



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**GBK8A
THRU
GBK8M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 8.0 Amperes

FEATURES

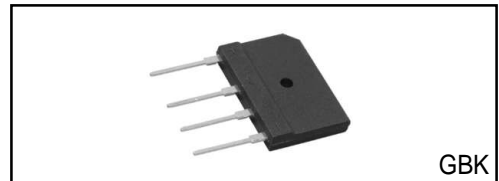
- * Ideal for printed circuit board
- * Surge overload rating: 200 Amperes peak
- * Glass passivated junction

MECHANICAL DATA

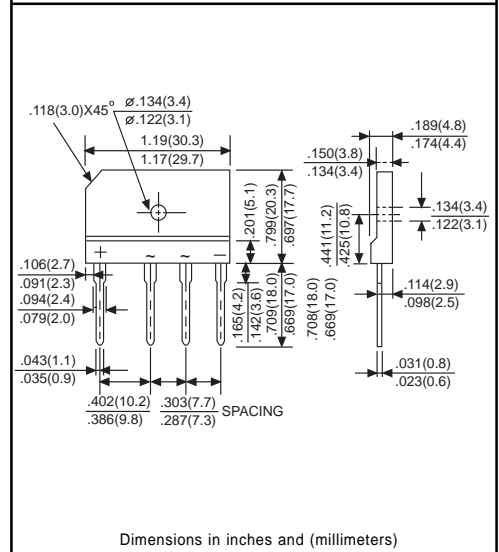
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



GBK



	SYMBOL	GBK8A	GBK8B	GBK8D	GBK8G	GBK8J	GBK8K	GBK8M	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Current @Tc=100°C (with heatsink Note 2) (without heatsink)	I(AV)	8.0 2.9							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	175							Amps
Maximum Forward Voltage Drop per element at 4.0A DC	VF	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@TJ = 25°C	10							μAmps
	@TJ = 125°C	500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	120							A ² Sec
Typical Junction Capacitance (Note1)	CJ	55							pF
Typical Thermal Resistance (Note 2)	RθJC	1.8							°C/W
Operating Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

NOTES : 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts

2.Thermal Resistance from Junction to Case per element Unit mounted on 100x100x1.6mm Cu plate heat-sink.

RATING AND CHARACTERISTIC CURVES (GBK8A THRU GBK8M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

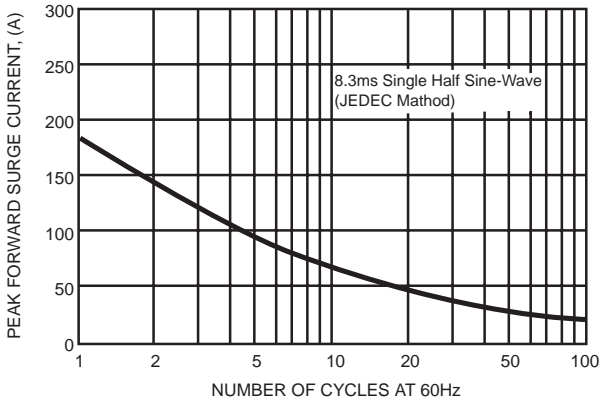


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

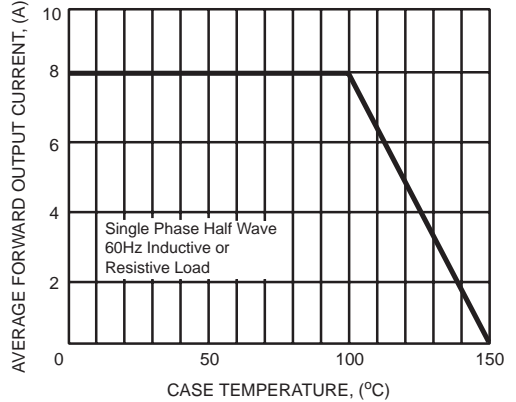


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

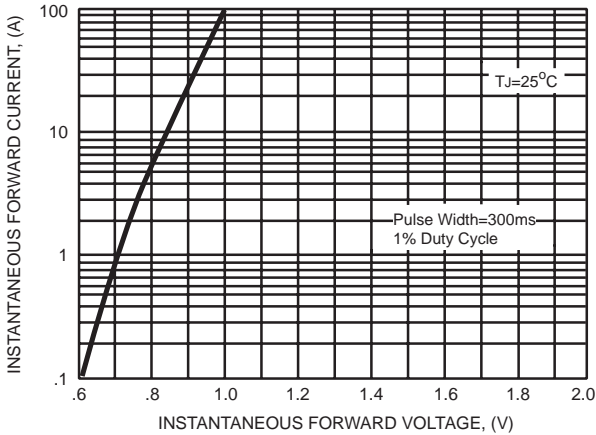


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

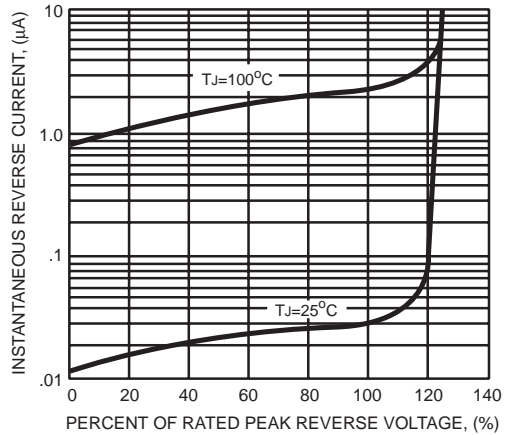
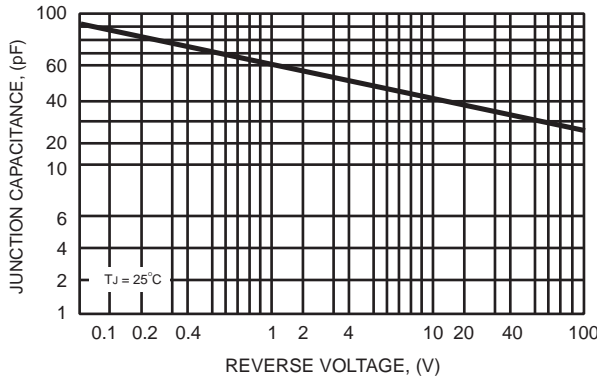


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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