



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

GBJ4A
THRU
GBJ4M

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 4.0 Amperes

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 150 Amperes peak
- * Glass passivated junction

MECHANICAL DATA

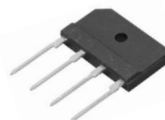
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 4.6 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

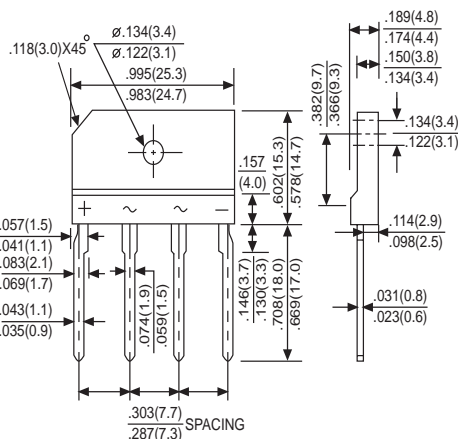
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



GBJ4-10



Dimensions in inches and (millimeters)

		SYMBOL	GBJ4A	GBJ4B	GBJ4D	GBJ4G	GBJ4J	GBJ4K	GBJ4M	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage		V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at Tc = 100 °C with heatsink		I _O	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	140							Amps
Maximum Forward Voltage Drop per element at 4.0A DC		V _F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ TA = 25°C	I _R	10							μAmps
	@ TA = 100°C		500							
I ² t Rating for Fusing (t≤8.3ms)		I ² t	93							A ² Sec
Typical Junction Capacitance (Note 1)		C _J	45							pF
Typical Thermal Resistance (Note 2)		RθJC	2.2							°C/W
Operating Temperature Range		T _J	-55 to +150							°C
Storage Temperature Range		T _{STG}	-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 300x300x1.6mm Aluminum plate heat-sink.

RATING AND CHARACTERISTIC CURVES (GBJ4A THRU GBJ4M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

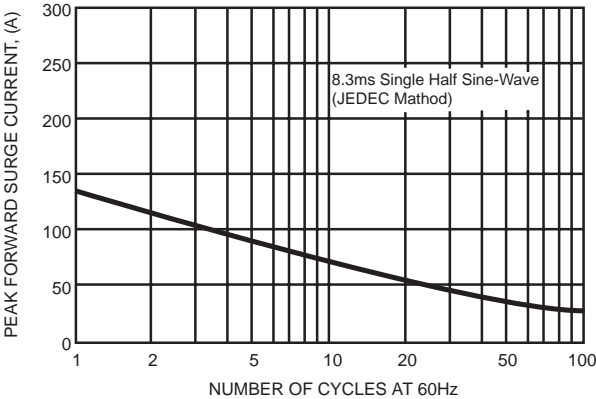


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

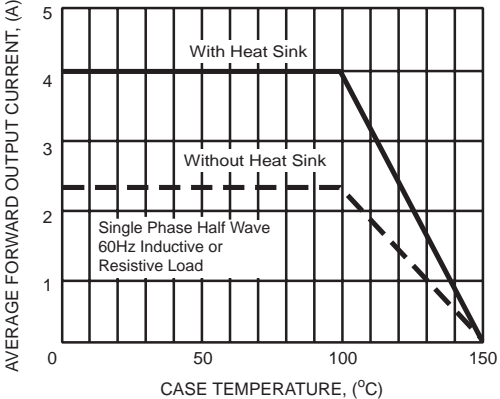


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

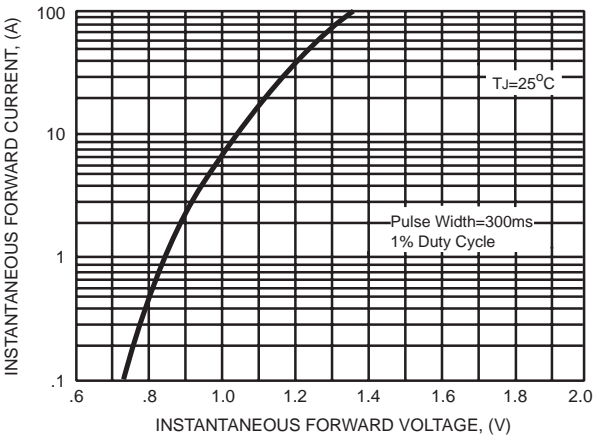


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

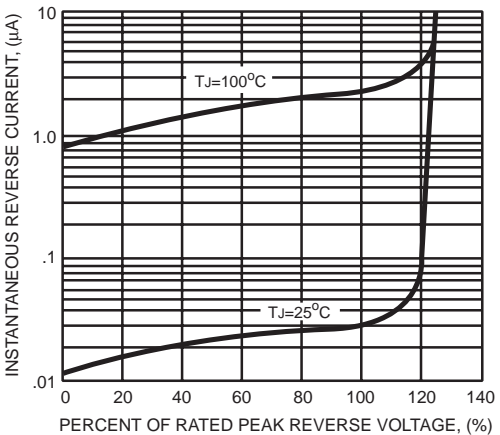
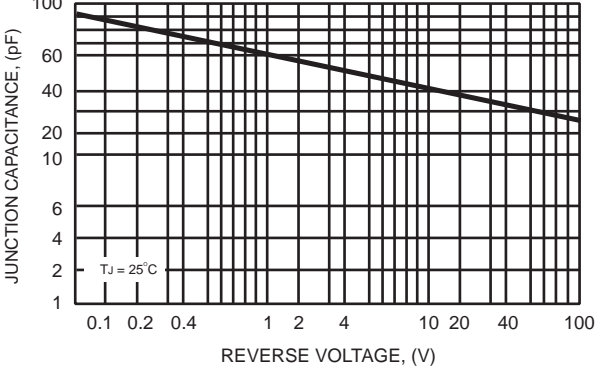


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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