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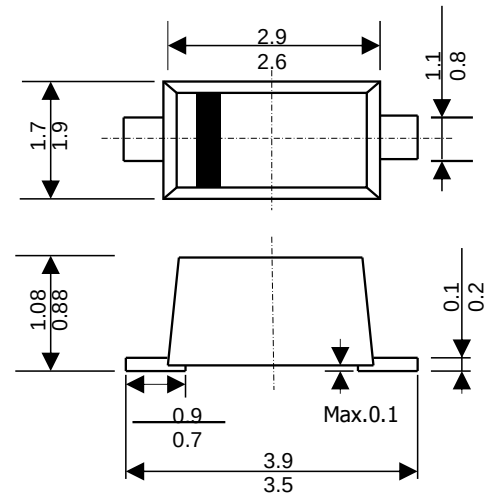
1N5817W - 1N5819W

SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 20 - 40 Volts
I_O : 1.0 Ampere

SOD-123FL



Dimensions in millimeters

MECHANICAL DATA :

* Case : SOD-123FL
* Weight: 0.006 ounces, 0.02 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	1N5817W	1N5818W	1N5819W	UNIT
Maximum Recurrent 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 Current 0.375", 9.5mm Lead Length	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25			A
Maximum Forward Voltage at I_F = 1.0 A at I_F = 3.0 A	V_F	0.45 0.75	0.55 0.875	0.60 0.90	V
Maximum Reverse Current Ta = 25 °C	I_R	0.5			mA
at Rated DC Blocking Voltage (Note 1) Ta = 100 °C	$I_{R(H)}$	10			mA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	75			°C/W
Typical Junction Capacitance (Note 3)	C_J	110			pF
Junction Temperature Range	T_J	-55 to + 125			°C
Storage Temperature Range	T_{STG}	-55 to + 150			°C

Notes :

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 1%.
(2) Thermal Resistance from junction to ambient 0.24"x0.24" (6 x 6mm.) copperpads each terminals.
(3) Measured at 1 MHz and applied reverse voltage of 4.0 volts.