

SHT01U30S-AH

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 30 V

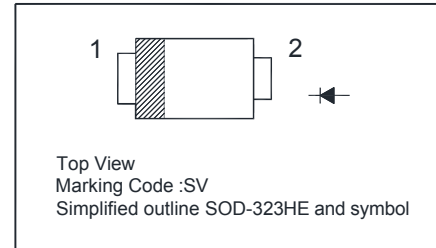
Forward Current - 1 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Features

- Low power loss,high efficieney
- Low forward voltage
- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF),
RoHS compliant



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

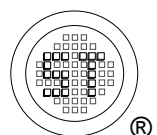
Parameter	Symbols	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Maximum RMS Voltage	V_{RMS}	21	V
Maximum DC Blocking Voltage	V_{DC}	30	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC methode)	I_{FSM}	22	A
Typical Thermal Resistance	$R_{\theta JA}^{1)}$ $R_{\theta JC}^{2)}$	300 50	$^\circ\text{C/W}$
Operating Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾ Mounted on a FR4 PCB, single-sided copper,mini pad.

²⁾ Mounted on a FR4 PCB, single-sided copper,with 100 cm² copper pad area.

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 0.5$ at $I_F = 1$ A at $I_F = 0.5$ A , $T_j = 125^\circ\text{C}$ at $I_F = 1$ A , $T_j = 125^\circ\text{C}$	V_F	0.42 - 0.28 0.34	- 0.52 - -	V
Reverse Current at $V_R = 21$ V at $V_R = 30$ V at $V_R = 30$ V, $T_j=125^\circ\text{C}$	I_R	8 - 7.2	- 100 -	μA μA mA
Typical Junction Capacitance at $V_R = 4$ V, $f = 1$ MHz	C_j	-	70	pF



Electrical characteristic curves

Fig 1. Reverse Characteristics

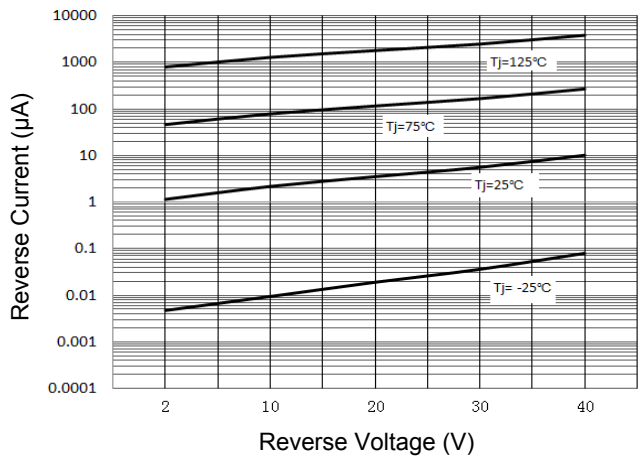


Fig 2. Forward Characteristics

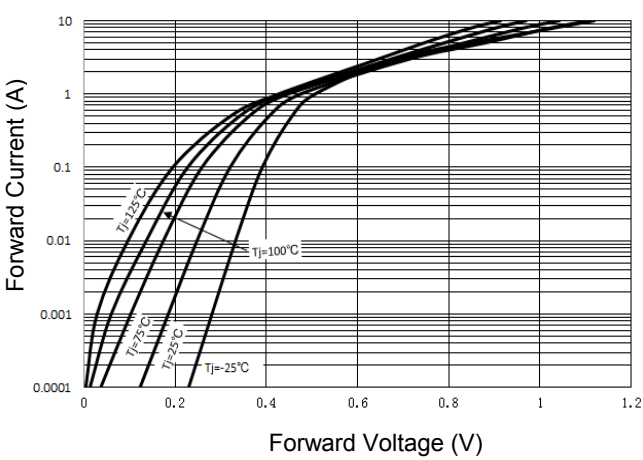
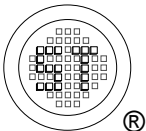
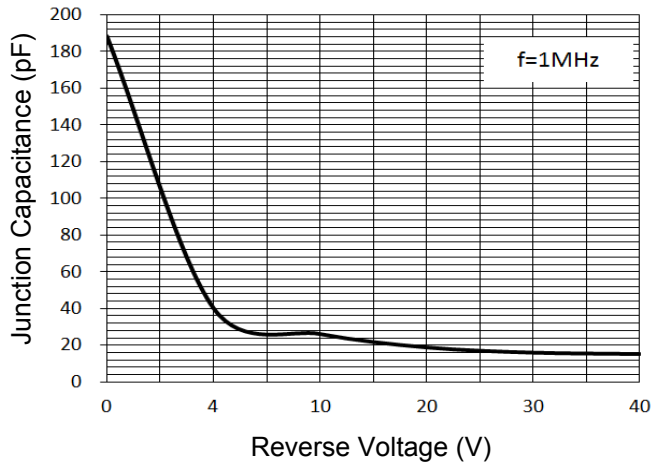


Fig 3. Junction Capacitance

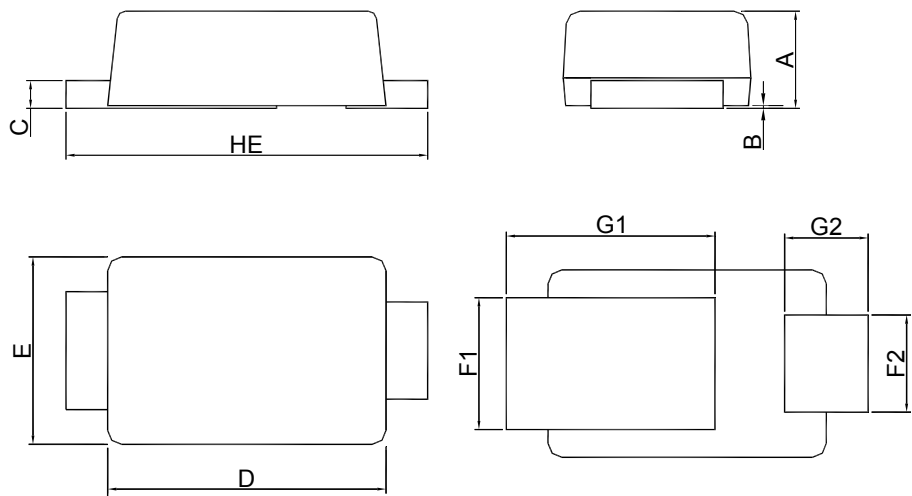


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PACKAGE OUTLINE

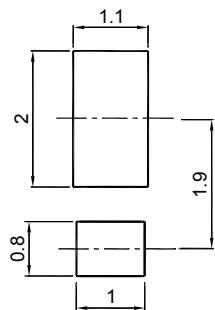
Plastic surface mounted package; 2 leads

SOD-323HE



UNIT	A	B	C	D	E	F1	F2	G1	G2	H _E
mm	0.7	0.02	0.2	2	1.35	0.95	0.7	1.5	0.6	2.6
	0.5	0	0.1	1.8	1.15	0.75	0.5	1.3	0.4	2.4

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-323HE	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line

" • " = HAF (Halogen and Antimony Free)

"SV" = Part No.

Font type: Arial

