

## 1N5817HS ~1N5819HS

## Surface Mount Schottky Barrier Rectifier

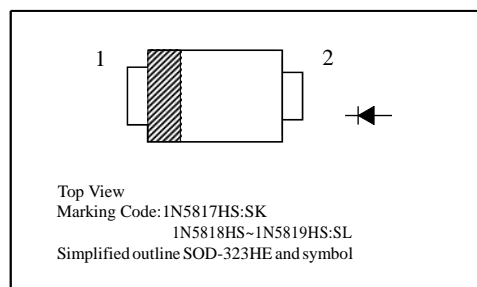
## FEATURES

Reverse Voltage - 20 to 40 V

Forward Current - 1 A

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



## MAXIMUM RATINGS AND ELECTRICAL 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	$V_F$	0.45	0.55	0.6	V
		0.75	0.875	0.9	
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage <sup>1)</sup>	$I_R$	0.5			mA
		10			
Typical Junction Capacitance <sup>2)</sup>	$C_J$	110			pF
Typical Thermal Resistance, Junction to Ambient <sup>3)</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> Pulse test: 300 μs pulse width, 1% duty cycle

<sup>2)</sup> Mearsured at 1 MHz and reverse voltage of 4 V

<sup>3)</sup> 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

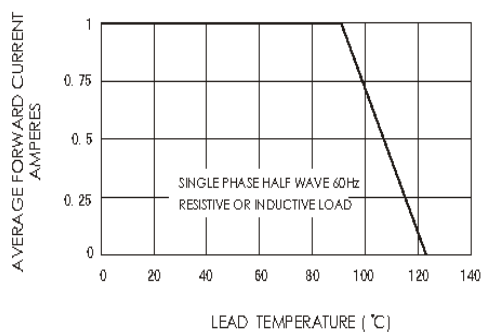


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

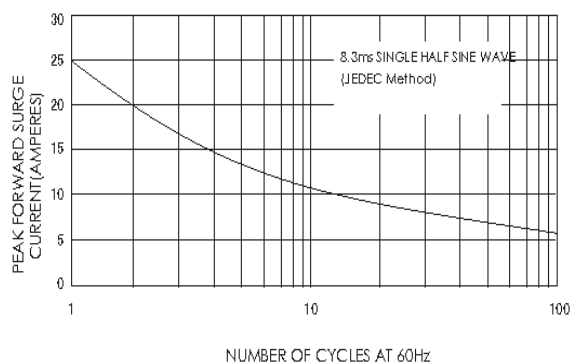


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

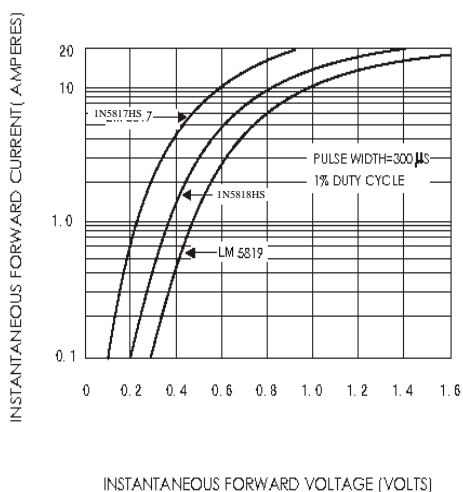


FIG.4-TYPICAL REVERSE CHARACTERISTICS

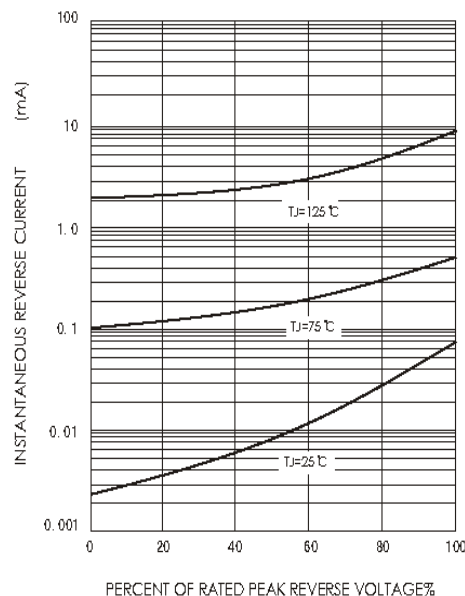
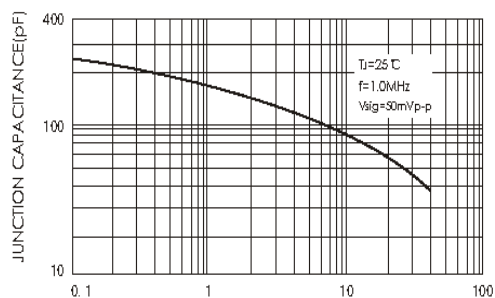


FIG.5-TYPICAL JUNCTION CAPACITANCE

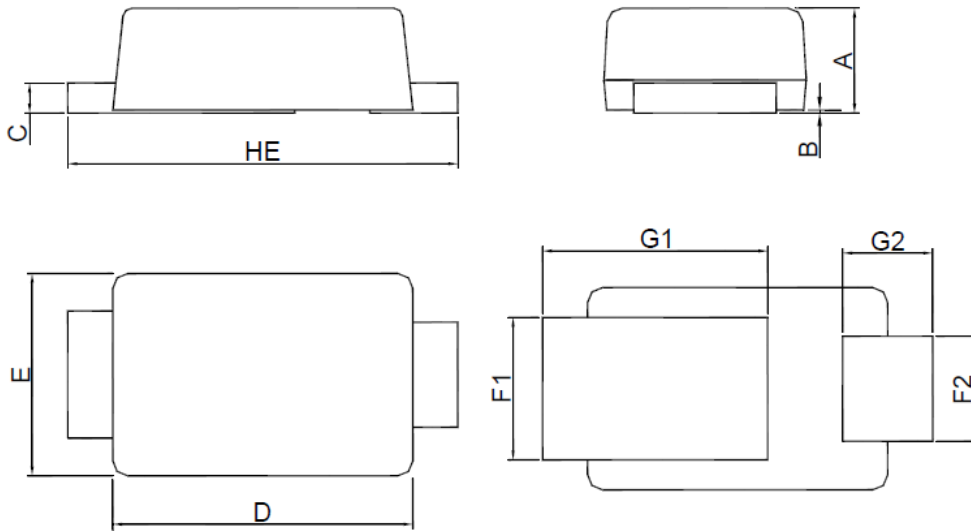


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PACKAGE OUTLINE

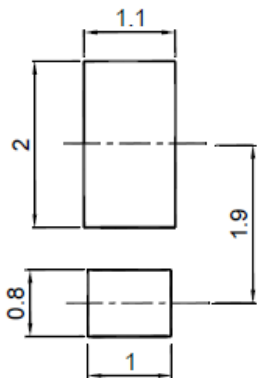
Plastic surface mounted package; 2 leads

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

Note: Specification are subject to change without notice. For more detail and update, please visit our website.