

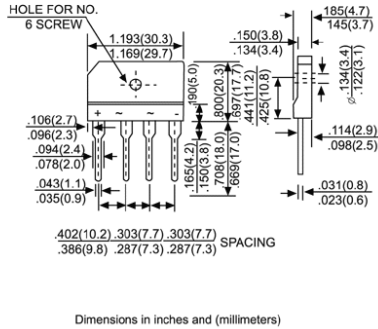
# GBJ/KBJ25005 THRU GBJ/KBJ2510

**SINGLE PHASE 25AMPS.  
GLASS PASSIVATED BRIDGE  
RECTIFIERS**

**Voltage Range  
50 to 1000 Volts  
Current  
25 Amperes**

**FEATURES**

- UL Recognized File # E-230084
- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The Plastic material has UL flammability classification 94 V-0



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 50Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number		GBJ	GBJ	GBJ	GBJ	GBJ	GBJ	GBJ	UNITS
		KBJ	KBJ	KBJ	KBJ	KBJ	KBJ	KBJ	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current@T <sub>c</sub> = 100°C (without heatsink)	I <sub>F(AV)</sub>				25.0	4.2			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	I <sub>FSM</sub>				350				A
Maximum Instantaneous Forward Voltage Drop Per Leg @12.5A	V <sub>f</sub>				1.05				V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C	I <sub>R</sub>				10	500			µA
I <sup>2</sup> t Rating for fusing (t<8.3ms)	I <sup>2</sup> t				510				A <sup>2</sup> S
Typical Junction Capacitance per Leg (Note 1)	C <sub>J</sub>				85				pF
Typical Thermal Resistance(Note 2)	R <sub>θJC</sub>				0.6				°C/W
Operating Temperature Range	T <sub>J</sub>				-55 to+150				°C
Storage Temperature Range	T <sub>STG</sub>				-55 to+150				°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

**RATING AND CHARACTERISTIC CURVES  
GBJ/KBJ25005 THRU GBJ/KBJ2510**

FIG.1 - FOR WARD CURRENT DERATING CURVE

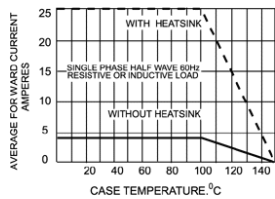


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

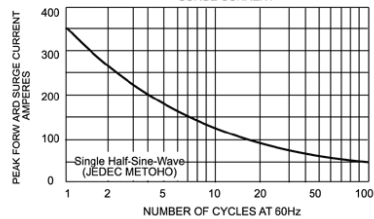


FIG.3 - TYPICAL JUNCTION CAPACITANCE

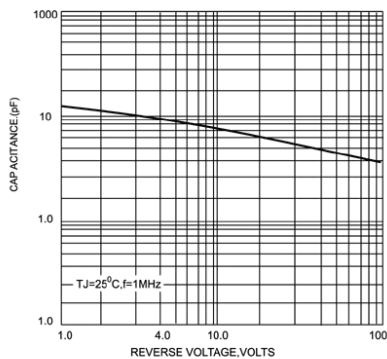


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

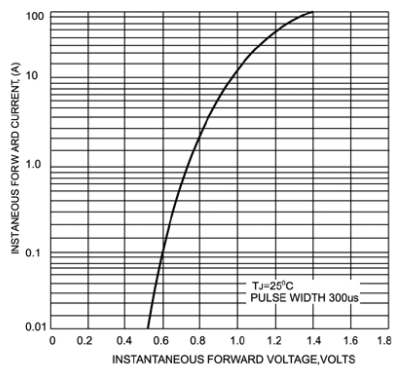


FIG.5-TYPICAL REVERSE CHARACTERISTICS

