

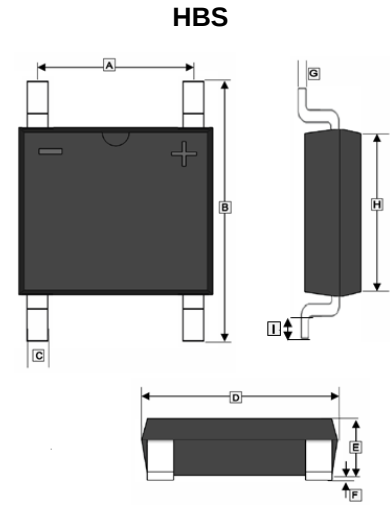
RoHS Compliant Product

FEATURES

- Surface mount bridge, small package
- Ideal for printed circuit boards
- Glass passivated chip junction
- High forward current capability up to 6A
- 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

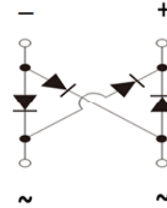
- Case: HBS
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
- High temperature soldering guaranteed: Solder Reflow 260°C, 10seconds
- Polarity: As marked on body
- Marking: Type Number



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.25	5.60	F	-	0.2
B	9.75	10.05	G	0.15	0.35
C	1.70	1.90	H	6.85	7.15
D	10.05	10.35	I	0.45	0.95
E	1.45	1.65			

ORDER INFORMATION

Part Number	Type
HBS602H~HBS610H	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Part Number					Unit
			HBS602H	HBS604H	HBS606H	HBS608H	HBS610H	
Maximum Peak Repetitive Reverse Voltage		V _{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage		V _{RMS}	140	280	420	560	700	
Maximum DC Blocking Voltage		V _{DC}	200	400	600	800	1000	
Average Rectified Output Current ²		I _F	6					A
Non-Repetitive Peak Forward Surge Current @8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	170					A
Rating for Fusing (t<8.3ms)		I ² t	120					A ² s
Instantaneous Forward Voltage Drop Per Diode	I _F =1A	V _F	0.88					V
	I _F =3A		0.93					
	I _F =6A		0.96					
Peak Reverse Current @Rated DC Blocking Voltage	T _A =25°C	I _R	5					μA
	T _A =125°C		100					
Typical Capacitance ¹		C _J	43					pF
Typical Thermal Resistance		R _{θJA}	68					°C/W
		R _{θJC}	10					
		R _{θJL}	22					
Operating & Storage Temperature Range		T _J , T _{STG}	-55~150					°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Device mounted on 20mm x 20mm x1.6mm AL pad, attached on 100mm x 80mm x 30mm Fin heat sink.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 Derating Curve Output Rectified Current

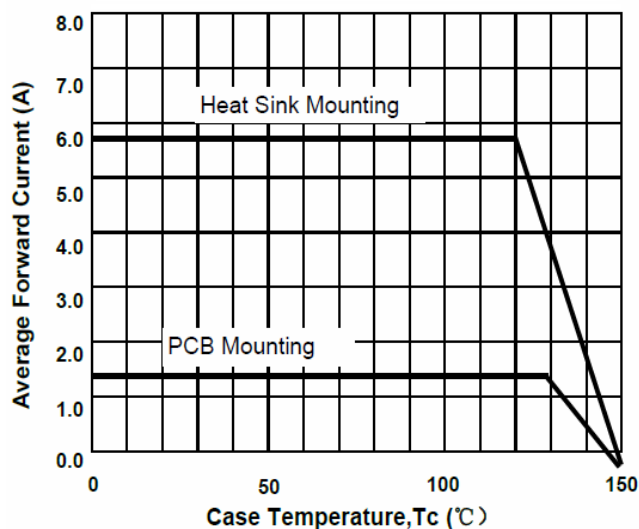


FIG.2 Typical Forward Characteristics per Diode

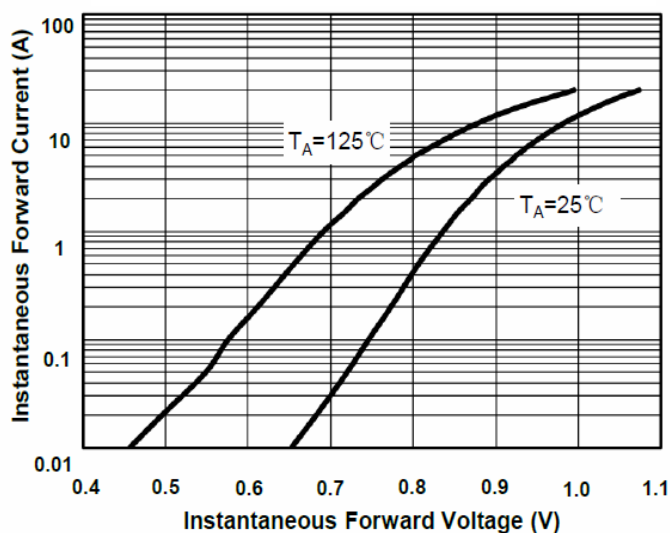


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

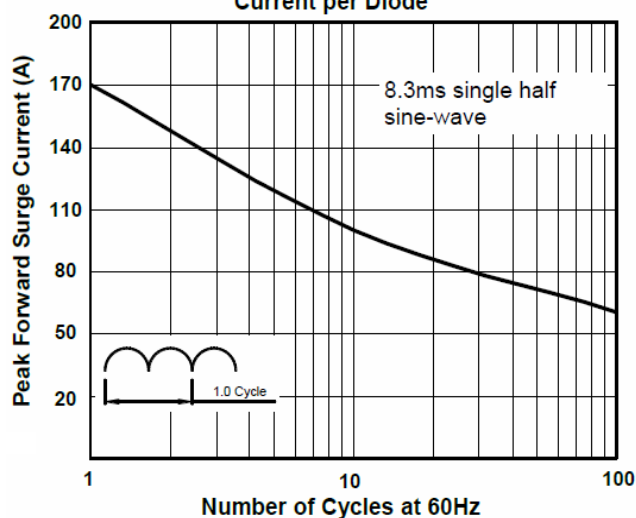


FIG.4 Typical Reverse Characteristics per Diode

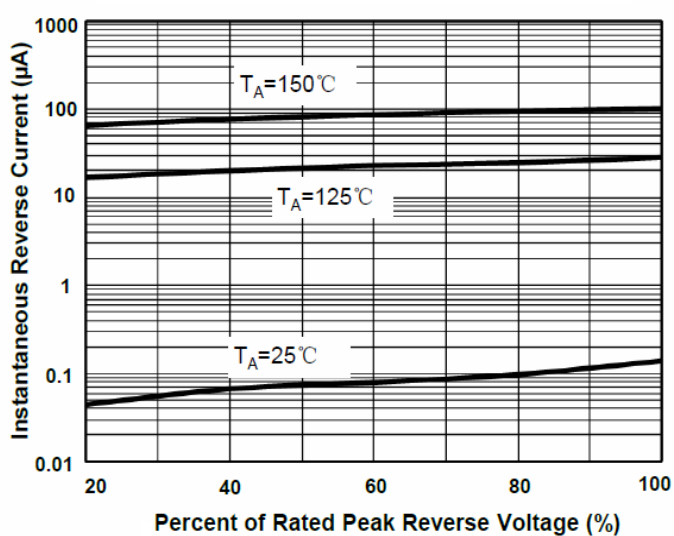


FIG.5 Typical Junction Capacitance per Diode

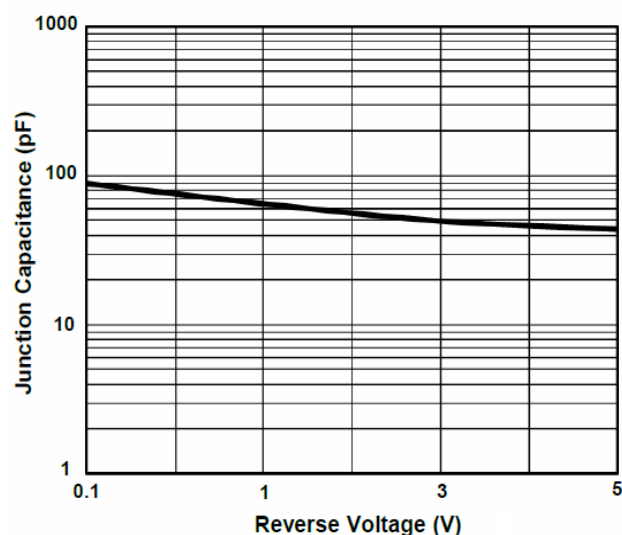


FIG. 6 Mounting Pad Layout

