

1N5817HS THRU 1N5819HS

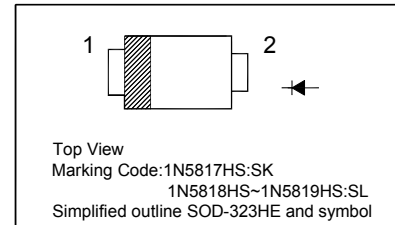
Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 40 V

Forward Current - 1 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings and Characteristics

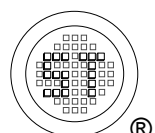
Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%

Parameter	Symbols	1N5817HS	1N5818HS	1N5819HS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	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 $I_F = 1$ A at $I_F = 3$ A	V_F	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹⁾ $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	I_R	0.5 10			mA
Typical Junction Capacitance ²⁾	C_J	110			pF
Typical Thermal Resistance, Junction to Ambient ³⁾	$R_{\theta JA}$	75			°C/W
Operating Junction Temperature Range	T_j	- 55 to + 125			°C
Storage Temperature Range	T_{stg}	- 55 to + 150			°C

¹⁾ Pulse test: 300 μs pulse width, 1% duty cycle

²⁾ Mearsured at 1 MHz and reverse voltage of 4 V

³⁾ Thermal resistance junction to ambient 0.24" X 0.24"(6 X 6 mm) copper pads to each terminals



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Fig 1. Forward Current Derating Curve

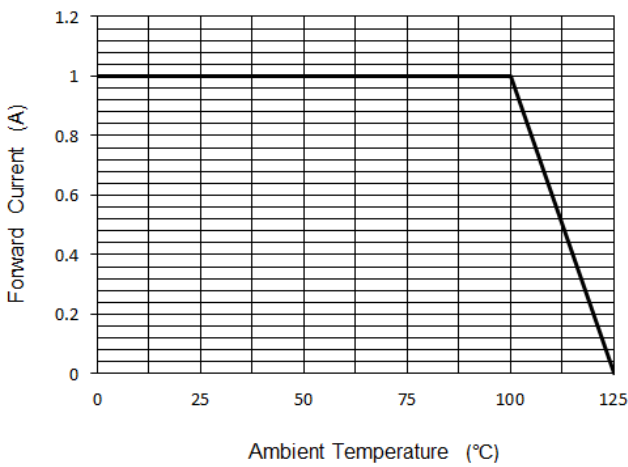


Fig 2. Junction Capacitance Reverse Voltage

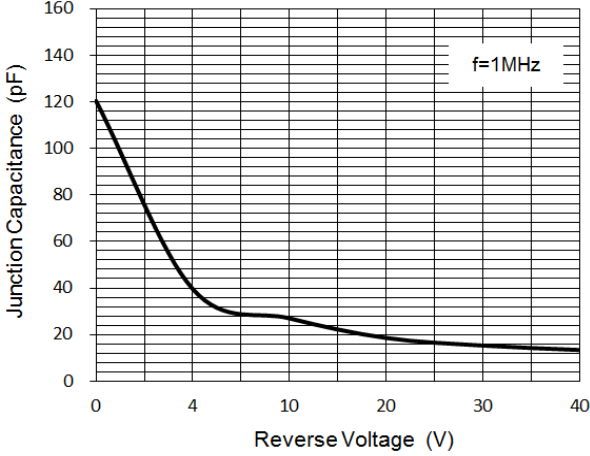
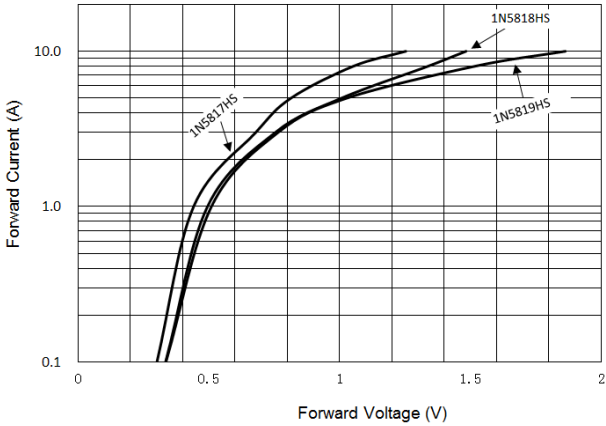


Fig 3. Forward Characteristics

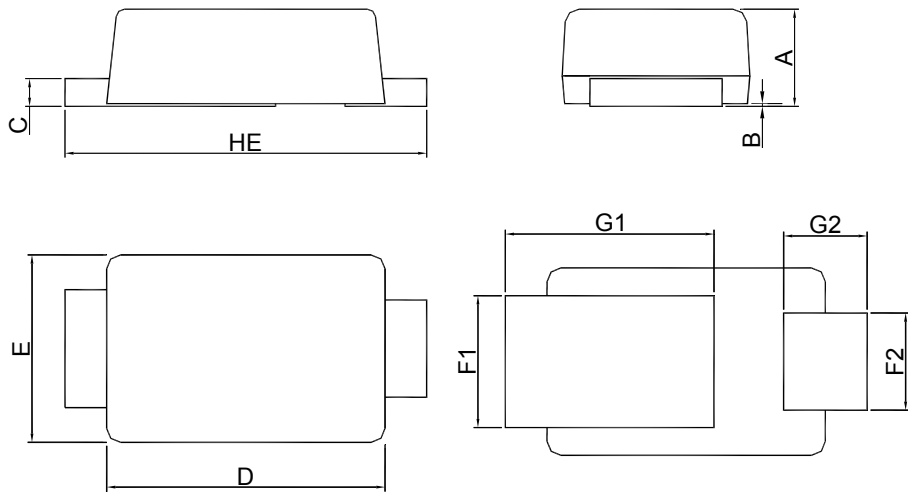


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PACKAGE OUTLINE

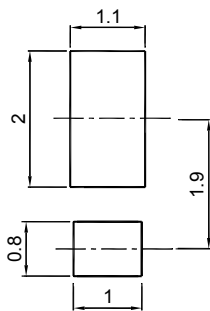
Plastic surface mounted package; 2 leads

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

" ** " = Part No.

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