

Kingtronics®

GBJ50005 thru GBJ5010

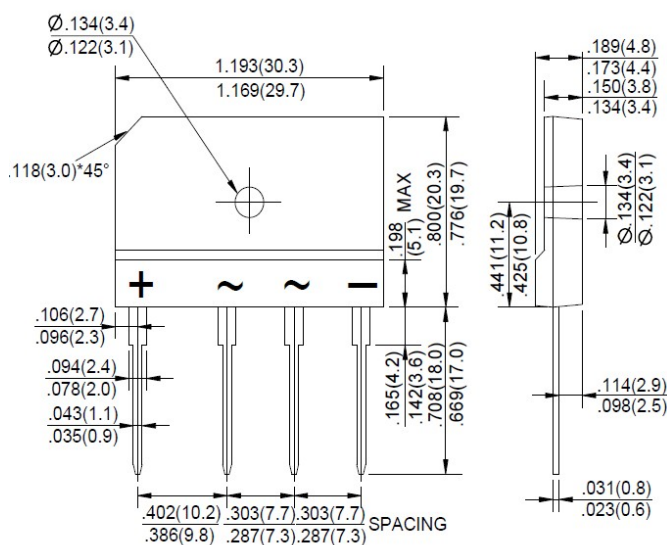
GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 50Amperes

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability

GBJ



Dimensions in inches and (millimeters)

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%

PARAMETER	SYMBOL	GBJ	GBJ	GBJ	GBJ	GBJ	GBJ	GBJ	UNITS	
		50005	5001	5002	5004	5006	5008	5010		
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	VRMS	35	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 @ TC=100°C (with heatsink Note 2)	I(AV)	50							A	
Peak Forward Surge Current 8.3ms single half Sine-wave Super Imposed on Rated Load (JEDEC Method)	IFSM	400							A	
Maximum Forward Voltage at 25.0A DC	VF	1.1							V	
Maximum DC reverse current at rated DC blocking voltage	IR	TJ =25°C	10.0							uA
		TJ =125°C	500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	660							A ² s	
Typical Thermal Resistance (Note1)	R _{θJC}	0.6							°C/W	
Operating Temperature Range	T _J	-55 to +150							°C	
Storage temperature range	T _{STG}	-55 to +150							°C	

NOTES: 1. Thermal resistance from junction to case with units mounted on heatsink.

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

3. The typical data above is for reference only.

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FIG.1-FORWARD CURRENT DERATING CURVE

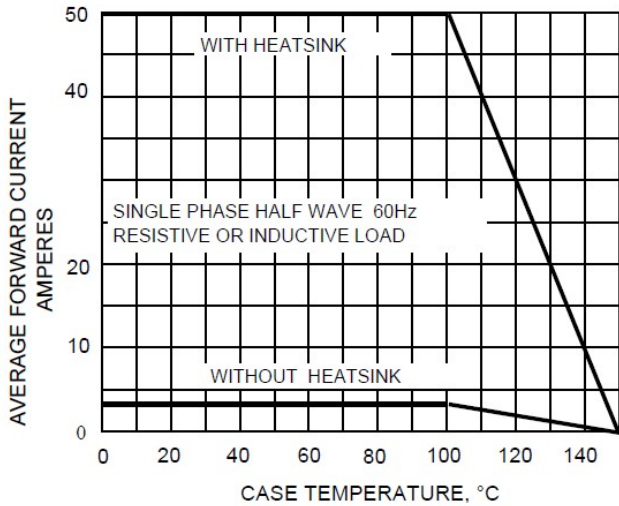


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

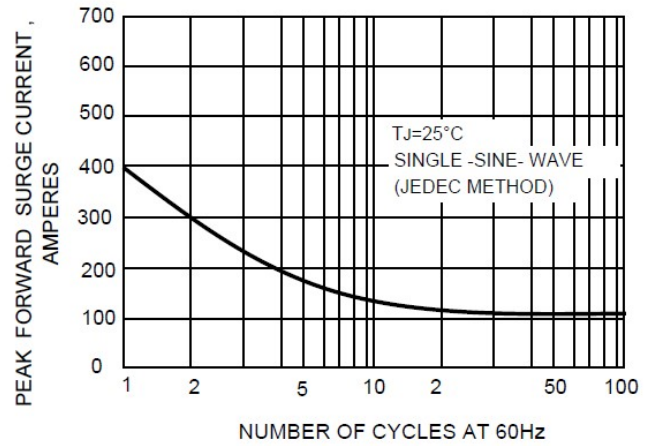


FIG.3-TYPICAL FORWARD CHARACTERISTICS

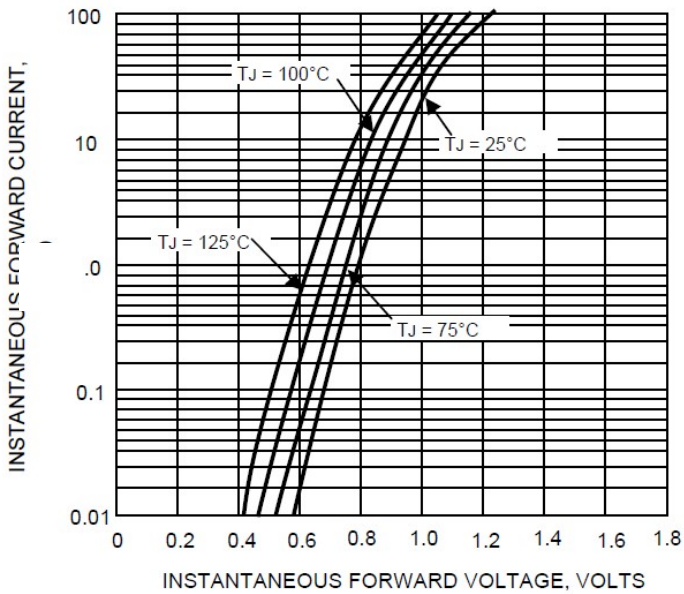


FIG.5-TYPICAL REVERSE CHARACTERISTICS

