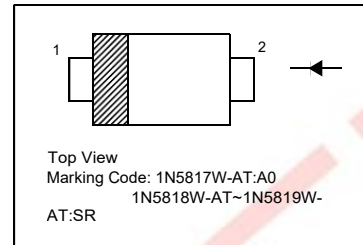


# 1N5817W-AT THRU 1N5819W-AT

**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	1N5817W -AT	1N5818W -AT	1N5819W -AT	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 <sup>1)</sup>	$I_R$	0.5 10			mA
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	$T_{slg}$	- 55 to + 150			°C

<sup>1)</sup> Pulse test: 300  $\mu$ s 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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## Typical Characteristics Curves

FIG.1-FORWARD CURRENT DERATING CURVE

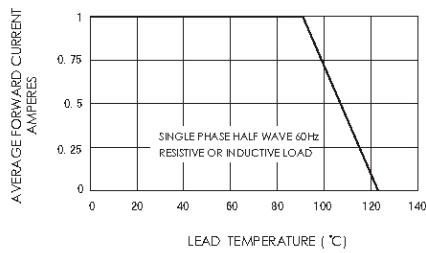


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

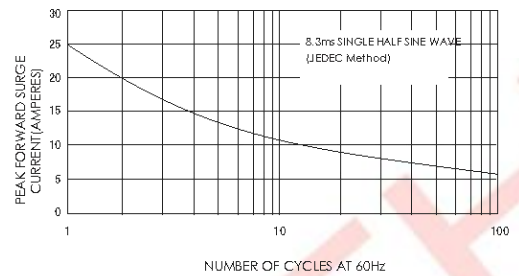


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

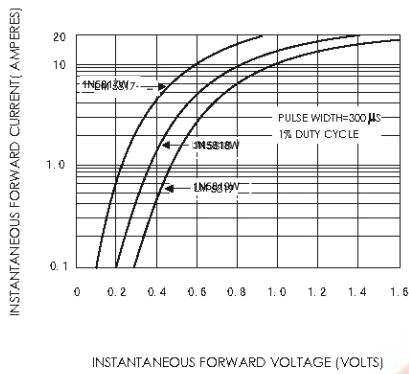


FIG.4-TYPICAL REVERSE CHARACTERISTICS

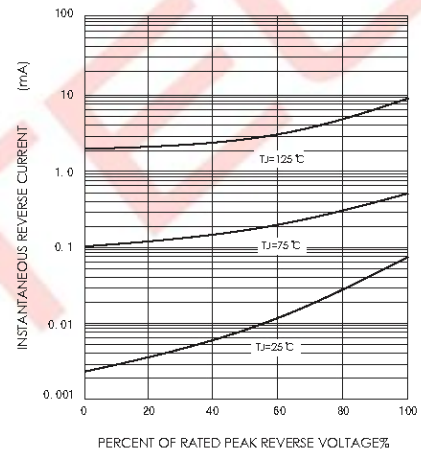
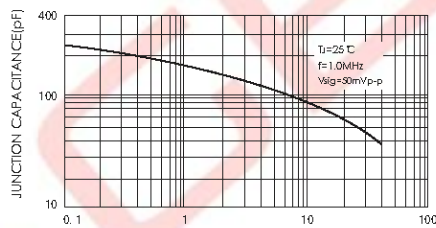


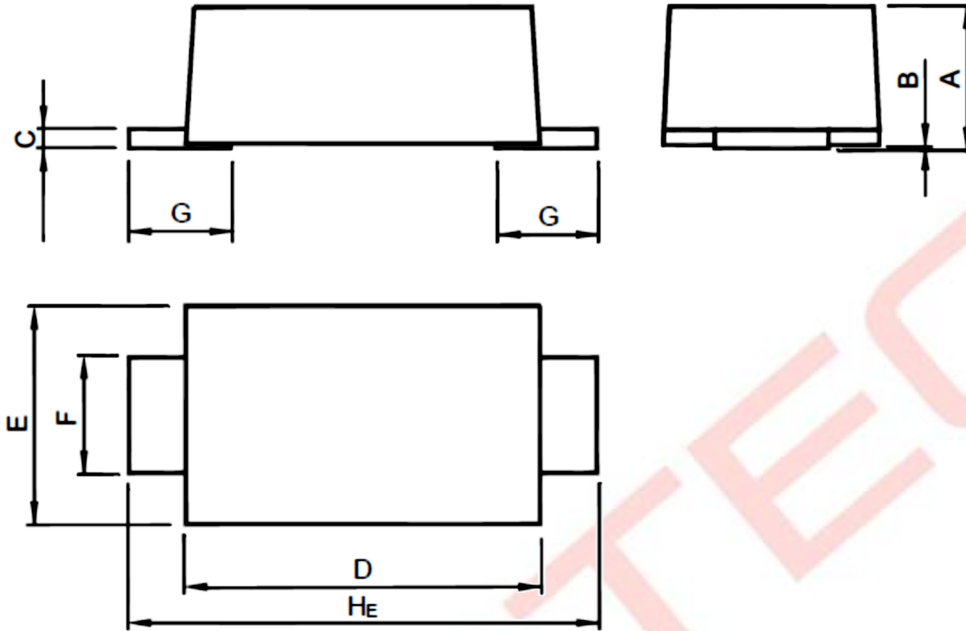
FIG.5-TYPICAL JUNCTION CAPACITANCE



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## Package Outline

SOD-123FL



UNIT	A	B	C	D	E	F	G	H <sub>E</sub>
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