

GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Surge overload rating -200 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L lammability classification 94V-0

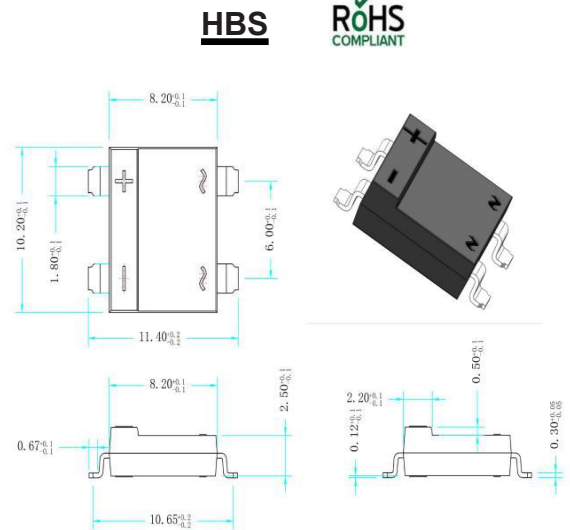
Mechanical Data

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



Maximum Ratings And Electrical Characteristics

Dimensions in inches and (millimeters)

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%.

Parameter	SYMBOLS	W HB6005S	W HB601S	W HB602S	W HB604S	W HB606S	W HB608S	W HB610S	UNITS
Marking Code									
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 @ $T_c=100^\circ\text{C}$ (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}	170							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	166							A^2s
Maximum instantaneous forward voltage drop per bridge element at 6A	V_F	1.050							V
Maximum DC reverse current at rated DC blocking voltage	I_R	10							μA
		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.2							$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-50 to +150							$^\circ\text{C}$
storage temperature range	T_{STG}	-50 to +150							$^\circ\text{C}$

- 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-FORWARD CURRENT DERATING CURVE

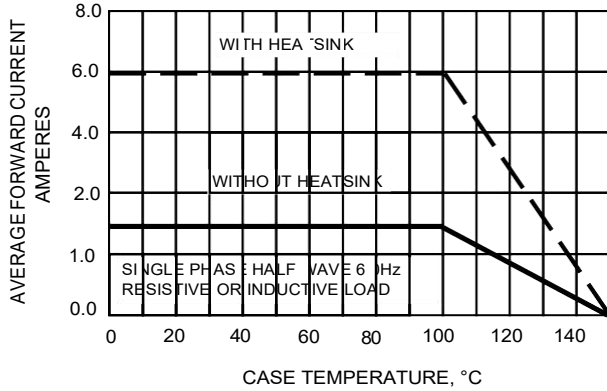


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

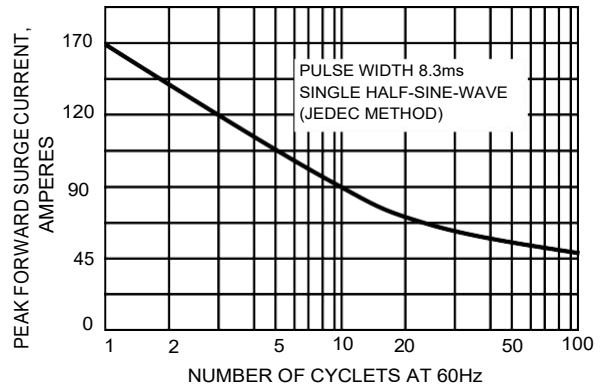


FIG.3-TYPICAL JUNCTION CAPACITANCE

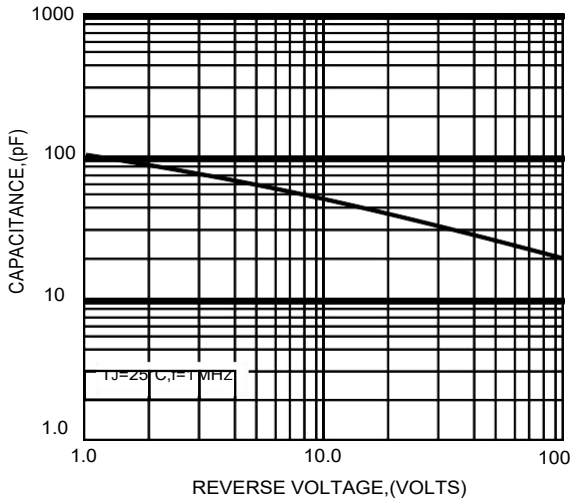


FIG.4-TYPICAL FORWARD CHARACTERISTICS

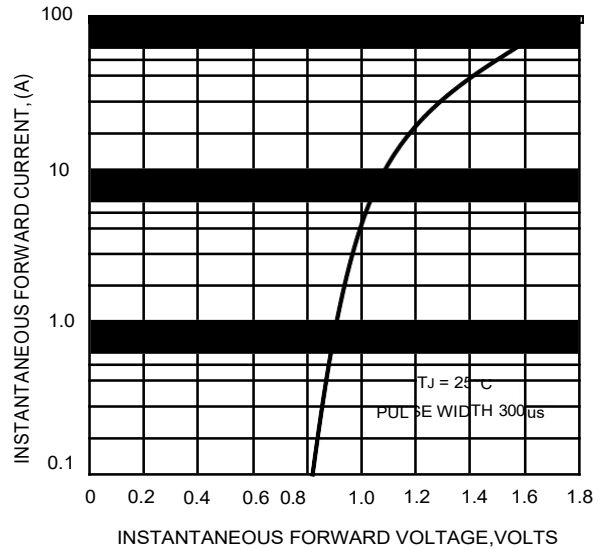
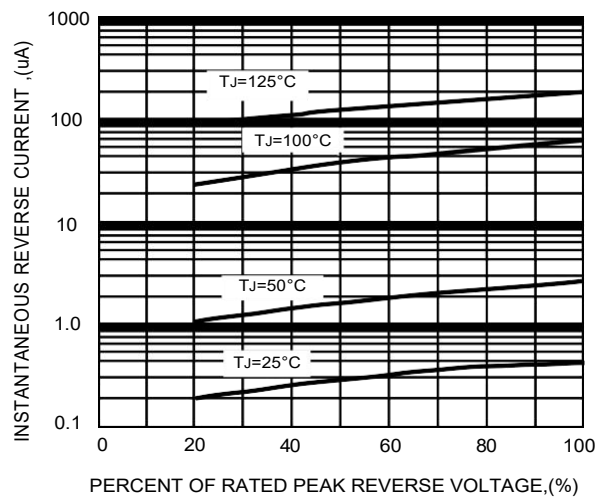


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The curve graph is for reference only