

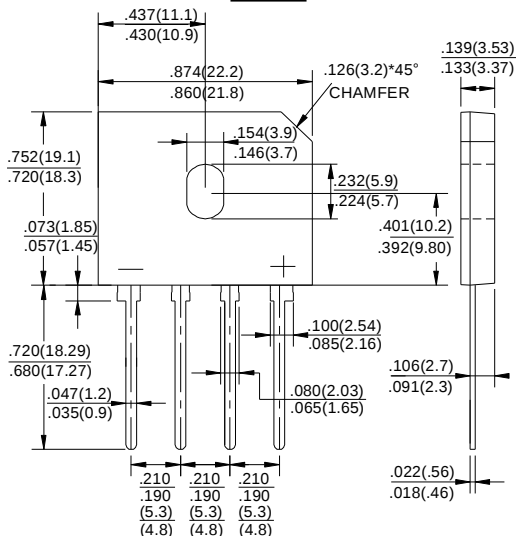


GBU8005 THRU GBU810

GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 Amperes

GBU



Dimensions in inches and (millimeters)

FEATURES

- ◆ Surge overload rating -175 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L flammability classification 94V-0
- ◆ 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 current derate by 20%.

TWGMC Catalog Number	SYMBOLS	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	UNITS
Maximum repetitive 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 @ $T_c=100^{\circ}C$ (without heatsink)	I_{AV}	8.0 2.9							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0							Amps
Rating for Fusing($t<8.3ms$)	I^2t	166							A ² s
Maximum forward voltage at 4.0A DC	V_F	1.0							Volts
Maximum DC reverse current $T_J=25^{\circ}C$ at rated DC blocking voltage $T_J=125^{\circ}C$	I_R	10							μA
		500							μA
Typical Junction Capacitance (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.2							$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150							$^{\circ}C$
storage temperature range	T_{STG}	-55 to +150							$^{\circ}C$

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(典型值仅供参考)

RATINGS AND CHARACTERISTIC CURVES GBU8005 THRU GBU810

FIG.1-FORWARD CURRENT DERATING CURVE

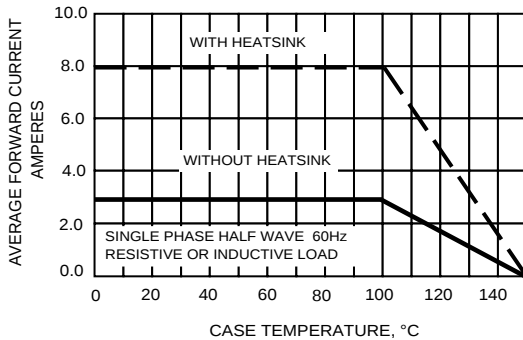


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

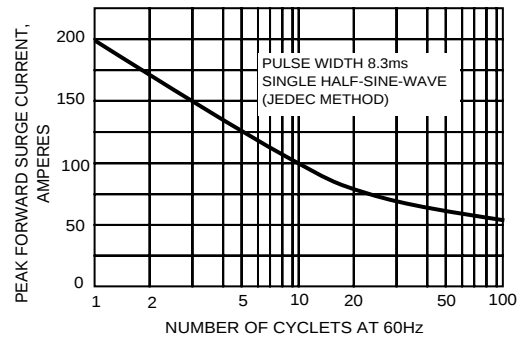


FIG.3-TYPICAL JUNCTION CAPACITANCE

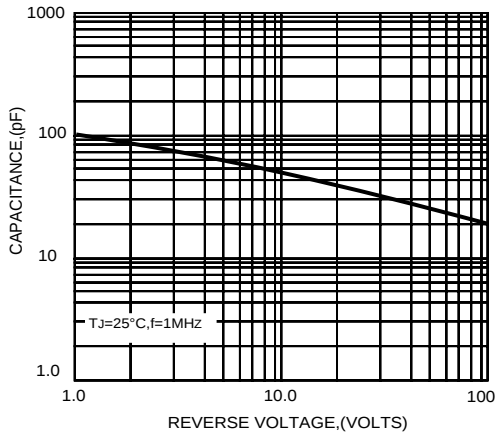


FIG.4-TYPICAL FORWARD CHARACTERISTICS

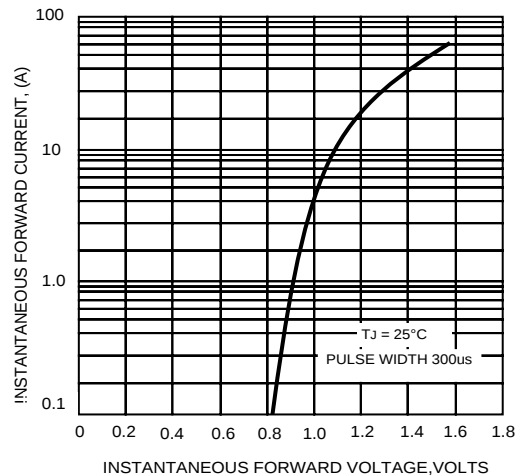
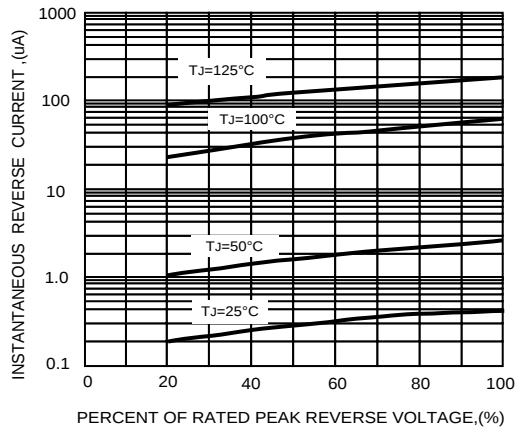


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!