

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 Underwriters Laboratory Flammability Classification 94V-0;

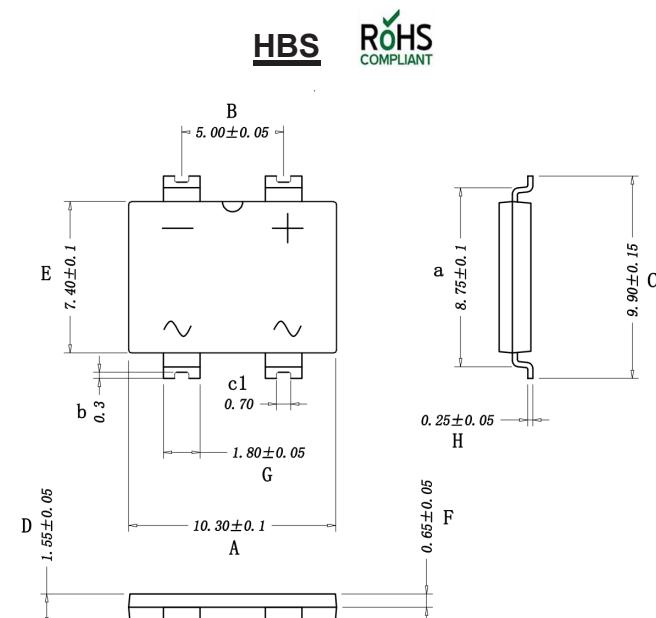
Mechanical Data

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 RHBS802	MDD RHBS804	MDD RHBS806	MDD RHBS808	MDD RHBS810	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			1.3			V
Maximum DC reverse current $T_A=25^\circ C$ $T_A=125^\circ C$	I_R			5 100			μA
Maximum reverse recovery time ⁽¹⁾	T_{rr}	150		250	500		ns
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$			70 15 22			$^\circ C/W$
Operating junction and Storage Temperature Range	T_J, T_{STG}			-55 to +150			$^\circ C$

Note1: $IF=0.5A, IR=1.0A, Irr=0.25A$

Ratings And Characteristic Curves

(TA = 25°C unless otherwise noted)

FIG.1 Derating Curve Output Rectified Current

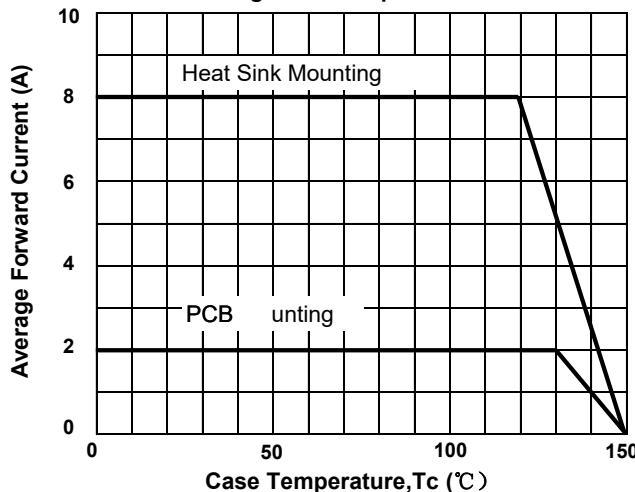


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

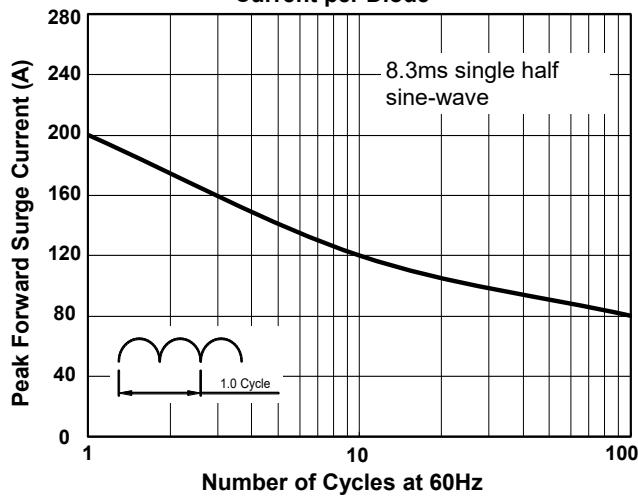


FIG.5 Typical Junction Capacitance per Diode

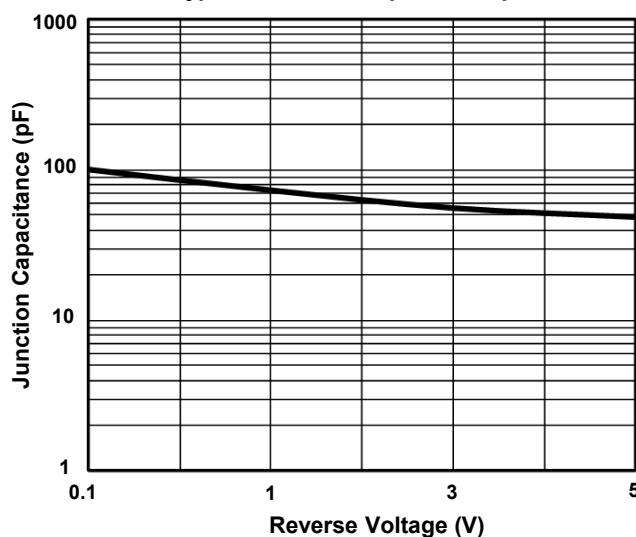


FIG.2 Typical Forward Characteristics per Diode

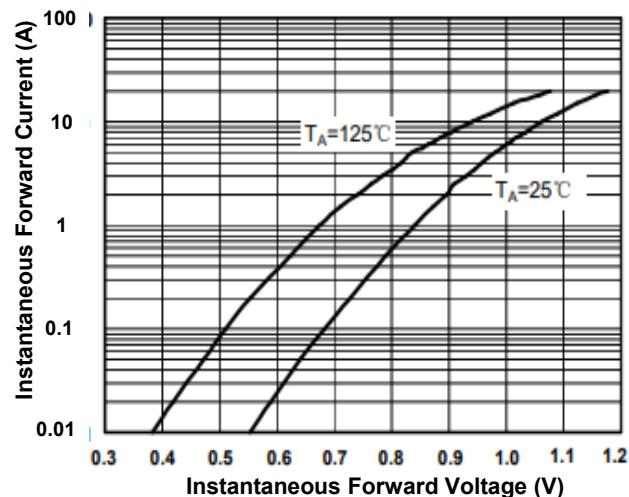
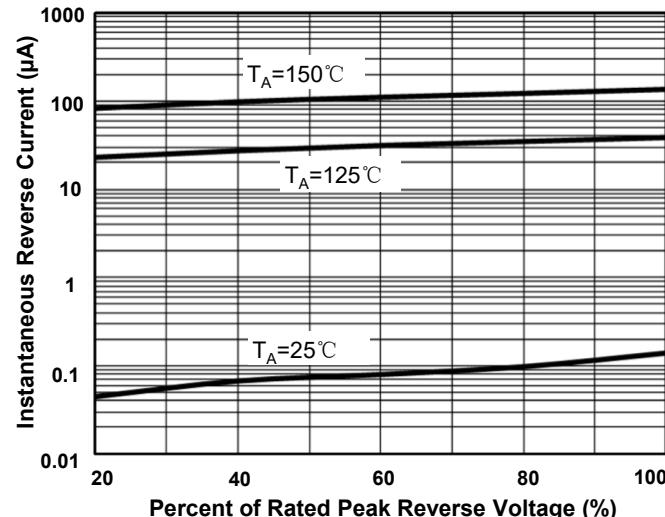


FIG.4 Typical Reverse Characteristics per Diode





RHBS802 THRU RHBS810

Voltage Range - 200 to 1000 Volts Current - 8.0 Ampere

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