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DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

GBU8A
THRU
GBU8M

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

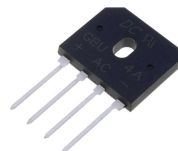
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

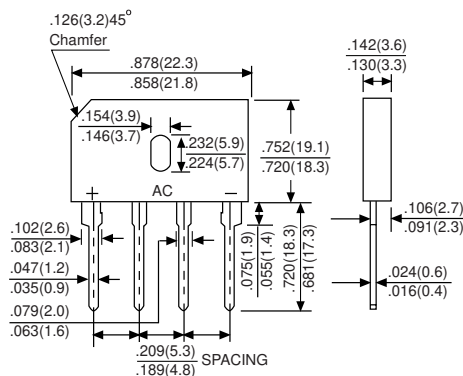
Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.



GBU



Dimensions in inches and (millimeters)

	SYMBOL	GBU8A	GBU8B	GBU8D	GBU8C	GBU8J	GBU8K	GBU8M	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 Rectified Current @T _C =100°C (with heatsink Note 2) (without heatsink)	I _{AV}	8.0 3.2							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200							Amps
Maximum Forward Voltage Drop per element at 4.0A DC	V _F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I _R	@T _J = 25°C							μAmps
		@T _J = 125°C							
IR _{2T} Rating for Fusing (t<8.3ms)	I _{2T}	166							A ² Sec
Typical Junction Capacitance (Note1)	C _J	60							pF
Typical Thermal Resistance (Note 2)	R _{θJC}	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 50x50x1.6mm Cu plate heat-sink.

RATING AND CHARACTERISTIC CURVES (GBU8A THRU GBU8M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

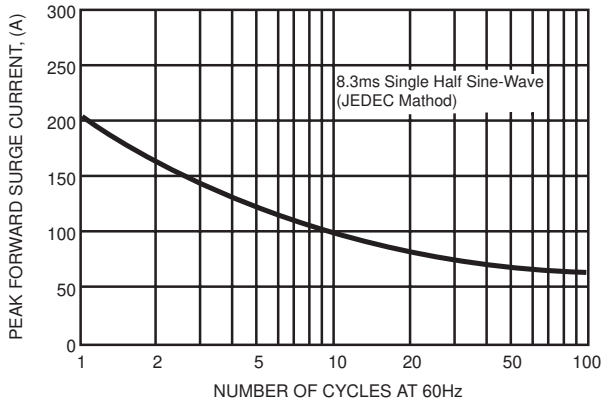


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

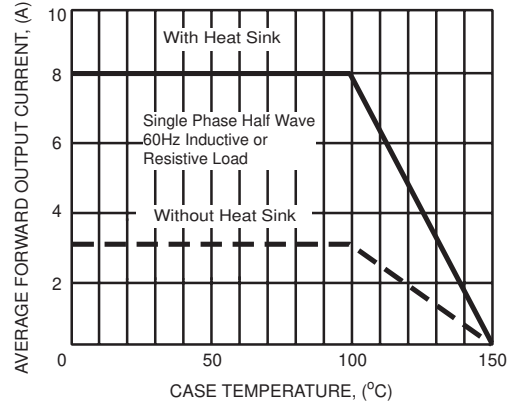


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

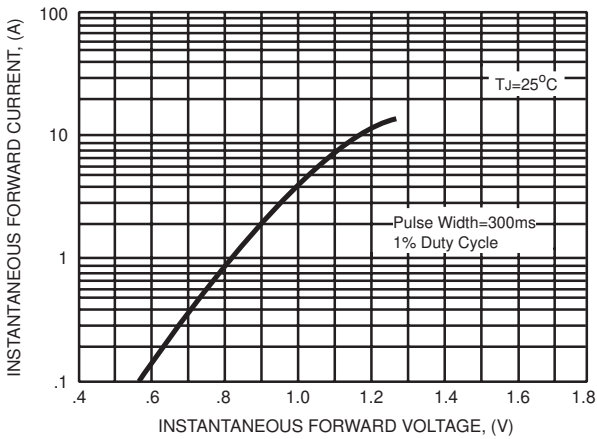


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

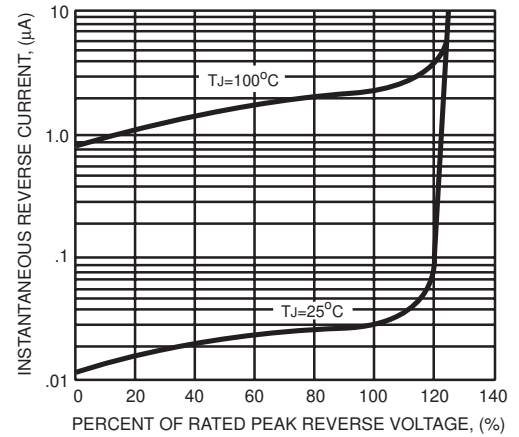
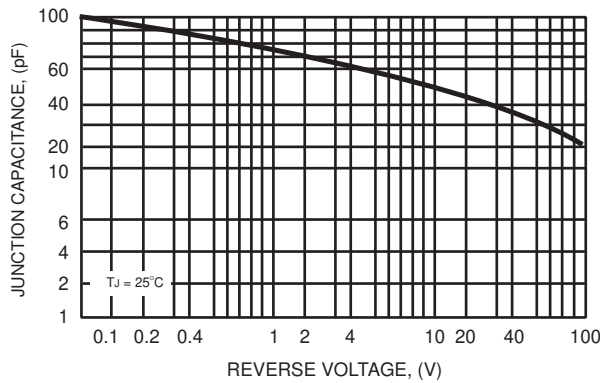


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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