

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 6.0A;
- ◆ 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

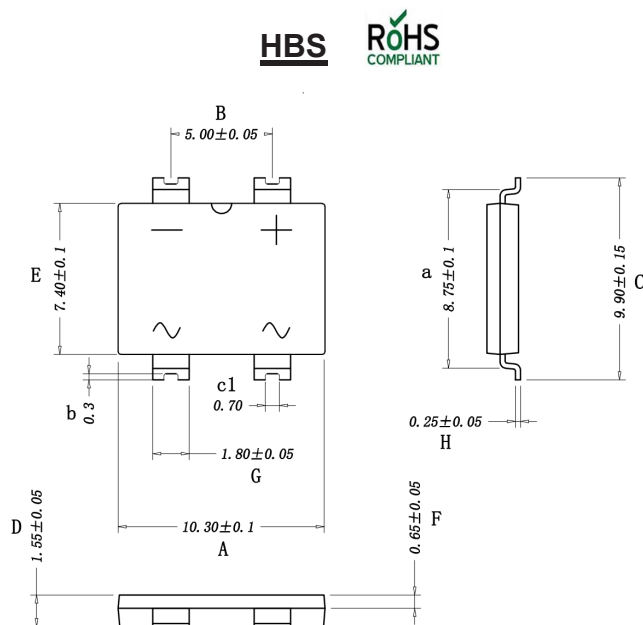
Case : JEDEC HBS Molded plastic body

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		RHBS602	RHBS604	RHBS606	RHBS608	RHBS610	
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°C	I _{F(AV)}	6.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	170					A
Maximum instantaneous forward voltage drop per diode at 6A	V _F	1.3					V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =125°C	I _R	5 100					μA
Maxumum reverse recovery time ⁽¹⁾	T _{rr}	150		250	500		ns
Typical thermal resistance	R _{θJA}	72					°C/W
	R _{θJC}	14					
	R _{θJL}	12					
Operating junction and Storage Temperature Range	T _j , T _{STG}	-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

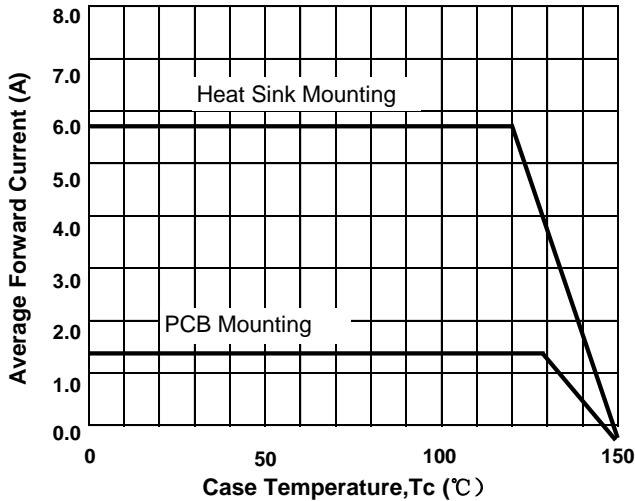


FIG.2 Typical Forward Characteristics per Diode

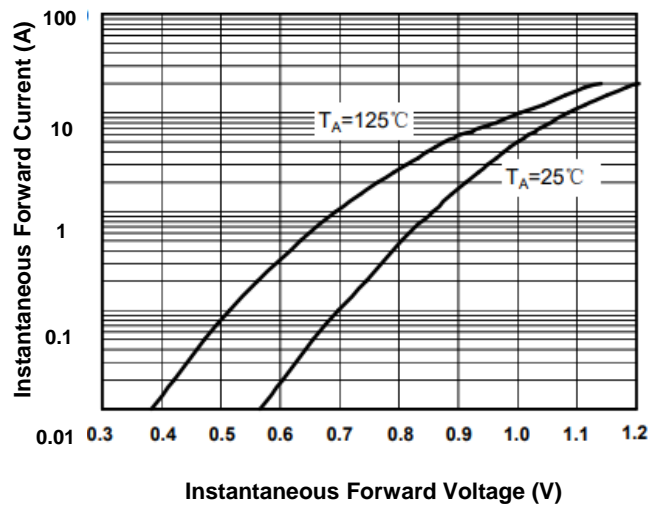


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

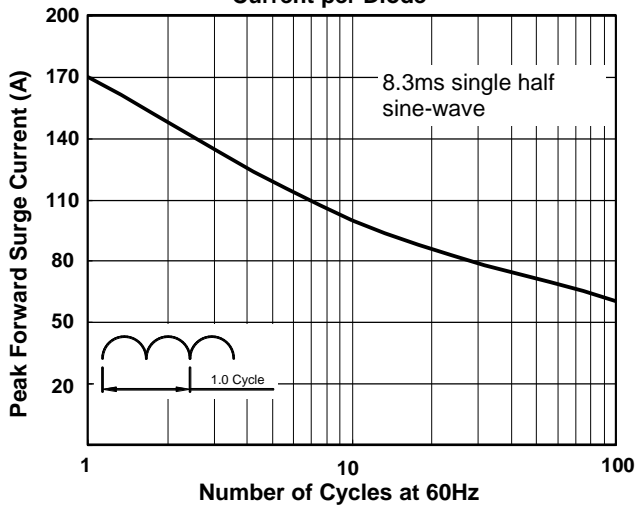


FIG.4 Typical Reverse Characteristics per Diode

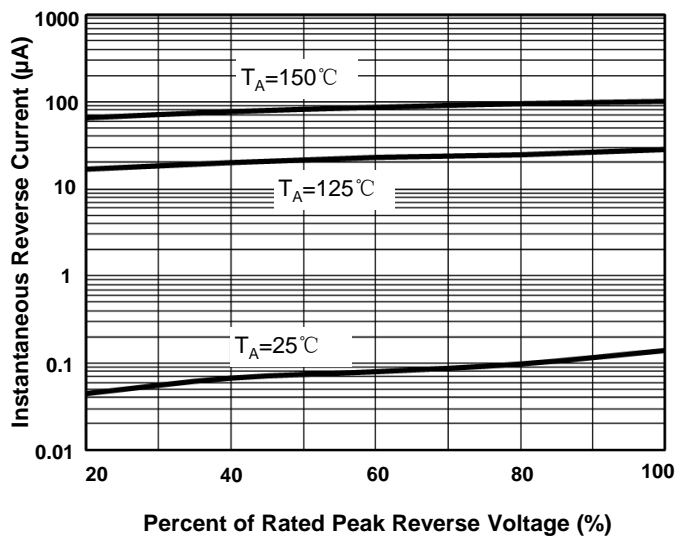
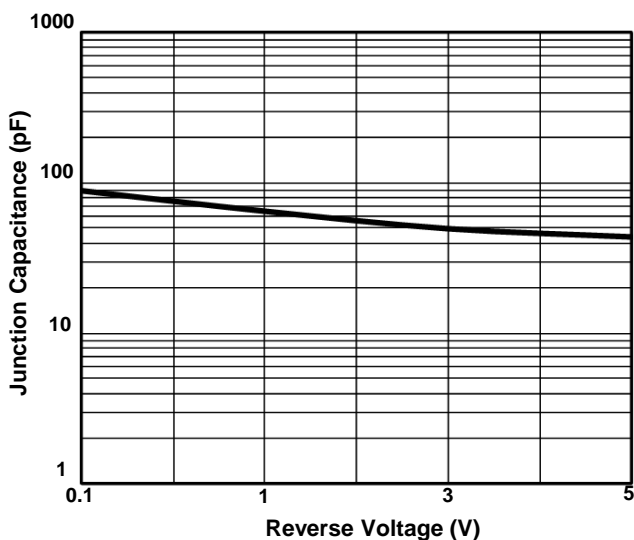


FIG.5 Typical Junction Capacitance per Diode





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