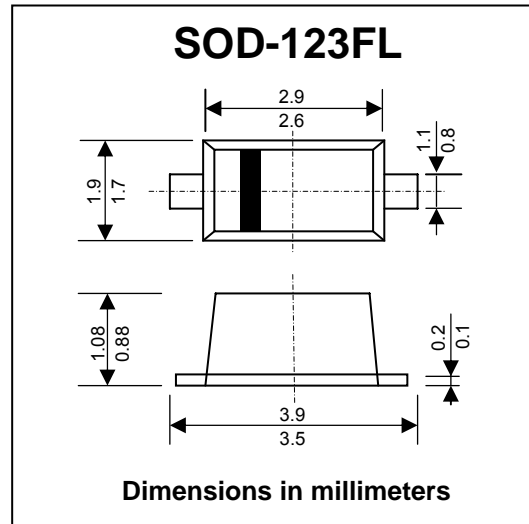


# 1N5817W THRU 1N5819W

Reverse Voltage - 20 to 40 V  
Forward Current - 1 A

## SURFACE MOUNT SCHOTTKY BARRIER DIODE



### 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 methode)	$I_{FSM}$	25			A
Maximum Instantaneous Forward Voltage	$V_F$	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	$T_{stg}$	- 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

FIG.1-FORWARD CURRENT DERATING CURVE

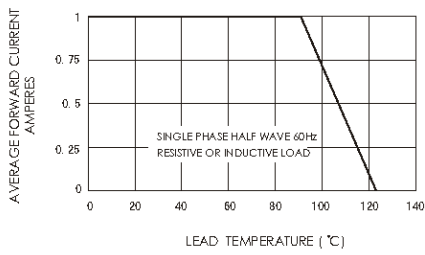


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

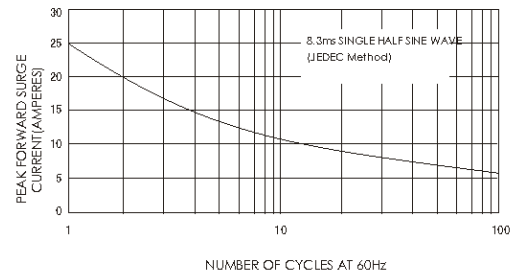


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

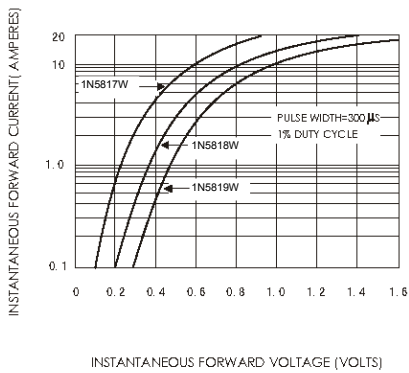


FIG.4-TYPICAL REVERSE CHARACTERISTICS

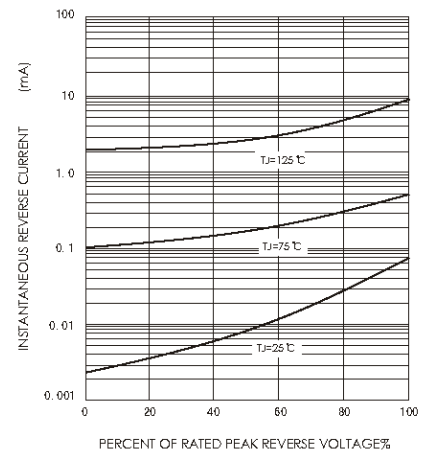


FIG.5-TYPICAL JUNCTION CAPACITANCE

