GBU6005 THRU GBU610

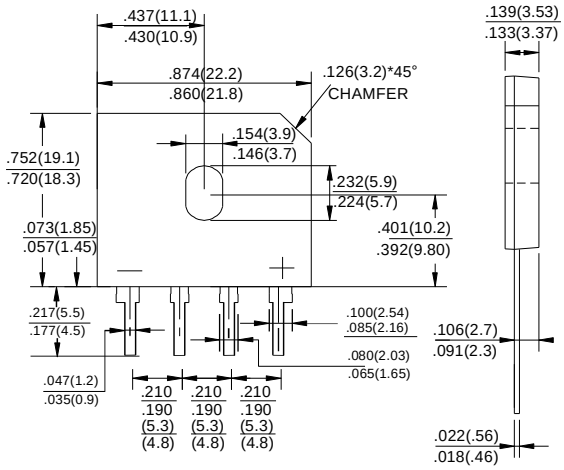
Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

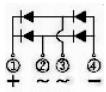
GLASS PASSIVATED BRIDGE RECTIFIERS

Features

GBU

- Surge overload rating -175 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L lammability classification 94V-0





Mechanical Data

Case : JEDEC GBU Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any

Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwisespecified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	MDD GBU6005	MDD GBU601	MDD GBU602	MDD GBU604	MDD GBU606	MDD GBU608	MDD GBU610	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward(with heatsink NOTE 2) Rectified current @T_C=100°C(without heatsink)	$I_{(AV)}$	6.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Rating for Fusing(t<8.3ms)	I^2t	94							A^2s
Maximum forward voltage at 3.0A DC	V_F	1.1							V
Maximum DC reverse current T_A=25°C	I_R	10							μA
at rated DC blocking voltage T_A=125°C		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	50							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.2							°C/W
Operating junction temperature range	T_J	-55 to +150							° C
storage temperature range	T_{STG}	-55 to +150							° C

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Device mounted on 75mm*75mm*1.6mm cu plate heatsink.
3.The typical data above is for reference only.

Ratings And Characteristic Curves

Fig. 1 Derating Curve for Output Rectified Current

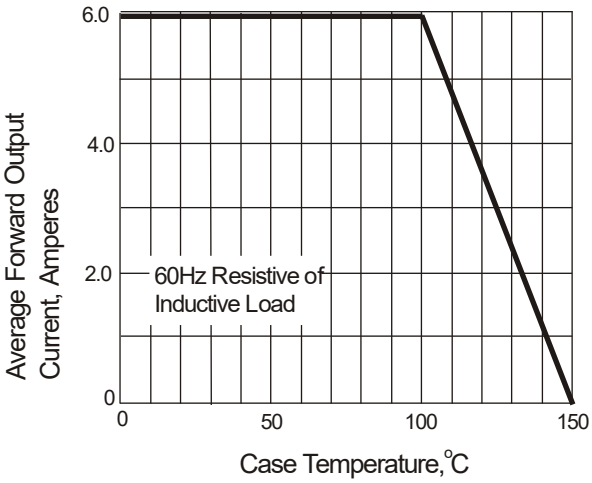


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

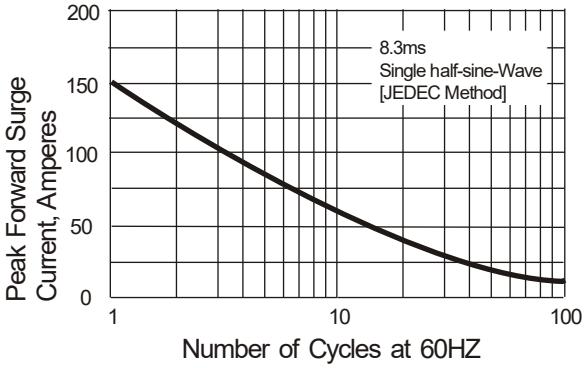


Fig. 3 Typical Instantaneous Forward Characteristics

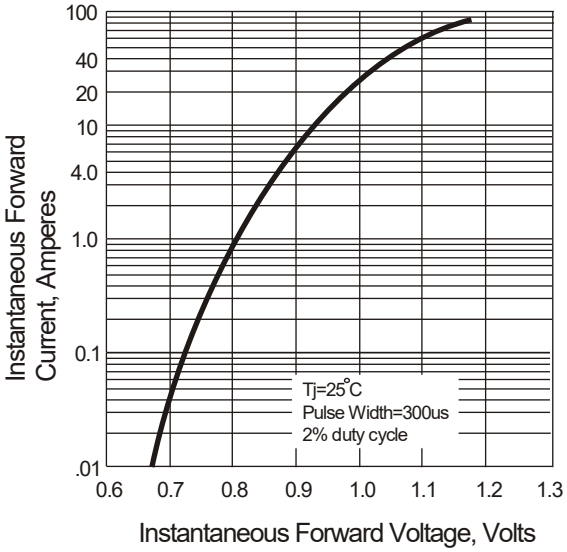


Fig. 4 Typical Reverse Characteristics

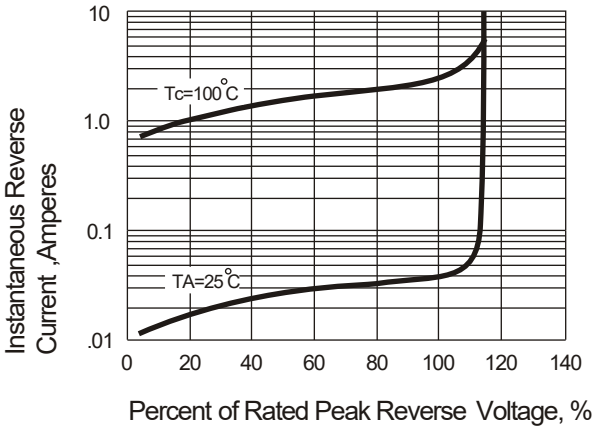
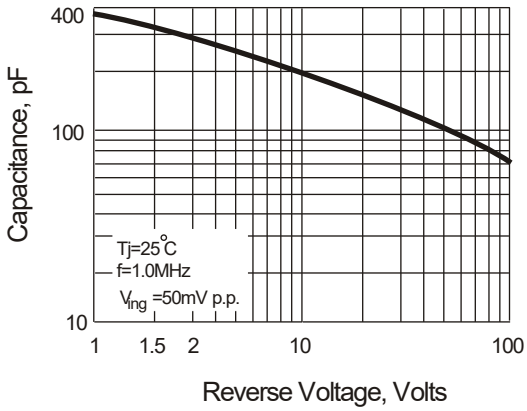


Fig. 5 Typical Junction Capacitance



The curve above is for reference only.