

### 6A Bridge Rectifiers

#### FEATURES :

- Reliable low cost construction utilizing molded plastic technique.
- Glass passivated chip junction.
- Ideal for printed circuit board.
- Low reverse leakage current.
- High surge current capability.
- RoHS compliant

#### MECHANICAL DATA :

- Case : Molded plastic, GBU
- Epoxy: UL 94V-O rate flame retardant
- Polarity: Marked on body
- Mounting position: Any



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25 C ambient temperature unless otherwise specified. Single, half wave, 60Hz resistive or inductive load. For capacitive load, derate current by 20%)

Characteristic	Symbol	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610	Unit
Maximum Reverse Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	6.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	175						A
Rating for Fusing (t =8 3ms . )	$I^2t$	127						A <sup>2</sup> S
Forward Voltage $I_F=3A$	$V_F$	1.0						V
Maximum DC reverse current at rated DC blocking voltage ( $T_A=25^{\circ}C$ / $T_A=125^{\circ}C$ )	$I_R$	5 / 100						uA
Typical Junction Capacitance <sup>(1)</sup>	$C_J$	50						pF
Typical Thermal resistance, Junction to Ambient	$R_{\theta JA}$	25						°C/W

Typical Thermal resistance, Junction to Case	$R_{\theta JC}$	2.2	$^{\circ}C/W$
Operating temperature range	$T_J$	-55 ~ +150	$^{\circ}C$
Storage temperature range	$T_{STG}$	-55 ~ +150	$^{\circ}C$

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

RATINGS AND CHARACTERISTICS CURVES

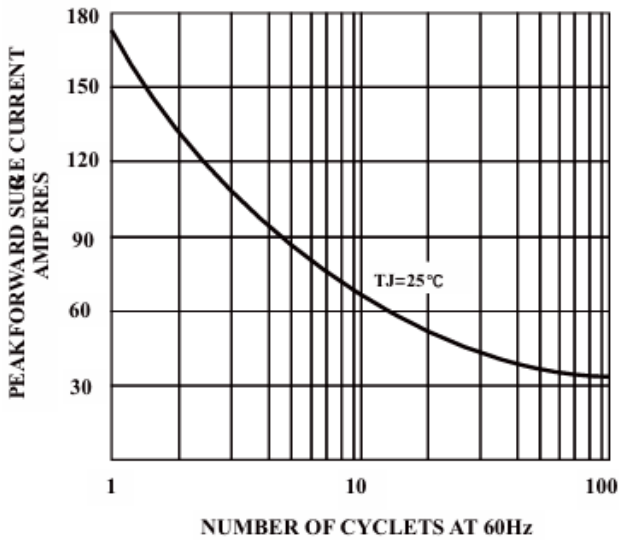


Figure 1. MAXIMUM FORWARD SURGE CURRENT

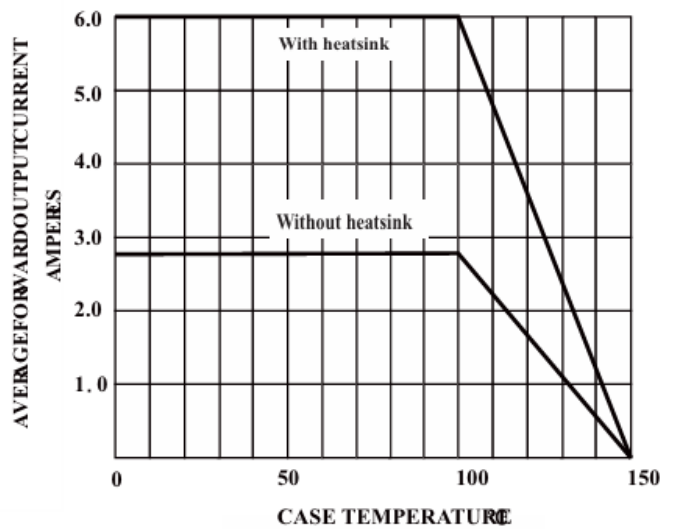


Figure 2. FORWARD CURRENT DERATING CURVE

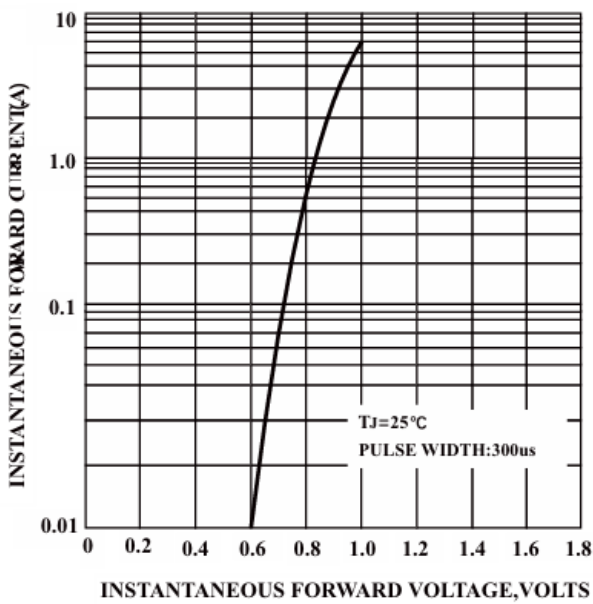


Figure 3. TYPICAL FORWARD CHARACTERISTICS

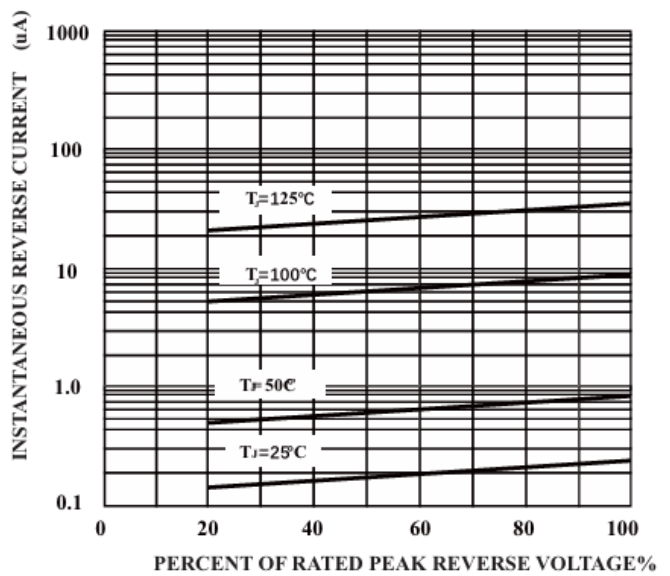
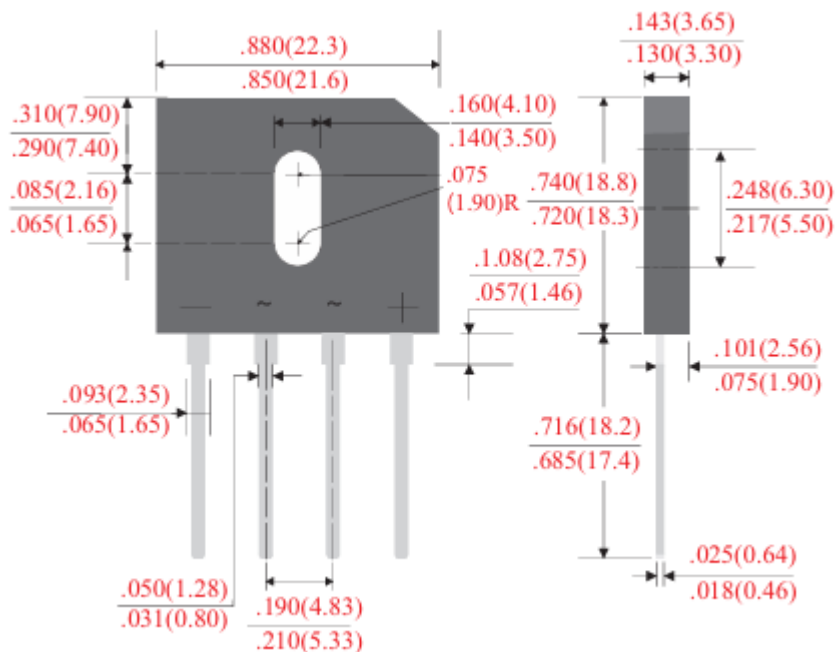


Figure 4. TYPICAL REVERSE LEAKAGE CHARACTERISTICS

- Package outlines : Dimensions in inches (millimeters)



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