

GBU6A THRU GBU6K

GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE: 50-800V

CURRENT: 6.0A

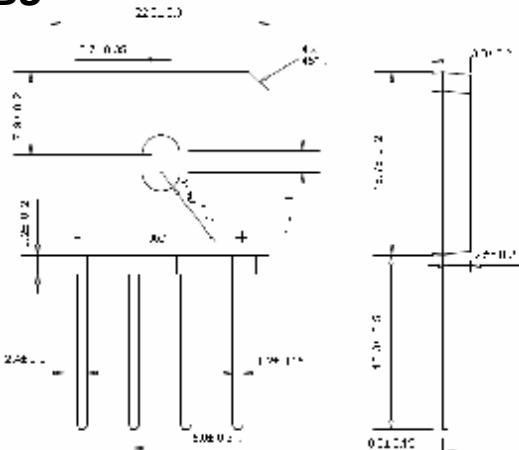
FEATURES

- Low leakage
- Low forward voltage
- Surge overload ratings-175 Amperes

MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL 94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** Symbols molded or marked on body
- **Mounting position:** Any
- **Weight:** 6.6 grams

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL 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	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Average Forward rectified Output Current at $T_C=75^\circ\text{C}$	I_o	6.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	175						A
Maximum Forward Voltage Drop per element at 3.0 A DC	V_F	1.0						V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R	5.0						μA
		500						
I^2t Rating for Fusing ($t<8.3\text{ms}$)	I^2t	240						A^2s
Typical Junction Capacitance per Element (Note 1)	C_J	60						pF
Typical Thermal Resistance, Junction to Case (Note 2)	$R_{\theta JA}$	2.7						$^\circ\text{C}/\text{W}$

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to case per element. Unit mounted on 150 x 150 x 1.6mm copper plate heat sink.