



# GBJ50005 THRU GBJ5010

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

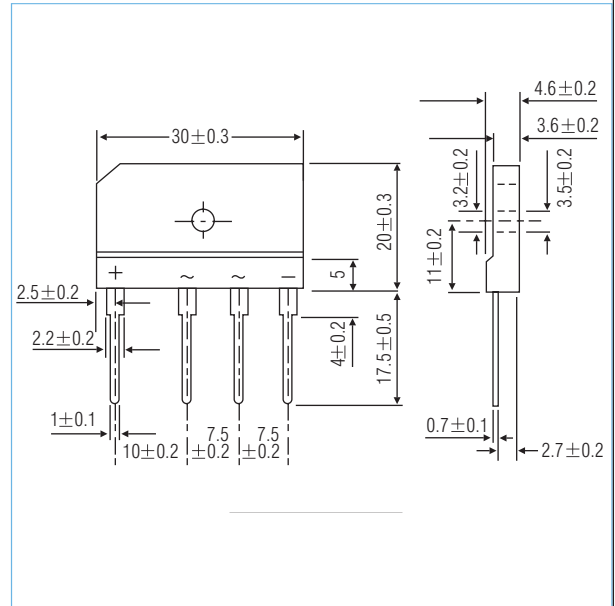
**VOLTAGE** 50 to 1000 Volts **CURRENT** 50.0 Amperes **GBJ** Unit : inch (mm)

### FEATURES

- \* Plastic package has Underwriters Laboratory Classification 94V-0
- \* Glass passivated chip junctions
- \* UL file number:E252843
- \* High surge current capability
- \* Ideal for printed circuit boards

### MECHANICAL DATA

CASE:5S Molded plastic body  
 Terminals:plated leads solderable per MIL - STD-750, Method 2026  
 High temperature soldering guaranteed:  
 260°C /10 seconds, 0.375 (9.5mm) lead length,  
 5 lbs. (2.3 kg) tension  
 Mounting position:Any (Note 3)  
 Mounting torque:5 in. lbs. Max.  
 Weight:0.26 ounce, 7.0gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings & Electrical Characteristics Ratings at 25 °C ambient temperature unless otherwise specified

	SYMBOLS	GBJ 50005	GBJ 5001	GBJ 5002	GBJ 5004	GBJ 5006	GBJ 5008	GBJ 5010	UNITS
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
最大均方根电压 Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
最大直流阻断电压 Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
最大正向平均整流电流 Maximum average forward output rectified	I(AV)	50.0							Amps
正向峰值浪涌电流 8.3ms 单一正弦半波 Peak forward surge current 8.3ms single half sine-wave	IFSM	500							Amps
最大正向电压降 Maximum forward voltage	VF	1.05							Volts
最大反向漏电流 Maximum reverse voltage	IR	5.0 500							μ A
典型结电容 Type junction capacitance VR=4.0V f=1.0MHz	CJ	14							pF
工作温度和存储温度 Operating junction and storage temperature range	TJ.TSTG	-55 to + 150							°C

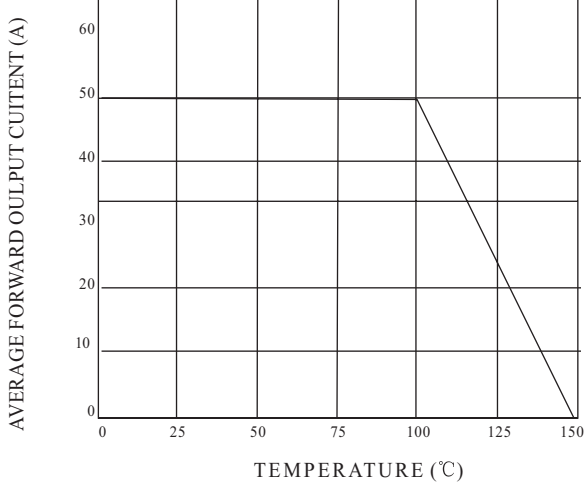
### NOTES:

1. Unit case mounted on Al plate heatsink.
2. Units mounted on P.C.B with 0.5\*0.5"(12\*12mm) copper pads an 0.375" (9.5mm) lead length
3. Recommended mounting position is to bolt down on heatsink with silicon thermal compound for maximum heat transfer with #6 screws

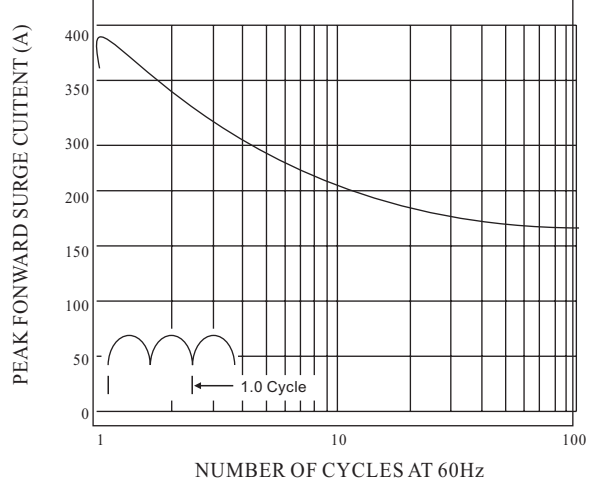
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## RATING AND CHARACTERISTIC CURVES

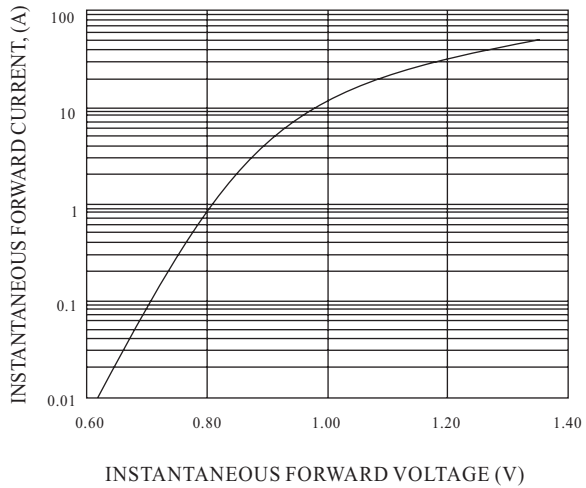
**FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT**



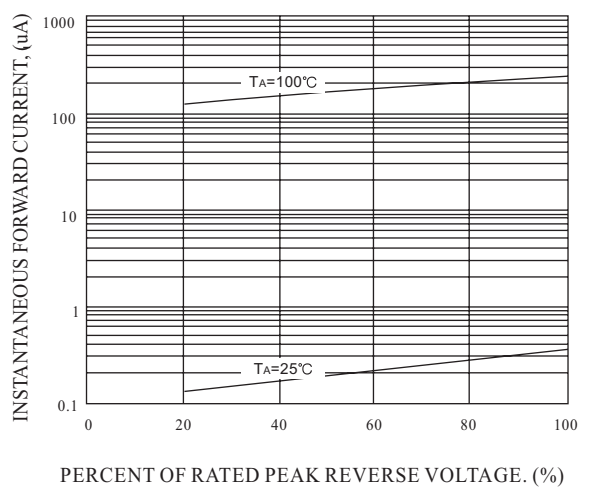
**FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



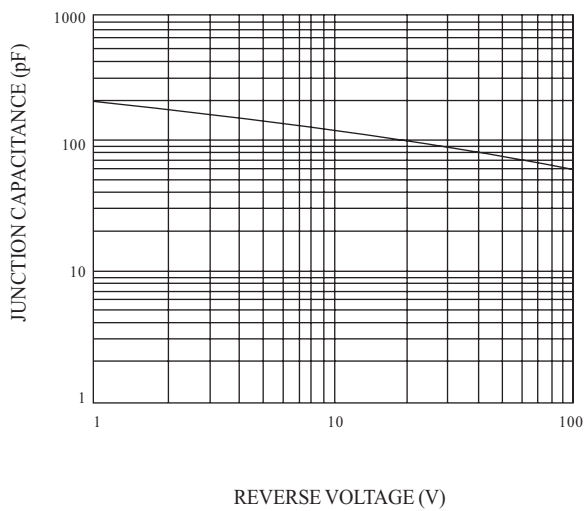
**FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

