YUYUE

HBS808 THRU HBS810

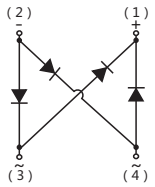
8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

- Surface mount bridge, small package;
- Ideal for printed circuit boards;
- Glass passivated chip junction;
- High forward current capability up to 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

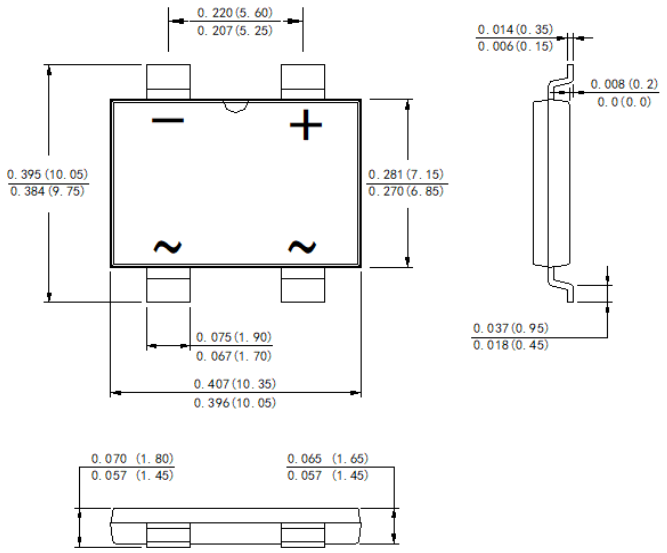
- Case: HBS;
  Epoxy meets UL-94V-0 Flammability rating;
- Terminals:Matte tin plated leads, solderable per J-STD-002 and JESD22-B102;
- High temperature soldering guaranteed: Solder Reflow 260 ,10seconds;
- Polarity: As marked on body;
- Marking: Type number;



HBS Package

VOLTAGE RANGE
800 to1000 Volts
CURRENT
8.0 Amperes

HBS



Dimensions in inches and (millimeters)

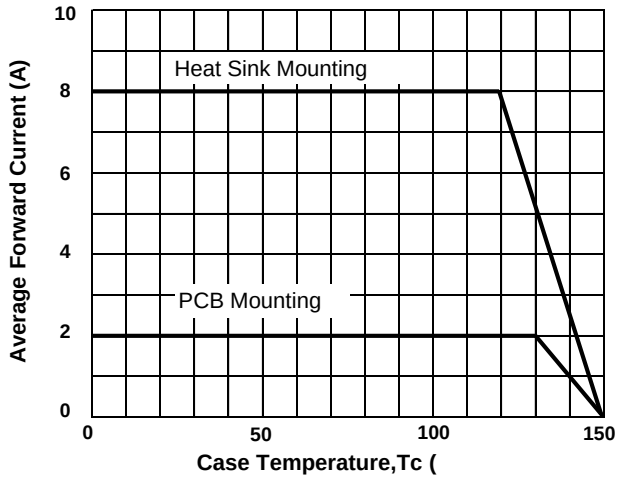
Maximum Ratings and Electrical characteristics
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	HBS808	HBS810	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800	1000	V
Maximum RMS voltage	V_{RMS}	560	700	V
Maximum DC Blocking Voltage	V_{DC}	800	1000	V
Average Rectified Output Current	I_O	8.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	220		A
I^2t Rating for Fusing	I^2t	170		A^2S
Maximum Forward Voltage at 1.0 A	V_F	0.81 (typ.)		V
Maximum Forward Voltage at 8.0 A	V_F	1.0		V
Maximum DC Reverse Current @T_A=25 °C at Rated DC Blocking Voltage @T_A=125 °C	I_R	5 100		μA
Typical Junction Capacitance (Note1)	C_j	60		pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 12		°C/W
Operating and Storage Temperature Range	T_j, 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 (HBS808 THRU HBS810)

FIG.1 Derating Curve Output Rectified Current



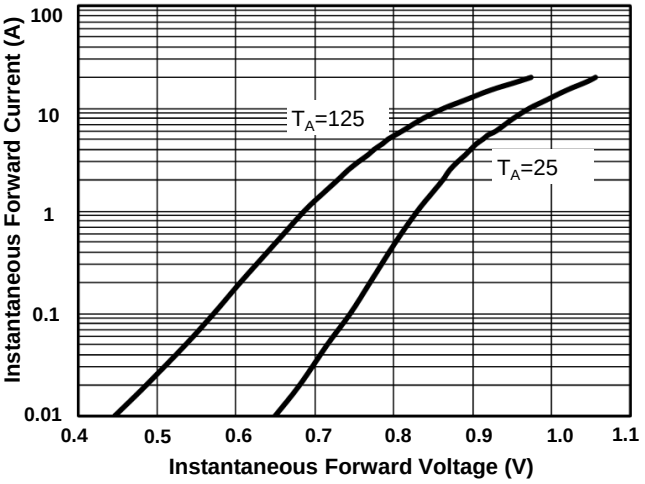


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

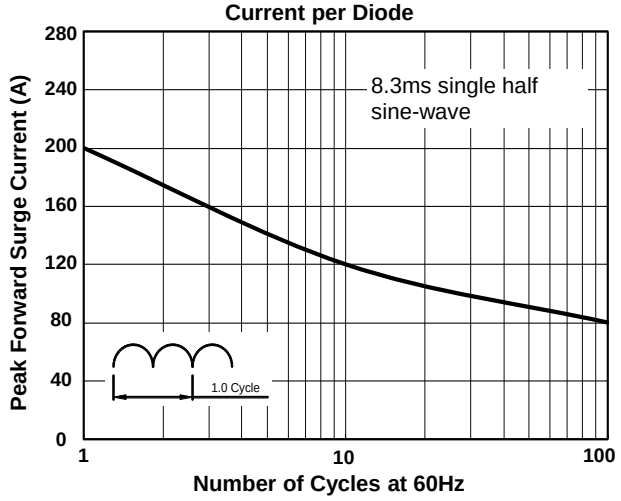


FIG.4 Typical Reverse Characteristics per Diode

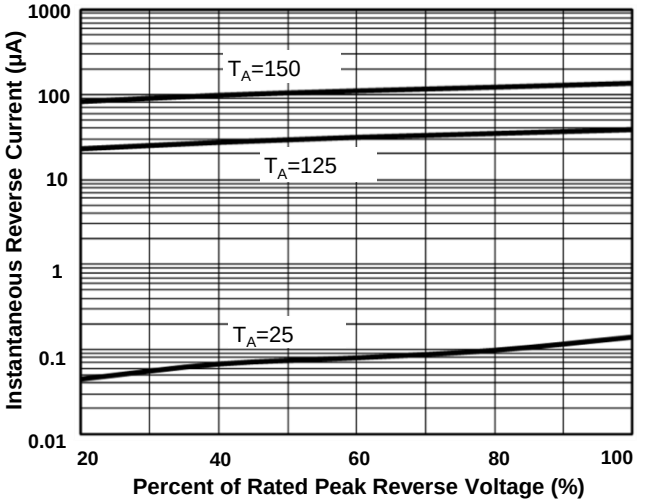
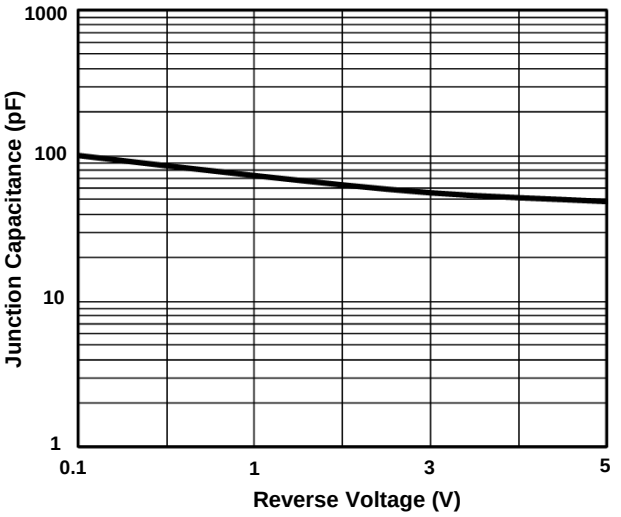


FIG.5 Typical Junction Capacitance per Diode



Suggested PCB printfoot layout