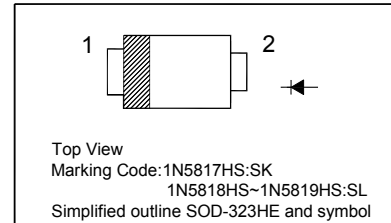


1N5817HS THRU 1N5819HS

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	V_F	at $I_F = 1$ A	0.45	0.55	0.6	V
		at $I_F = 3$ A	0.75	0.875	0.9	
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹⁾	I_R	$T_A = 25^\circ\text{C}$	0.5			mA
		$T_A = 100^\circ\text{C}$	10			
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

TOP DYNAMIC



Dated: 25/04/2014 Rev: 01

1N5817HS THRU 1N5819HS

FIG.1-FORWARD CURRENT DERATING CURVE

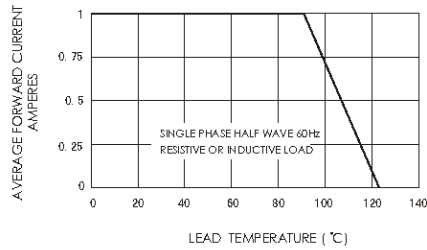


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

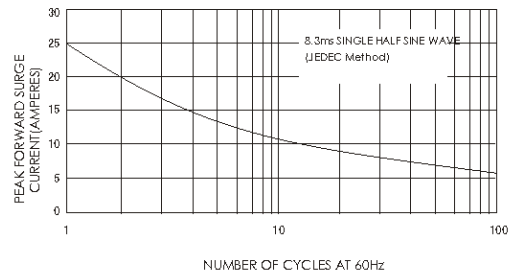


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

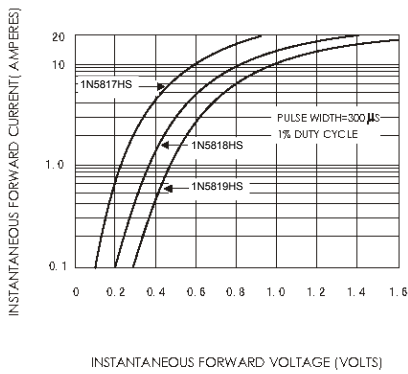


FIG.4-TYPICAL REVERSE CHARACTERISTICS

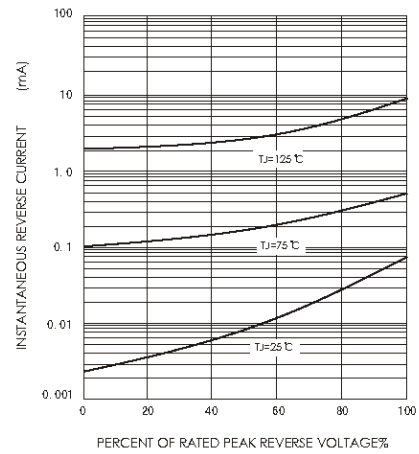
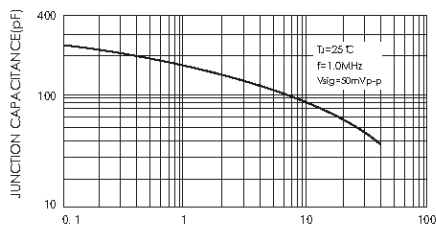


FIG.5-TYPICAL JUNCTION CAPACITANCE



TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121505007 ISO 9001 : 2008 Certificate No. 01114012 OHSAS 18001 : 2007 Certificate No. 05131508006 IECQ QC 080000 Certificate No. EQ-H0001 N.002

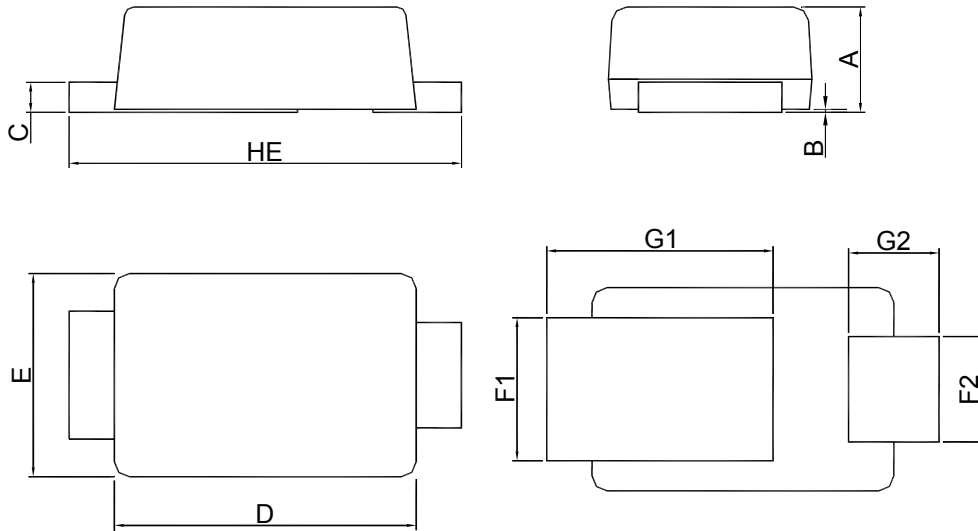
Dated: 25/04/2014 Rev: 01

1N5817HS THRU 1N5819HS

PACKAGE OUTLINE

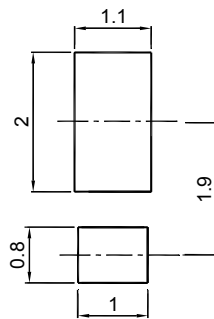
Plastic surface mounted package; 2 leads

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



SOD-323HE

TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121505007
 ISO 9001 : 2008 Certificate No. 50114012
 OHSAS 18001 : 2007 Certificate No. 05131508006
 IECQ QC 080000 Certificate No. EQ-HK001 N.002

Dated: 25/04/2014 Rev: 01