

## 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

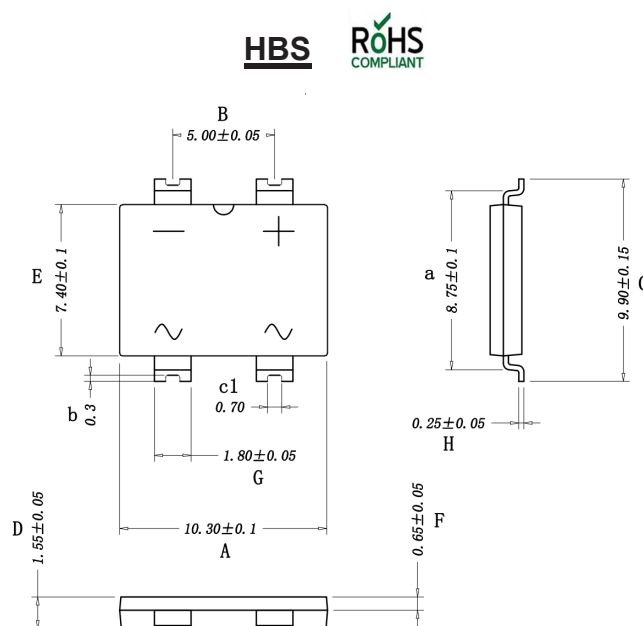
**Case :** JEDEC HBS Molded plastic body

**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	MDD	MDD	MDD	MDD	UNITS
Marking Code		RHBS802	RHBS804	RHBS806	RHBS808	RHBS810	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum average forward rectified current at T <sub>A</sub> =25°C	I <sub>F(AV)</sub>	8.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	200					A
Maximum instantaneous forward voltage drop per diode at 8A	V <sub>F</sub>	1.3					V
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =125°C	I <sub>R</sub>	5 100					μA
Maxumum reverse recovery time <sup>(1)</sup>	T <sub>rr</sub>	150		250	500		ns
Typical thermal resistance	R <sub>θJA</sub>	70					°C/W
	R <sub>θJC</sub>	15					
	R <sub>θJL</sub>	22					
Operating junction and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150					°C

Note1:  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

## Ratings And Characteristic Curves

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

FIG.1 Derating Curve Output Rectified Current

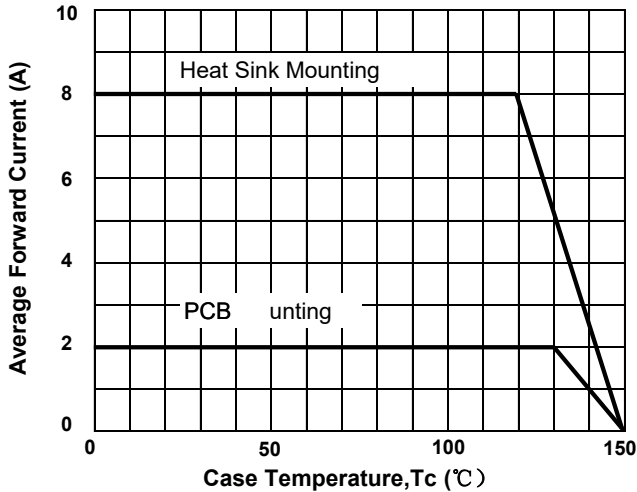


FIG.2 Typical Forward Characteristics per Diode

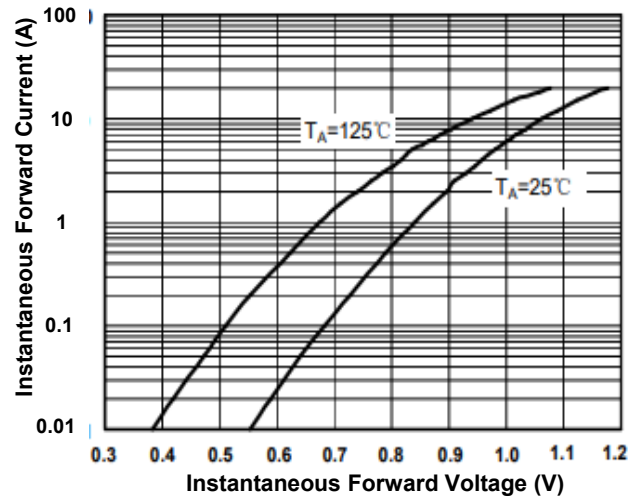


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

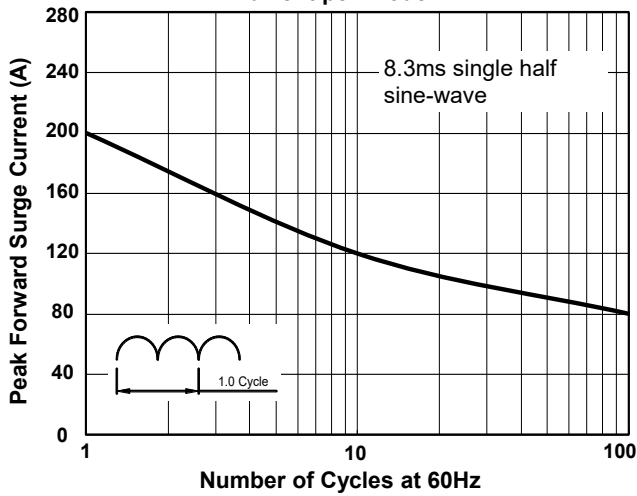


FIG.4 Typical Reverse Characteristics per Diode

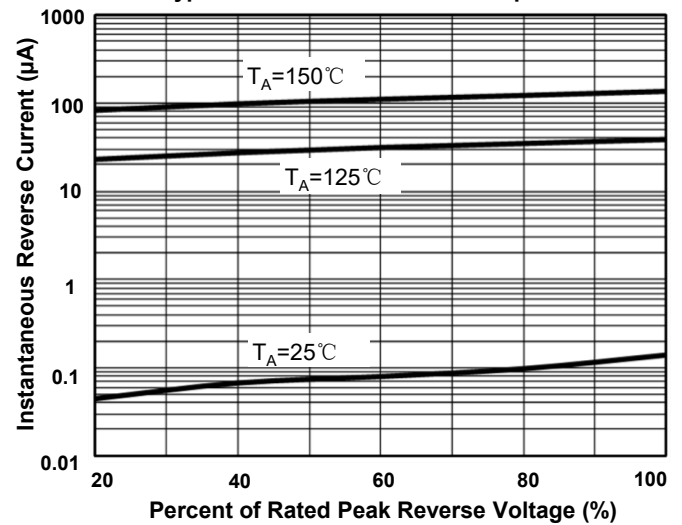
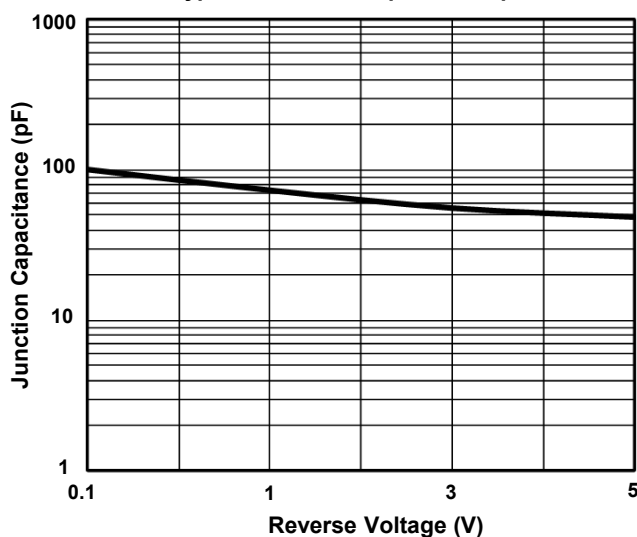


FIG.5 Typical Junction Capacitance per Diode





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