

# 1N5818HT-AH

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 30 V

Forward Current - 1 A

### Features

- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View  
Marking Code: SL  
Simplified outline SOD-323HE and symbol

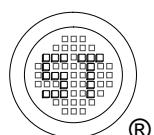
### Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%

Parameter	Symbols	Value	Units
Maximum 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)	$I_{FSM}$	25	A
Maximum Instantaneous Forward Voltage at $I_F = 1 \text{ A}$ at $I_F = 3 \text{ A}$	$V_F$	0.55 0.875	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	$I_R$	0.5 10	mA
Typical Junction Capacitance <sup>1)</sup>	$C_J$	110	pF
Typical Thermal Resistance, Junction to Ambient <sup>2)</sup>	$R_{\theta JA}$	75	°C/W
Operating Junction Temperature Range	$T_j$	- 55 to + 125	°C
Storage Temperature Range	$T_{stg}$	- 55 to + 150	°C

<sup>1)</sup> Measured at 1 MHz and reverse voltage of 4 V.

<sup>2)</sup> Thermal resistance junction to ambient 0.24" X 0.24"(6 X 6 mm) copper pads to each terminals.



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## Electrical characteristic curves

Fig 1. Reverse Characteristics

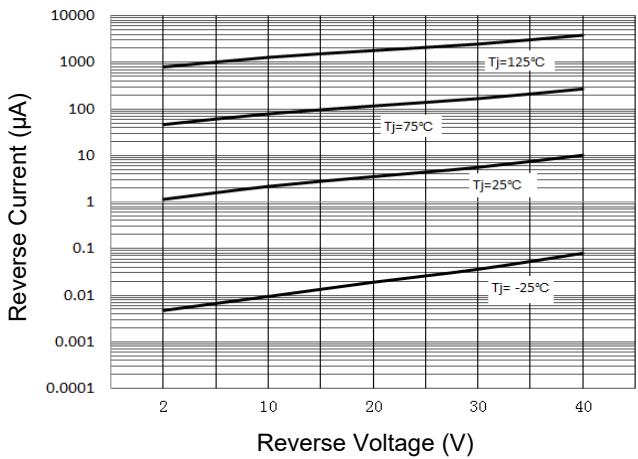


Fig 2. Forward Characteristics

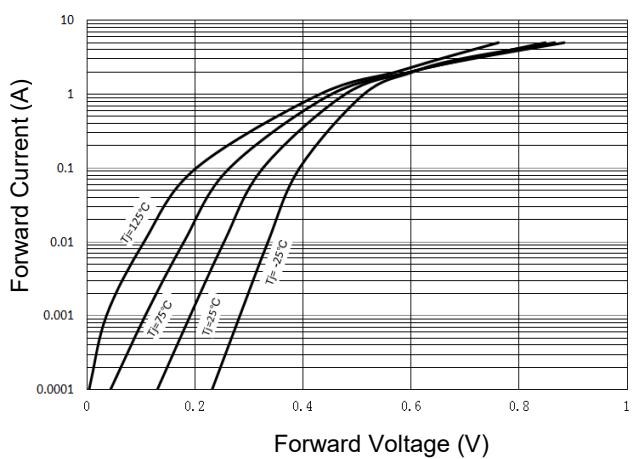
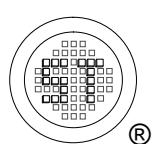
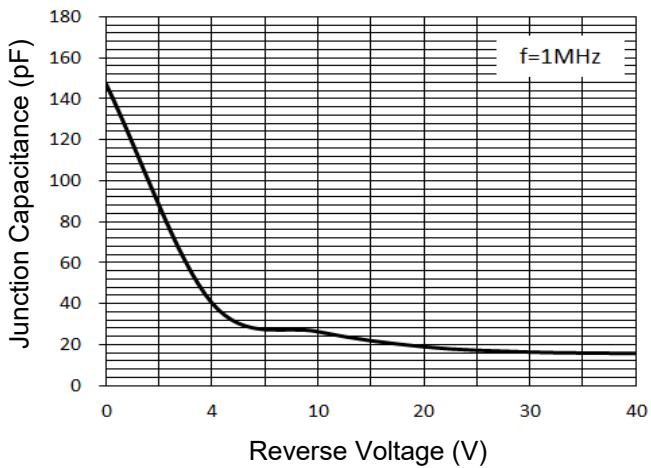


Fig 3. Junction Capacitance

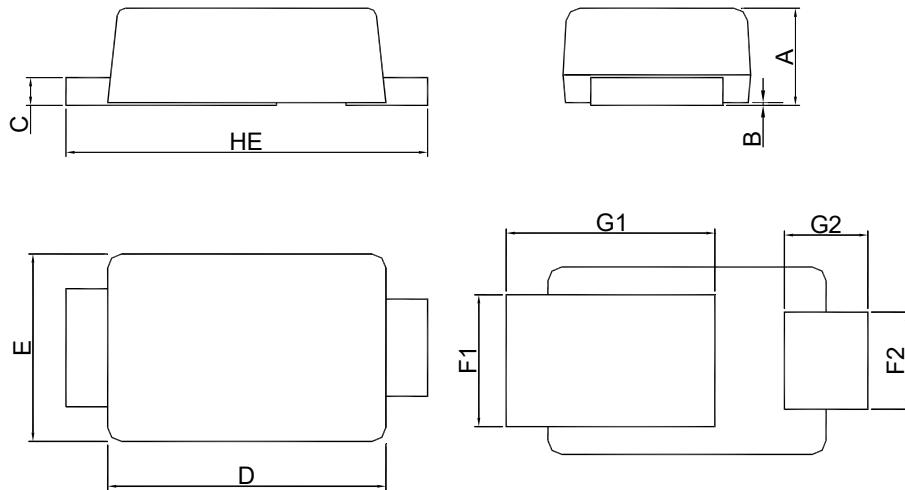


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## PACKAGE OUTLINE

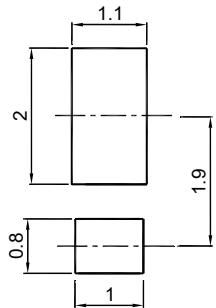
Plastic surface mounted package; 2 leads

SOD-323HE



UNIT	A	B	C	D	E	F1	F2	G1	G2	H <sub>E</sub>
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)

" SL " = Part No.

Font type: Arial

