



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**GBU6A
THRU
GBU6M**

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 6.0 Amperes

FEATURES

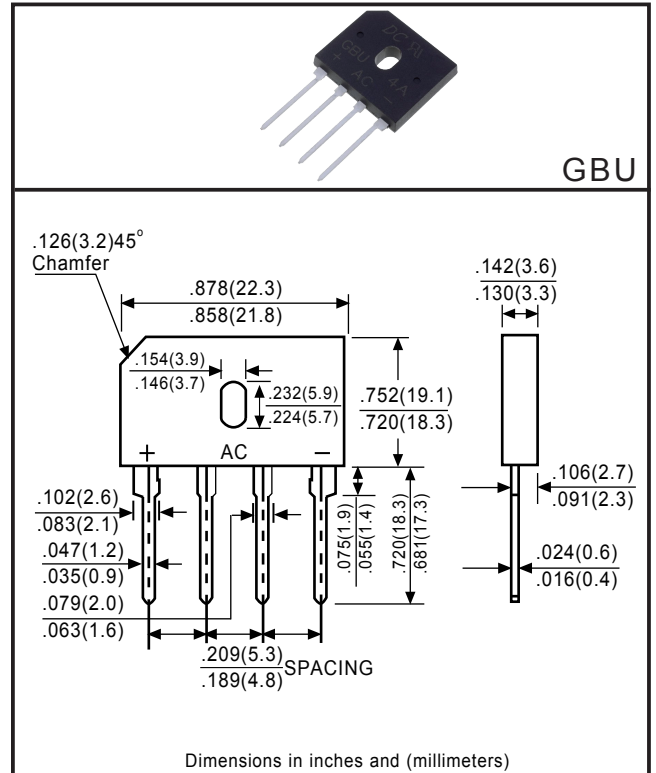
- * High forward surge capability
- * High current capability
- * Low forward voltage drop
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94-V0 rated flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 6.1 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%.



	SYMBOL	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	GBU6M	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS 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 (with heatsink Note 2) Rectified Current at T _A = 100°C (without heatsink)	I _O	6.0 2.8							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	175							Amps	
Maximum Instantaneous Forward Voltage at 3.0A DC	V _F	1.1							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _J = 25°C	I _R	10							μAmps
	@T _J = 125°C		100							
Typical Junction Capacitance (Note 1)	C _J	45							pF	
I ² t Rating for Fusing (t<8.3mS)	I ² t	127.1							A ² s	
Typical Thermal Resistance to case with heatsink (Note 2)	R _{θJC}	2.0							°C/W	
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to +150							°C	

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

2. Device mounted on 50mm*50mm*1.6mm Cu plate heatsink.

RATING AND CHARACTERISTIC CURVES (GBU6A THRU GBU6M)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

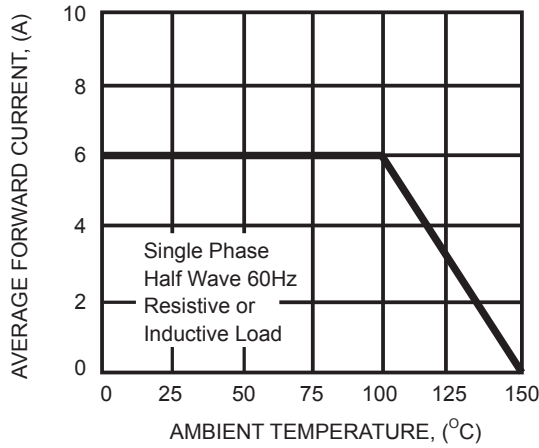


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

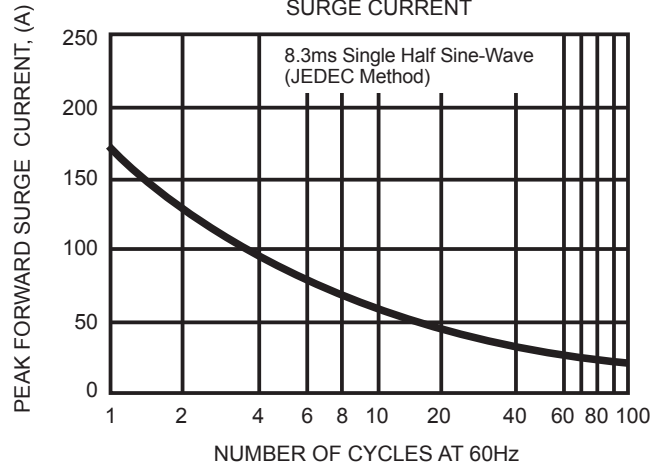


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

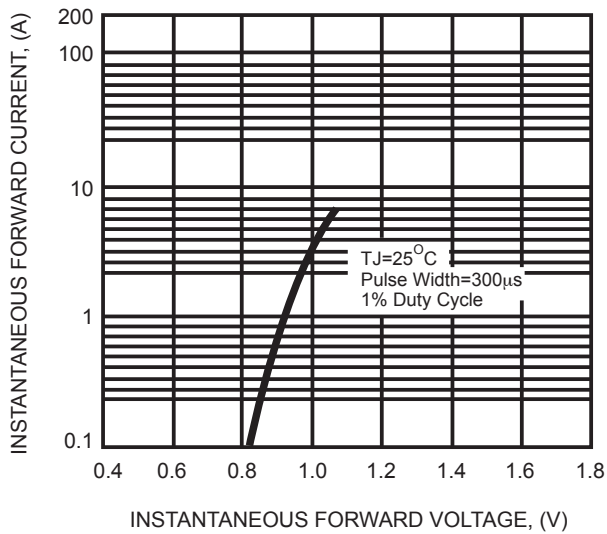


FIG. 4
TYPICAL REVERSE CHARACTERISTICS

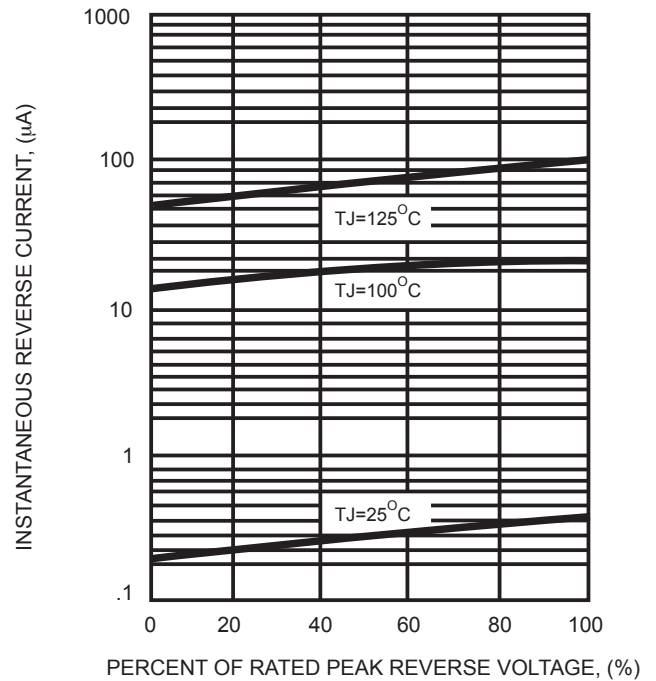
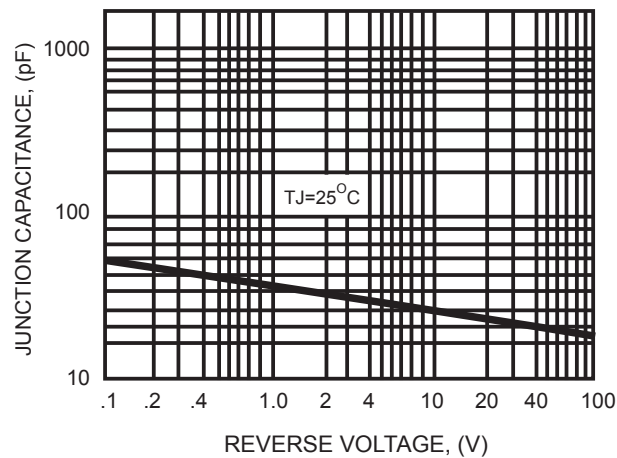


FIG. 5
TYPICAL JUNCTION CAPACITANCE



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