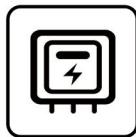
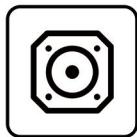


自主封測 品質把控 售後保障

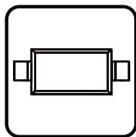
WEB | WWW.TDSEMIC.COM 



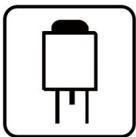
電源管理



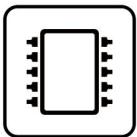
顯示驅動



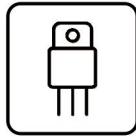
二三極管



LDO穩壓器



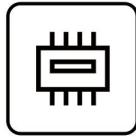
觸摸芯片



MOS管



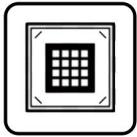
運算放大器



存儲芯片



MCU



串口通信

HBS810-TD

產品規格說明書



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: 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;

Typical Applications

General purpose use in AC-to-DC bridge full wave rectification for Fast Charging, Switching Power Supply, USB PD, Adapter and 3-in-1 Power Board, etc.

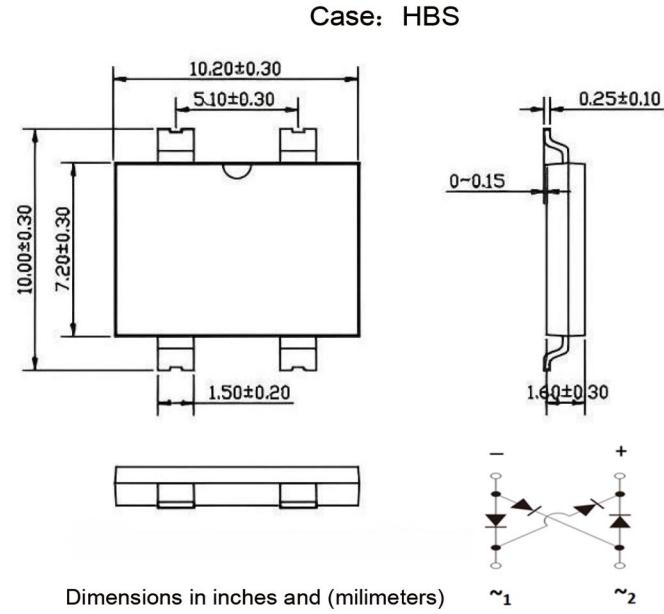
Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbol	HBS802	HBS804	HBS806	HBS808	HBS810	Unit
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 output current at $T_A=25^\circ\text{C}$	$I_{F(AV)}$			8.0			Amps
Non-Repetitive Peak forward surge current 8.3 ms single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}			220			Amps
Rating for fusing ($t < 8.3\text{ms}$)	I^2t			166			A^2sec
Instantaneous forward voltage drop per diode	V_F	@ $I_F=1.0\text{A}$		0.82 Typ.	0.87 max.		
		@ $I_F=4.0\text{A}$		0.89 Typ.	0.94 max.		Volt
		@ $I_F=8.0\text{A}$		0.94 Typ.	1.0 max.		
Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$		0.15 Typ.	5.0 max.		μA
		$T_A=125^\circ\text{C}$		20.0 Typ.	100 max.		
Typical capacitance (note1)	C_j			49			pF
Typical thermal resistance	$R_{\text{eJ-A}}$			70.0			$^\circ\text{C/W}$
	$R_{\text{eJ-C}}$			11.0			
	$R_{\text{eJ-L}}$			14.0			
Operating junction and Storage Temperature Range	T_J, T_{STG}			-55 to +150			$^\circ\text{C}$

Note1: Measured at 1.0MHz and applied reverse voltage of 5.0V DC;



Dimensions in inches and (millimeters)

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1 Derating Curve Output Rectified Current

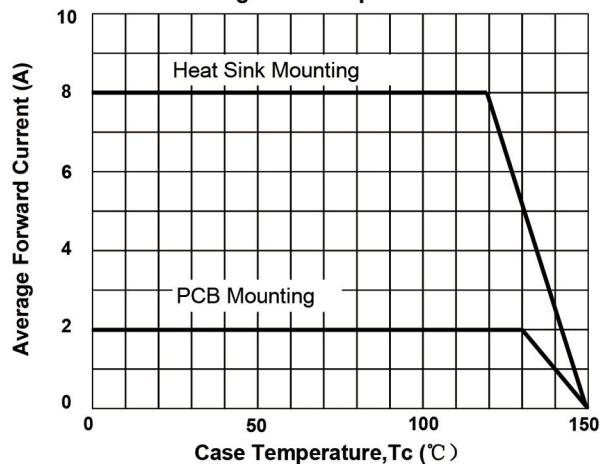


FIG.2 Typical Forward Characteristics per Diode

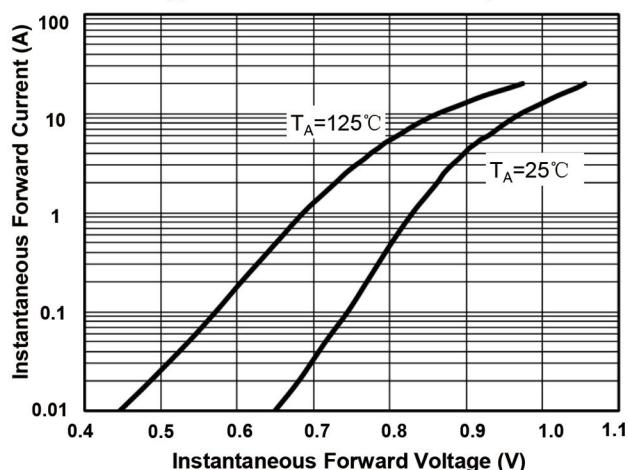


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

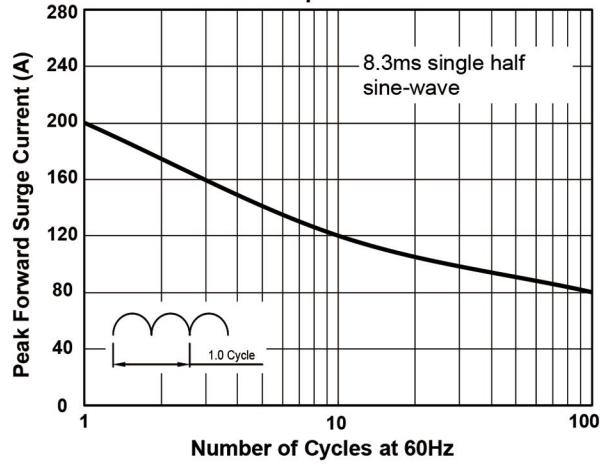


FIG.4 Typical Reverse Characteristics per Diode

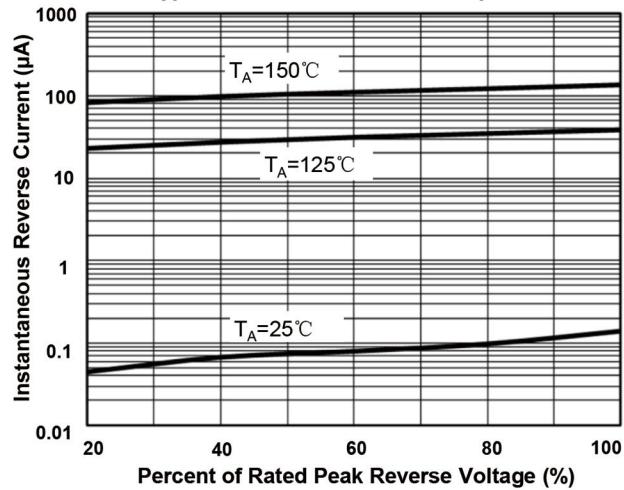
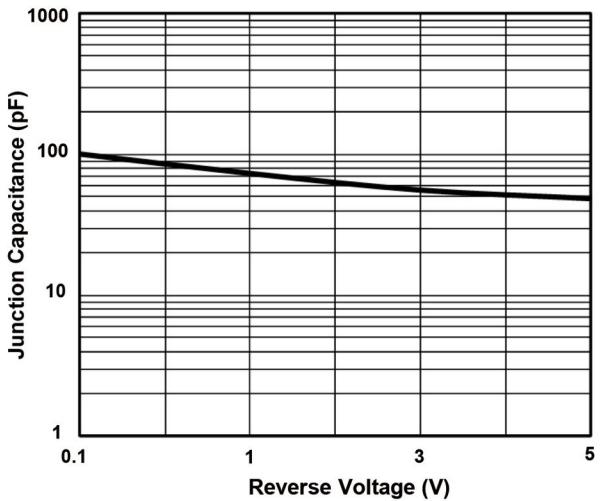


FIG.5 Typical Junction Capacitance per Diode



Suggested PCB printfoot layout

Unit: inches (mm)

