

RHBS602 - RHBS610

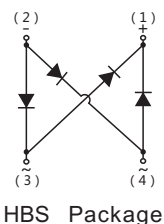
6A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

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: HBS;
- Epoxy meets UL-94V-0 Flammability rating;
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102;
- High temperature soldering guaranteed:
Solder Reflow 260°C, 10seconds;
- Polarity: As marked on body;
- Marking: Type number;



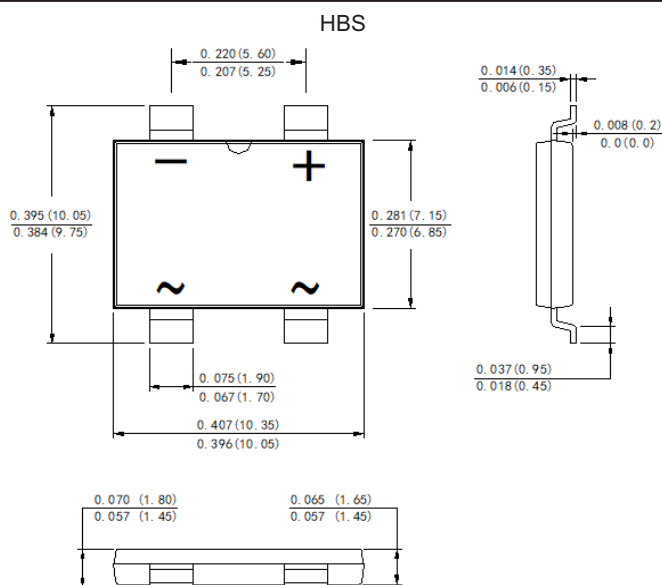
HBS Package

VOLTAGE RANGE

200 to 1000 Volts

CURRENT

6.0 Amperes



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	RHBS602	RHBS604	RHBS606	RHBS608	RHBS610	Units
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
Average Rectified Output Current	I _O	6.0					A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	170					A
I ² t Rating for Fusing	I ² t	120					A ² S
Maximum Forward Voltage at 1.0 A	V _F	0.95 (max.)					V
Maximum Forward Voltage at 6.0 A	V _F	1.3					V
Maximum DC Reverse Current @T _A =25 °C at Rated DC Blocking Voltage @T _A =125 °C	I _R	0.16 100					μA
Maxumum reverse recovery time (IF=0.5A,IR=1.0A,Irr=0.25A)	Trr	150		250	500		nS
Typical Junction Capacitance (Note1)	Cj	46					pF
Typical Thermal Resistance (Note2)	R _{BJA}	72.0					°C/W
	R _{BJC}	14.0					
	R _{BJL}	12.0					
Operating and Storage Temperature Range	Tj, T _{stg}	-55 ~ +150					°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATING AND CHARACTERISTIC CURVES (RHBS602 THRU RHBS610)

FIG.1 Derating Curve Output Rectified Current

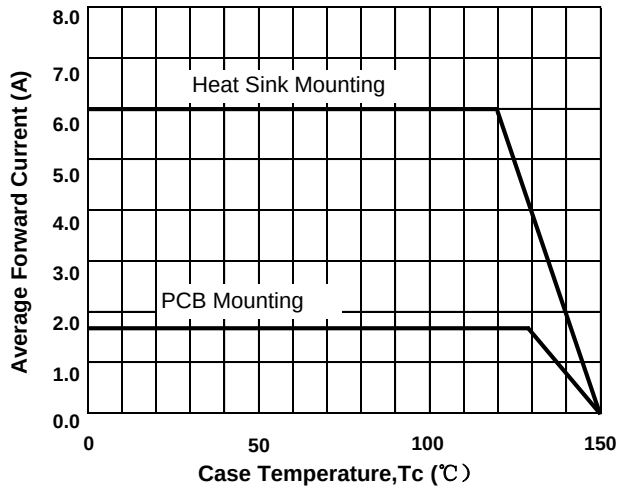


FIG.2 Typical Forward Characteristics per Diode

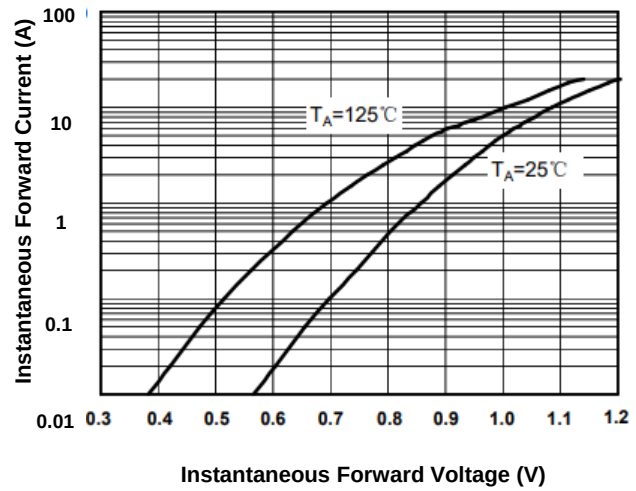


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

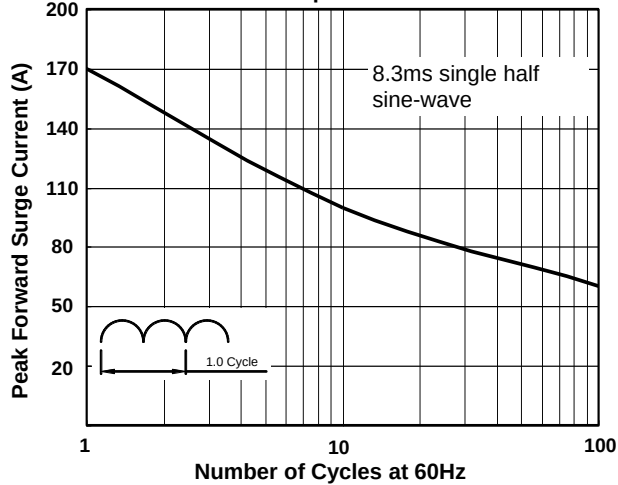


FIG.4 Typical Reverse Characteristics per Diode

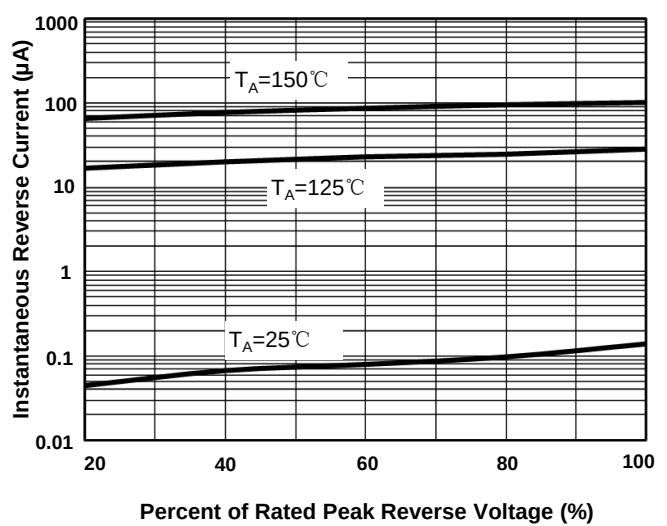
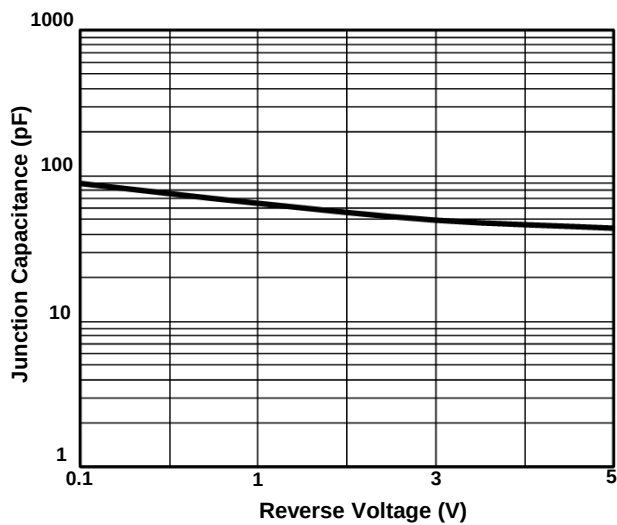


FIG.5 Typical Junction Capacitance per Diode



Suggested PCB printfoot layout

