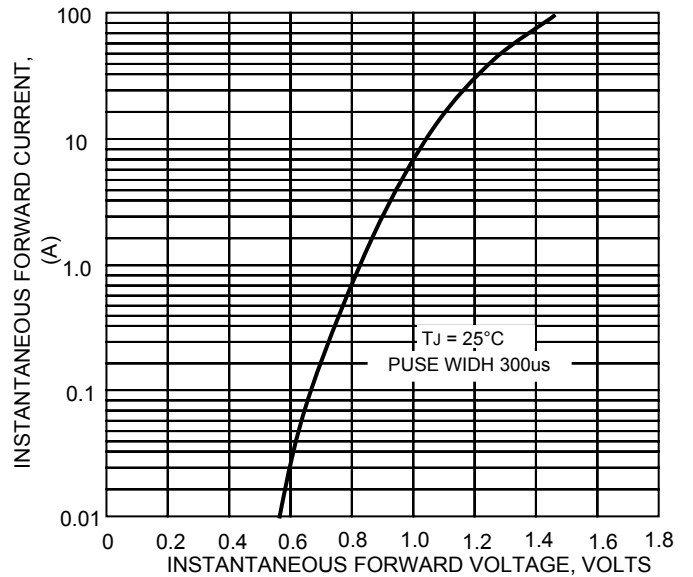


FIG.5-TYPICAL REVERSE

