



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

GBU6A
THRU
GBU6M

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 6.0 Amperes

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 175 Amperes peak
- * Glass passivated junction

MECHANICAL DATA

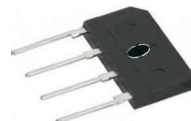
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

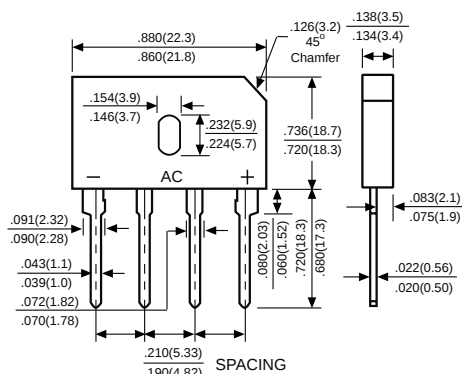
Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.



GBU



Dimensions in inches and (millimeters)

		SYMBOL	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 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}	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 Forward Voltage Drop per element at 3.0A DC		V _F	1.0						Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ T _J = 25°C	I _R	5.0						μAmps	
	@ T _J = 125°C		500							
I ² t Rating for Fusing (t<8.3ms)		I ² t	127						A ² Sec	
Typical Junction Capacitance (Note1)		C _J	50						pF	
Typical Thermal Resistance (Note 2)		R _{θJA}	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 DC.

2. Thermal Resistance from Junction to Case per element Unit mounted on 75x75x1.6mm Cu plate heat-sink.