



勳昇科技股份有限公司  
Extensive Technology  
www. extensivetech. com

## 4.0A Glass Passivated Single-Phase Bridge Rectifiers - 50V-1000V

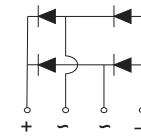
### FEATURES

- Ideal for printed circuit board
- General use in ac-to-ac bridge full wave rectification for Monitor, TV, Printer, Switching Mode Power Supply, Adapter, Audio Equip. & Home Appliances applications
- Glass passivated chip junctions
- High case dielectric strength of 1500VRMS
- High surge current capability
- Lead-free parts, meet RoHS requirements

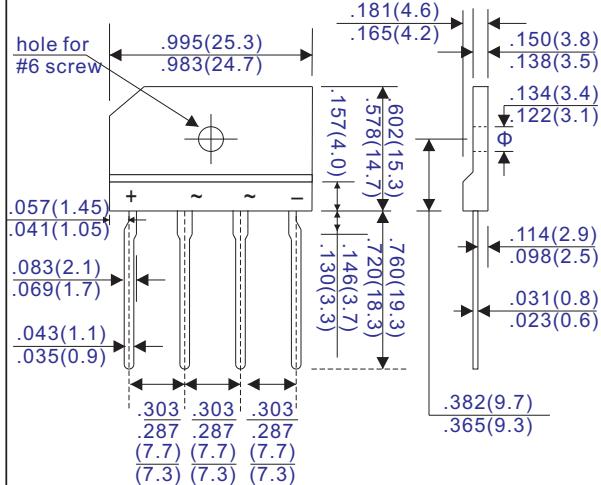
### MECHANICAL DATA

- Case: Molded plastic KBJ case
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: shown on front side of case, positive lead by beveled corner
- Mounting Torque: 10cm-kg max., Note 4
- Weight: 0.16 ounce, 4.6 grams

**GBJ4A thru GBJ4M**



### KBJ Case



Unit :inch(mm)

### MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	GBJ 4A	GBJ 4B	GBJ 4D	GBJ 4G	GBJ 4J	GBJ 4K	GBJ 4M	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at Tc=100°C, Note 1 at TA=25°C, Note 2	I(AV)					4.0	2.3		Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method) TJ=150°C	IFSM					130			Amps
Maximum Instantaneous Forward Voltage at 2.0A	VF					0.95			Volts
Maximum DC Reverse Current TA= 25°C TA=125°C at Rated DC Blocking Voltage	IR					5.0	250.0		μA
Rating for fusing (t<8.3mS)	$I^2 t$					60			$\text{A}^2 \text{ sec}$
Typical Junction Capacitance (Note 3)	CJ					40			pF
Typical Thermal Resistance Per Leg (Note 2 & 1)	RθJA RθJC					26.0	5.0		°C/W
Operating Junction Temperature Range	TJ					-55 ~ +150			°C
Storage Temperature Range	TSTG					-65 ~ +150			°C

Note 1. Thermal resistance from junction to ambient with units mounted on Al. heatsink,

2. Thermal resistance from junction to lead with units mounted on P.C.B. at 0.375" (9.5mm) lead length and 0.5x0.5" (12x12cm) copper pads.

3. Measured at 1.0MHz and applied reverse voltage 4.0 Volts .

4. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

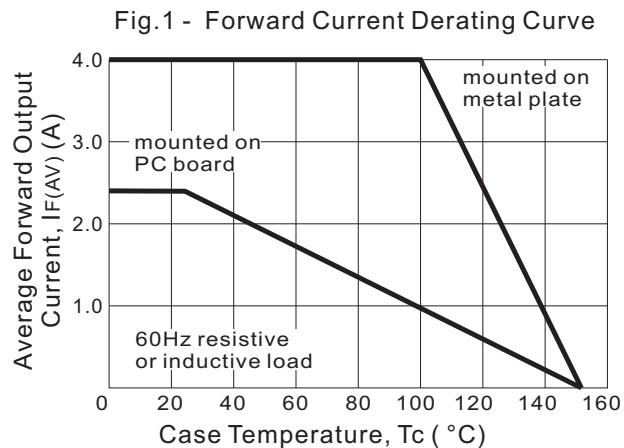


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

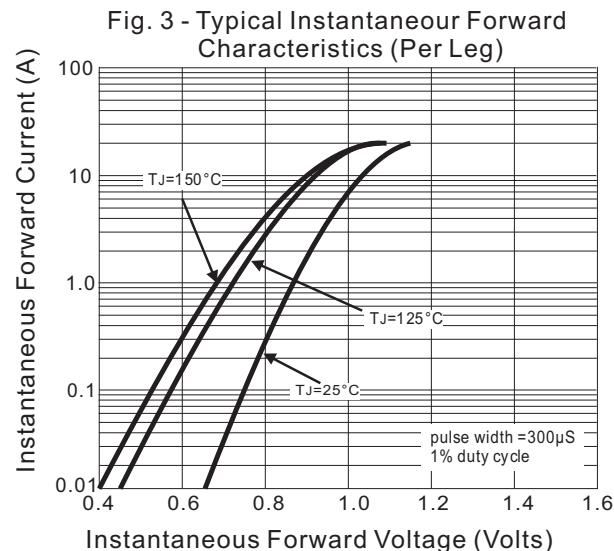
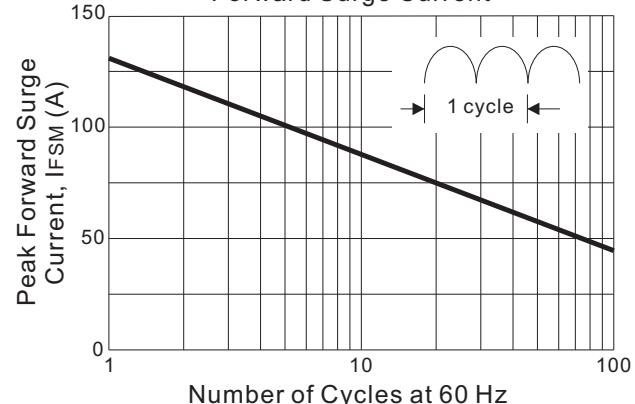


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

