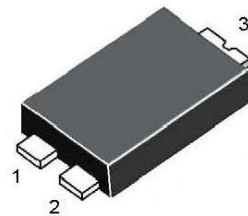
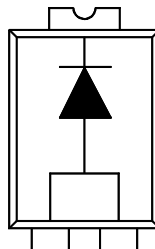


SHB08H100SA-HAF

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 100 V
Forward Current - 8 A

Features

- Low forward voltage drop
- Very low leakage current
- High maximum junction temperature capability
- Highly stable oxide passivated junction
- High forward surge current capability
- Halogen and Antimony Free(HAF),
RoHS compliant



1.Anode 2.Anode 3.Cathode
TO-277 Plastic Package

Applications

- Polarity Protection Diode
- Re-circulating Diode
- Switching Diode

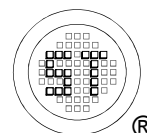
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	8	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC methode)	I_{FSM}	130	A
Junction Temperature	T_J	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 175	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambeint ¹⁾	$R_{\theta JA}$	36	$^\circ\text{C/W}$
Typical Thermal Resistance Junction to Lead ¹⁾	$R_{\theta JL}$	9	$^\circ\text{C/W}$

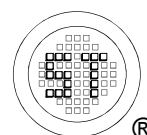
¹⁾ Device mounted on FR-4 substrate PC board, 2oz copper, with 1-inch square copper plate.



SHB08H100SA-HAF

Electrical Characteristics ($T_a = 25^{\circ}\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	100	-	-	V
Forward Voltage at $I_F = 8 \text{ A}$ at $I_F = 8 \text{ A}$, $T_j = 125^{\circ}\text{C}$	V_F	- -	- 631	880 -	mV
Reverse Current at $V_R = 100 \text{ V}$ at $V_R = 100 \text{ V}$, $T_j = 125^{\circ}\text{C}$	I_R	- -	- 400	2 -	μA
Junction Capacitance at $V_R = 4 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	272	-	pF



Electrical Characteristics Curves

Fig 1. Reverse Characteristic Curve

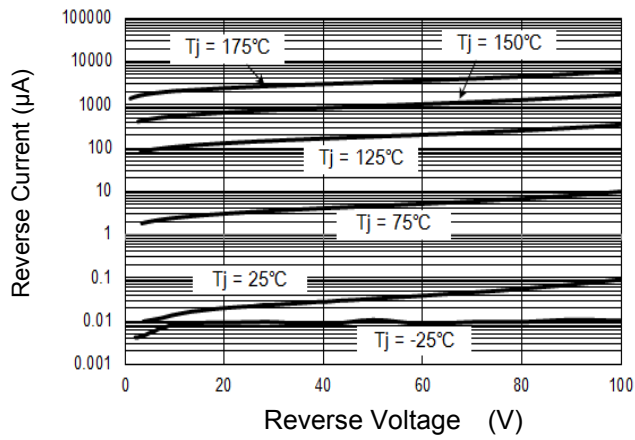


Fig 2. Forward Characteristic Curve

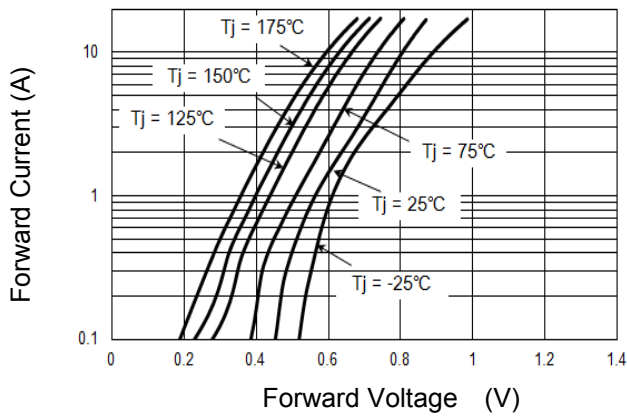


Fig 3. Junction Capacitance

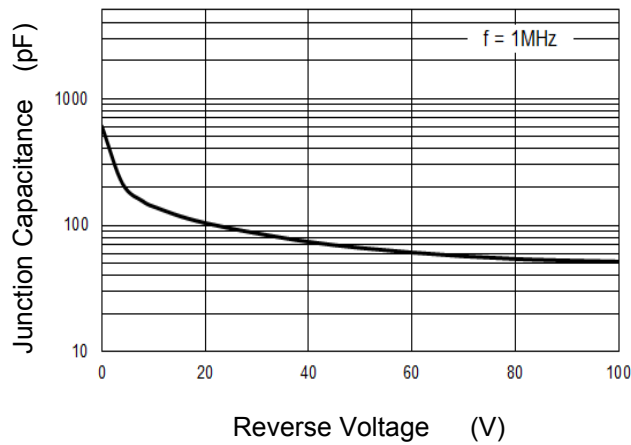


Fig 4. Average Rectified Current Derating Curve

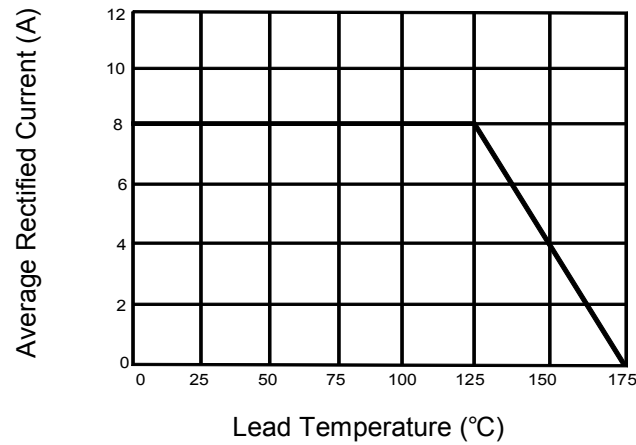
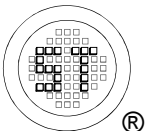
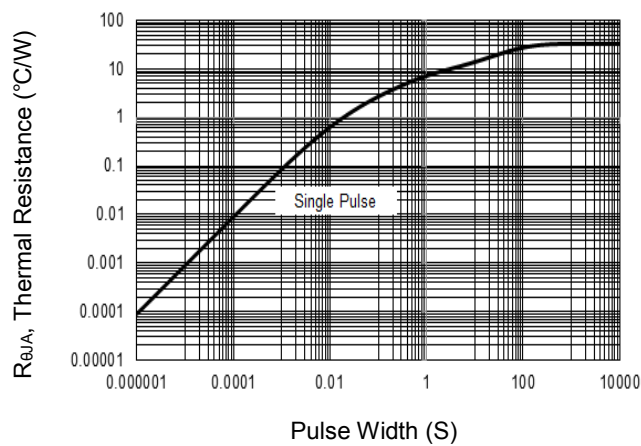


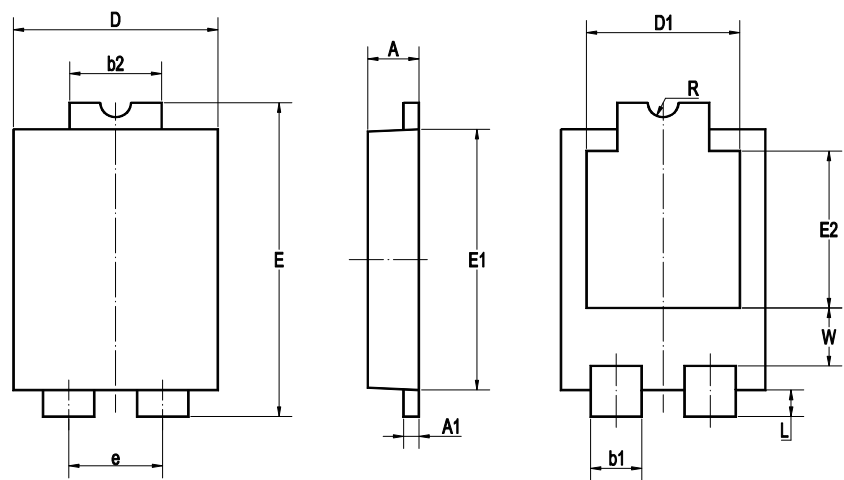
Fig 5. Thermal Resistance



SHB08H100SA-HAF

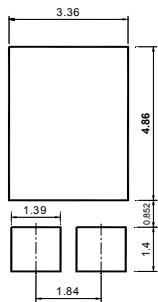
Package Outline Dimensions (Units : mm)

TO-277



UNIT	A	A1	b1	b2	D	D1	E	E1	E2	e	L	W	R
mm	1.15	0.3	1.0	1.9	4.05	3.05	6.65	5.45	3.25	1.84	0.65	1.3	0.3
	1.05	0.24	0.8	1.7	3.9	Typ.	6.35	5.3	Typ.	Typ.	0.5	1.0	Typ.

Recommended Soldering Footprint

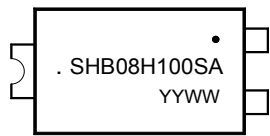


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
TO-277	12	8 ± 0.1	0.315 ± 0.004	330	13	5,000

Marking information

- " SHB08H100SA " = Part No.
" • " = HAF (Halogen and Antimony Free)
" YYWW " = Date Code Marking
" Y " = Year (ex: 19 = 2019)
" W " = Week (ex: 09 = the 9th week of the year)
Font type: Arial



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