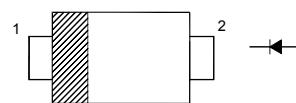


1N5817W THRU 1N5819W

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 20 to 40 V
Forward Current - 1 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: 1N5817W:A0
1N5818W~1N5819W:SR
Simplified outline SOD-123FL and symbol

Absolute Maximum Ratings and Characteristics

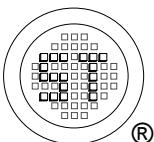
Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%

Parameter	Symbols	1N5817W	1N5818W	1N5819W	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 method)	I_{FSM}		25		A
Maximum Instantaneous Forward Voltage at $I_F = 1 \text{ A}$ at $I_F = 3 \text{ A}$	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⁾ Measured 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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1N5817W THRU 1N5819W

FIG.1-FORWARD CURRENT DERATING CURVE

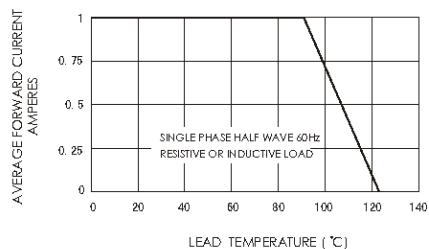


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

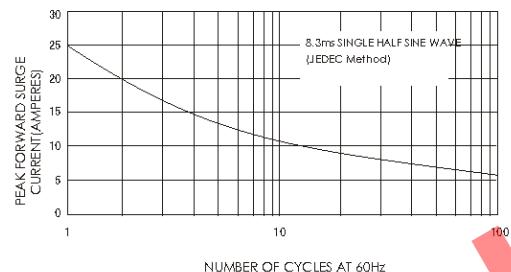


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

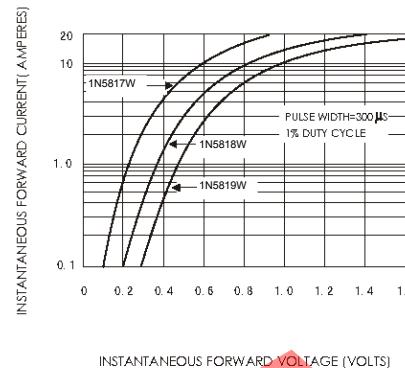


FIG.4-TYPICAL REVERSE CHARACTERISTICS

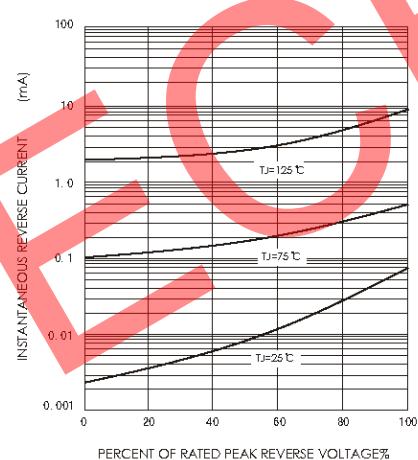
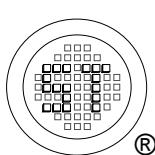
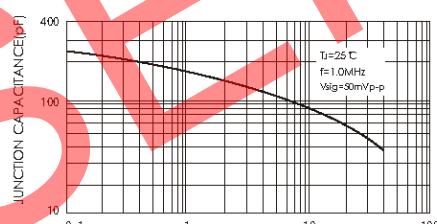


FIG.5-TYPICAL JUNCTION CAPACITANCE



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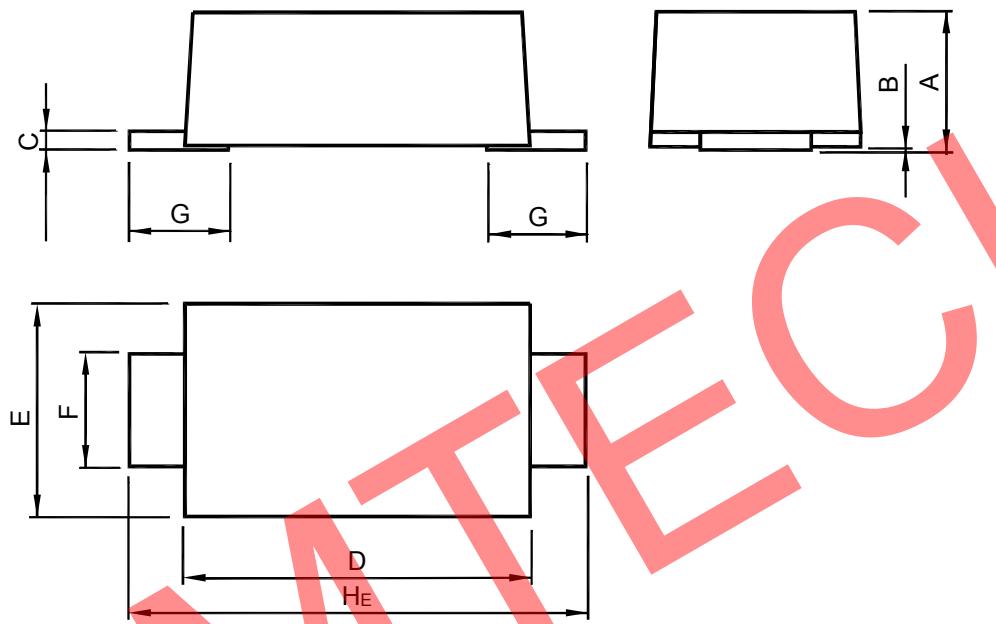
Dated: 05/07/2013 Rev: 02

1N5817W THRU 1N5819W

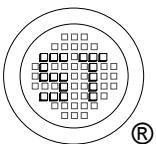
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H_E
mm	1.08	0.1	0.2	2.9	1.9	1.1	0.9	3.9
	0.88	0	0.1	2.6	1.7	0.8	0.7	3.5



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