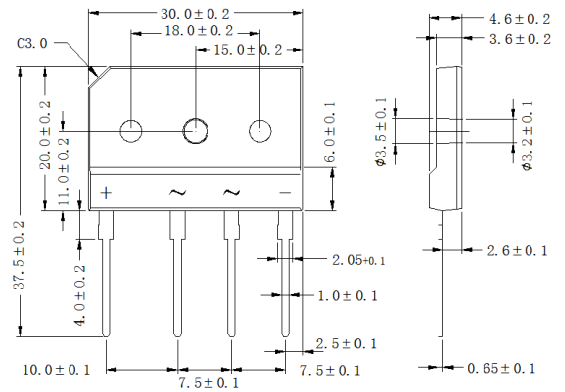




■ Features

- Ideal for printed circuit board mounting
- 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



Dimensions in inches and (millimeters)

■ Mechanical Data

- Case: Reliable low cost construction utilizing molded plastic technique
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Mounting Position: Any

■ Maximum Ratings & Thermal Characteristics

CHARACTERISTICS	SYMBOL	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	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)@T <sub>c</sub> =100 C (with heatsink)@T <sub>a</sub> =25 C	I <sub>F(AV)</sub>	25.0 3.5							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	350							A
Typical Thermal Resistance	R <sub>θJC</sub> (1)	1.0							°C/W
	R <sub>θJA</sub> (2)	22							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>								

Notes: Rating at 25 C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz. For Capacitive load derate current by 20%.

■ Electrical Characteristics

CHARACTERISTICS	SYMBOL	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	UNIT
Maximum Forward Voltage at 12.5A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>J</sub> =25 C	10							uA
	@T <sub>J</sub> =125 C	500							

Notes: Rating at 25 C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz. For Capacitive load derate current by 20%

Unit case mounted on aluminum plate heatsink  
Units mounted on PCB without heatsink



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

Fig. 1 - Derating Curve Output Rectified Current

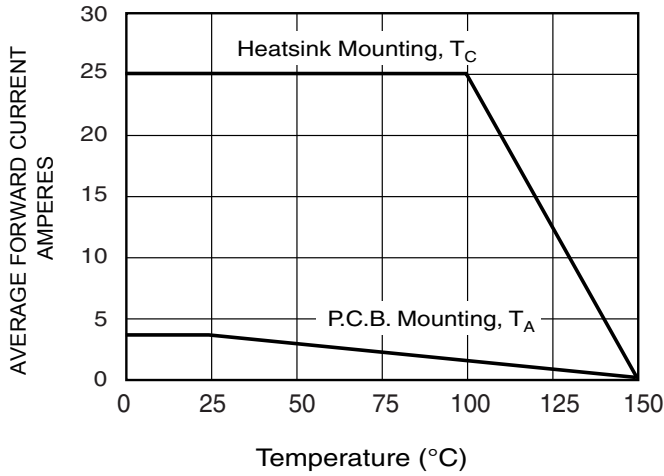


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

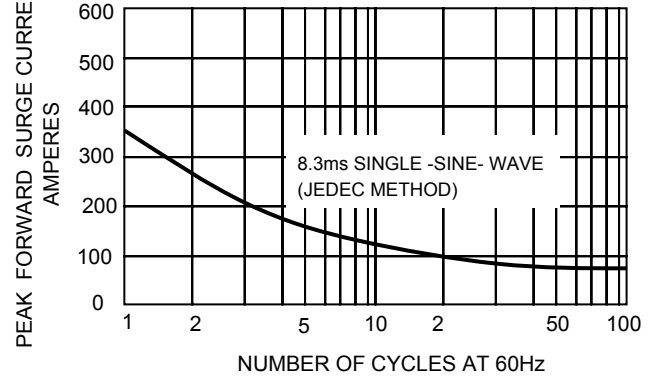


FIG.3-TYPICAL JUNCTION CAPACITANCE

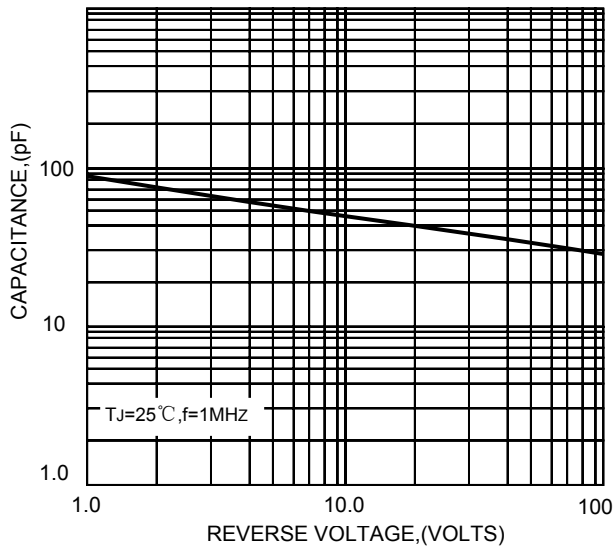


FIG.4-TYPICAL FORWARD CHARACTERISTICS

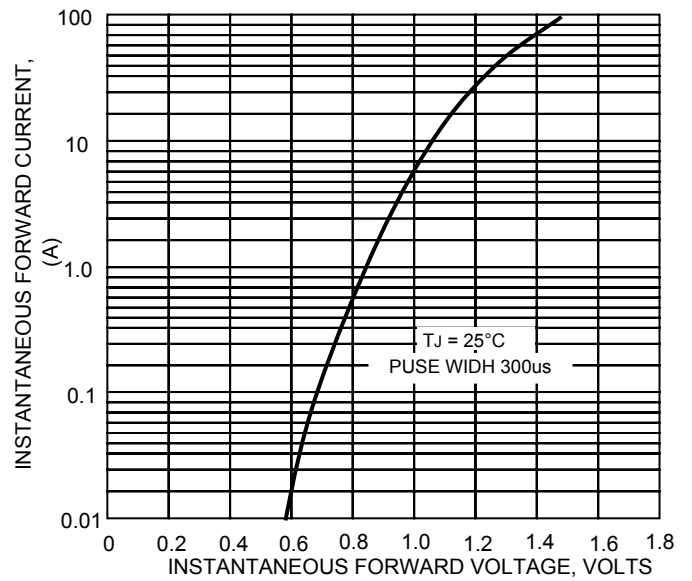


FIG.5-TYPICAL REVERSE CHARACTERISTICS

