

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Surface mount bridge, small package;
- ◆ Ideal for printed circuit boards;
- ◆ Glass passivated chip junction;
- ◆ High forward current capability up to 8.0A;
- ◆ High surge current capability;
- ◆ High heat dissipation capability;
- ◆ Low profile package;
- ◆ Low forward voltage drop;
- ◆ Plastic package has Underwrites Laboratory Flammability Classification 94V-0;

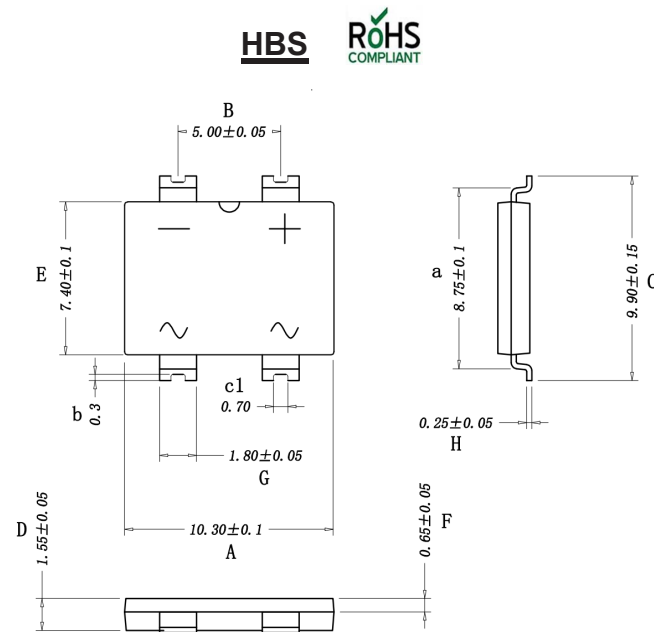
Mechanical Data

Case : JEDEC HBS Molded plastic body

Mounting Position : Any

High temperature soldering guaranteed: Solder Reflow
260 °C, 10seconds

Polarity: As marked on body



Dimensions in inches and (millimeters)

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%.

Parameter	SYMBOLS	MDD HBS802	MDD HBS804	MDD HBS806	MDD HBS808	MDD HBS810	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current at $T_A=25^{\circ}C$	$I_{F(AV)}$	8.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200					A
Maximum instantaneous forward voltage drop per diode at 8A	V_F	1.10					V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	I_R	5 100					μA
Typical capacitance (note1)	C_J	49					pF
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	70 11 14					$^{\circ}C/W$
Operating junction and Storage Temperature Range	T_j, T_{STG}	-55 to +150					$^{\circ}C$

Note1: Measured at 1.0MHz and applied reverse voltage of 5.0V DC;

Ratings And Characteristic Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

FIG.1 Derating Curve Output Rectified Current

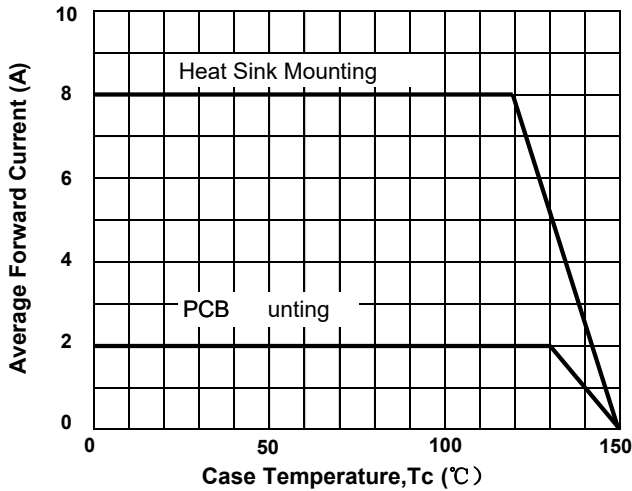


FIG.2 Typical Forward Characteristics per Diode

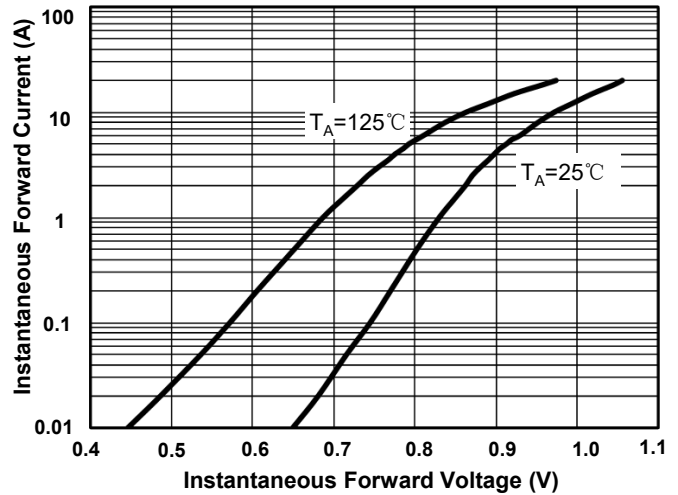


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

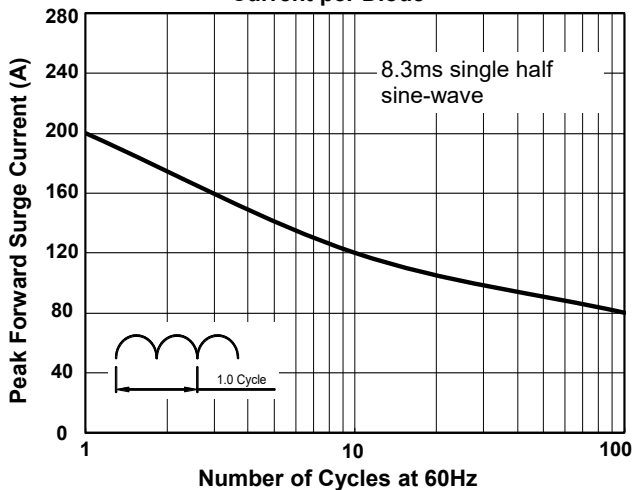


FIG.4 Typical Reverse Characteristics per Diode

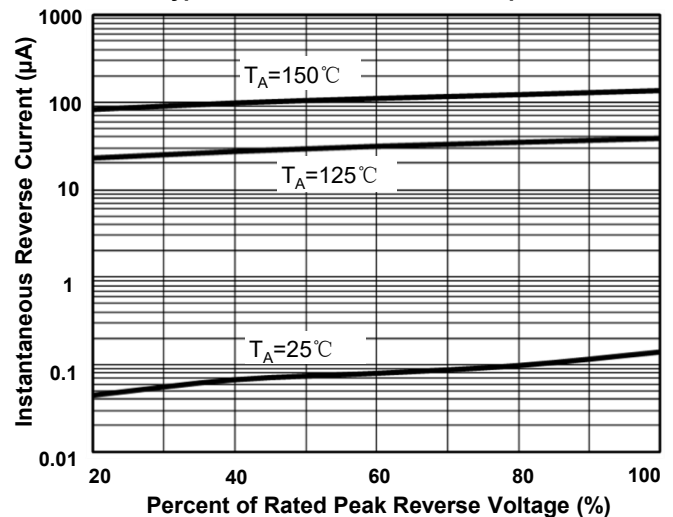
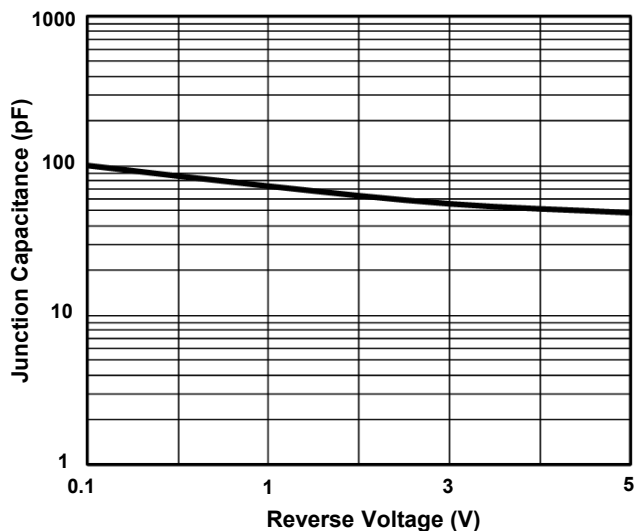


FIG.5 Typical Junction Capacitance per Diode





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