

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

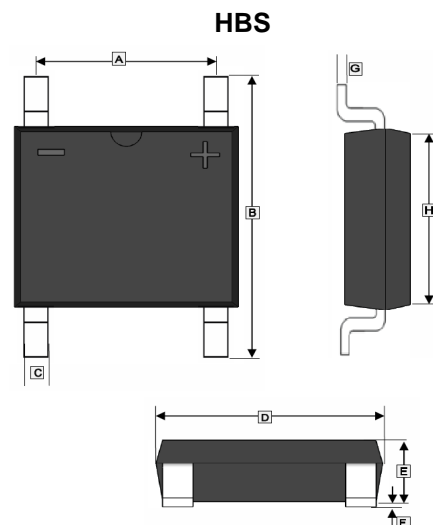
- Surface mount bridge, small package
- Ideal for printed circuit boards
- Glass passivated chip junction
- High forward current capability up to 6.0A
- High surge current capability
- High heat dissipation capability
- Low profile package
- Low forward voltage drop
- Plastic package has Underwrites Laboratory Flammability Classification 94V-0

## MECHANICAL DATA

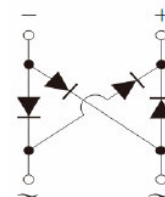
- Case: HBS
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
- High temperature soldering guaranteed: Solder Reflow 260°C, 10seconds
- Polarity: As marked on body
- Marking: Type Number

## ORDER INFORMATION

Part Number	Type
HBS62~HBS610	Lead (Pb)-free
HBS62-H~HBS610-H	Lead (Pb)-free and Halogen-free



	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.88	5.28	E	2.3	2.7
B	9.1	9.9	F	-	0.2
C	1.2	1.6	G	0.2	0.3
D	7.95	8.35	H	6.1	6.5



## 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
			HBS62	HBS64	HBS66	HBS68	HBS610	
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	$T_C=75^{\circ}\text{C}$	$I_F$	6					A
	$T_C=129^{\circ}\text{C}$		1.4					
Non-Repetitive Peak Forward Surge Current @8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		$I_{FSM}$	180					A
Rating for Fusing ( $t<8.3\text{ms}$ )		$I^2t$	134					$\text{A}^2\text{s}$
Forward Voltage per diode	$I_F=1\text{A}$	$V_F$	0.89					V
	$I_F=3\text{A}$		0.94					
	$I_F=6\text{A}$		1					
Peak Reverse Current @DC Blocking Voltage	$T_A=25^{\circ}\text{C}$	$I_R$	5					$\mu\text{A}$
	$T_A=125^{\circ}\text{C}$		100					
Typical Capacitance <sup>1</sup>		$C_J$	45					pF
Typical Thermal Resistance		$R_{\theta JA}$	75					$^{\circ}\text{C/W}$
		$R_{\theta Jc}$	13					
		$R_{\theta JL}$	14					
Operating and Storage Temperature Range		$T_J, T_{STG}$	-55~150					$^{\circ}\text{C}$

Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES

FIG.1 Derating Curve Output Rectified Current

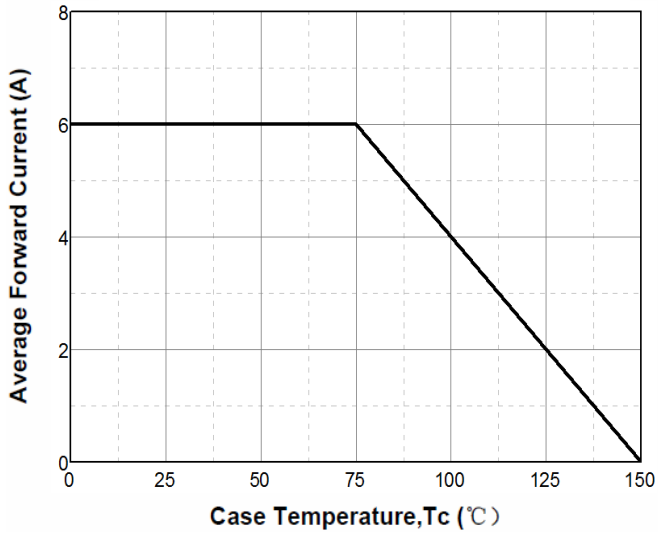


FIG.2 Typical Forward Characteristics per Diode

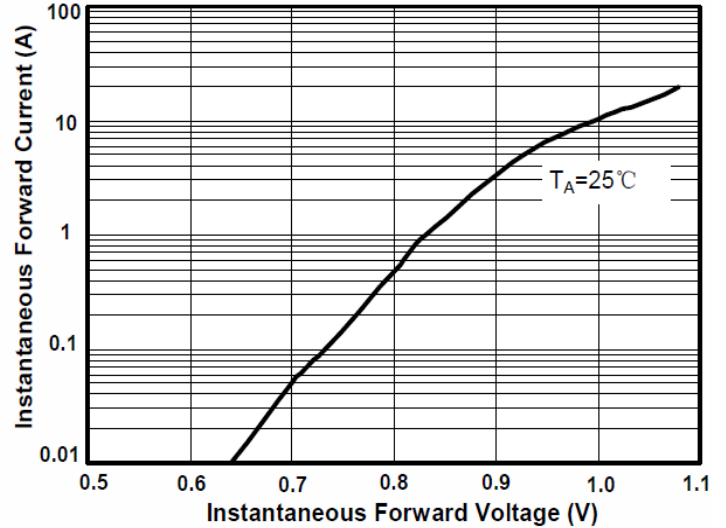


FIG.3 Maximum Non-Repetitive Peak Forward Surge Current per Diode

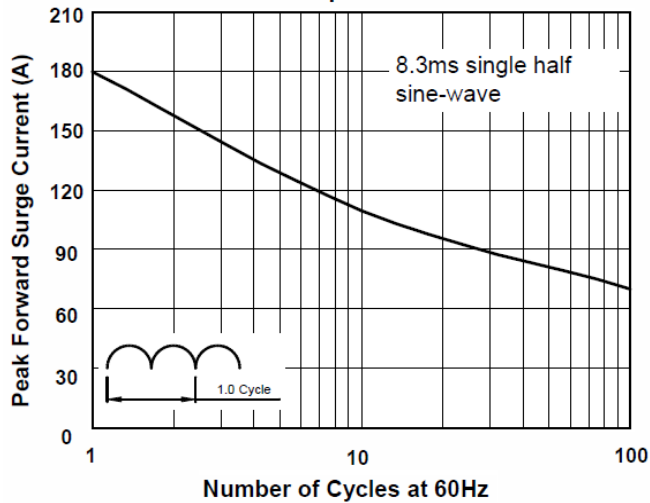


FIG.4 Typical Reverse Characteristics per Diode

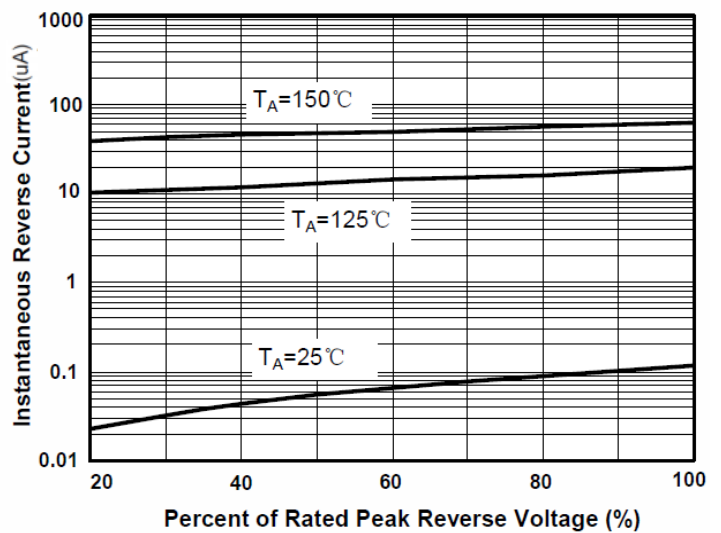


FIG.5 Typical Junction Capacitance per Diode

