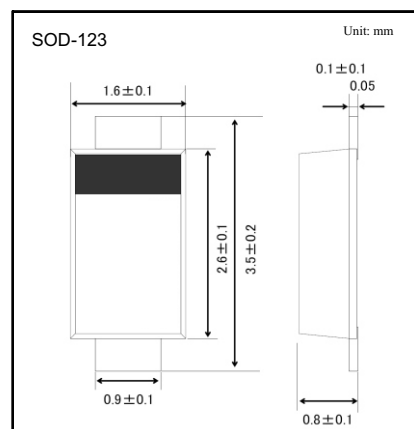


Schottky Barrier Diodes

1N5819W

■ Features

- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Weight: 0.01 grams (approx)



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	40	V
Peak repetitive Peak reverse voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_o	1	A
Peak forward surge current @=8.3ms	I_{FSM}	25	A
Power Dissipation	P_d	450	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	222	K/W
Storage temperature	T_{STG}	-65 to 150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1\text{mA}$	40			V
Reverse voltage leakage current	I_R	$V_R = 40\text{V}$			1	mA
Forward voltage	V_F	$I_F = 1\text{A}$			0.6	V
		$I_F = 3\text{A}$			0.9	
Diode capacitance	C_D	$V_R = 4\text{V}, f = 1\text{MHz}$			120	pF

■ Marking

Marking	SL
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1N5819W

■ Typical Characteristics

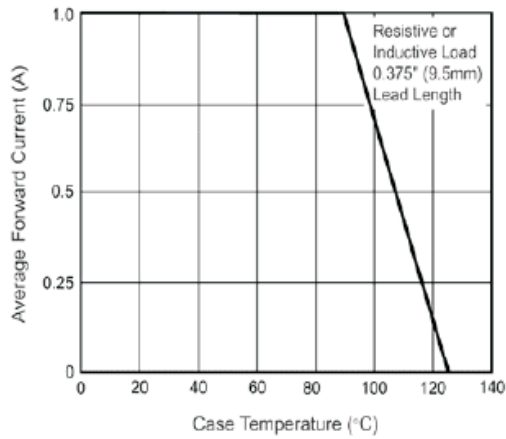


Fig.1 Forward Current Derating Curve

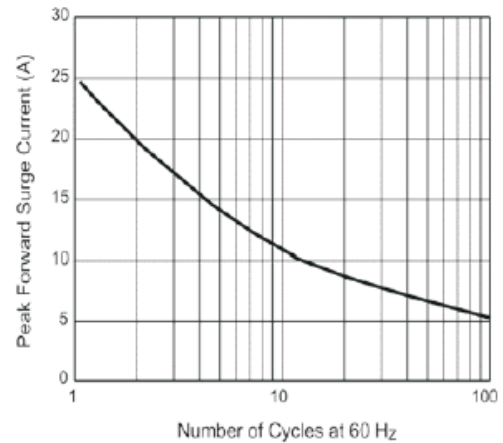


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

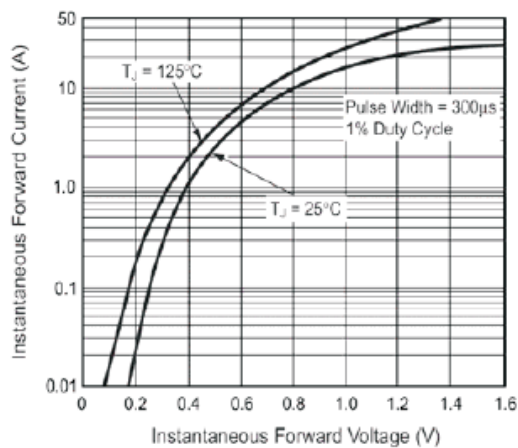


Fig.3 Typical Instantaneous Forward Characteristics

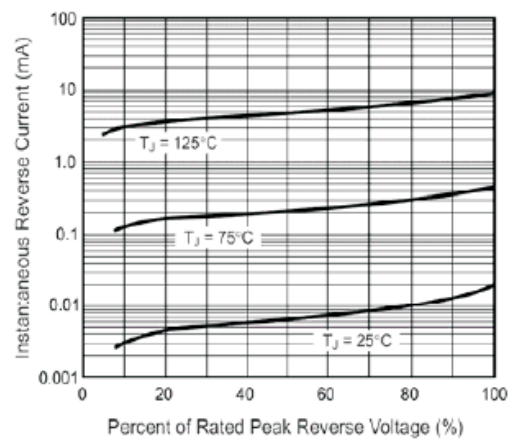


Fig.4 Typical Reverse Characteristics

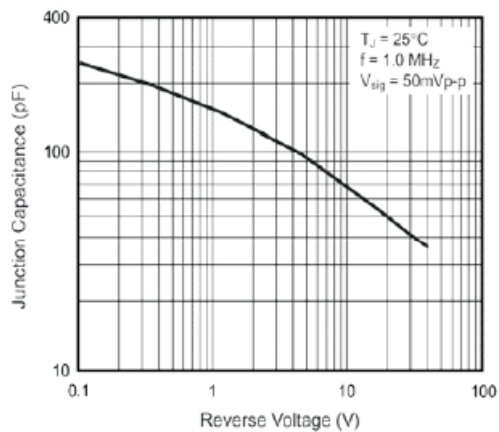


Fig.5 Typical Junction Capacitance

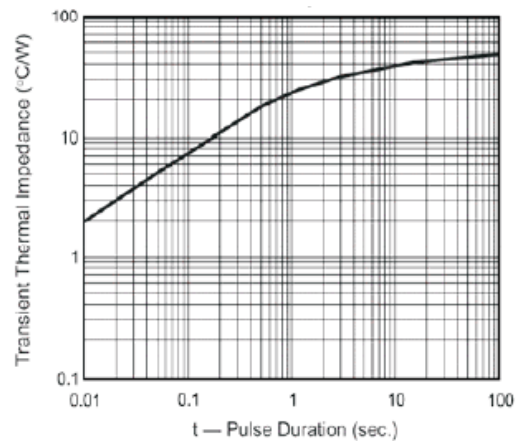


Fig.6 Typical Transient Thermal Impedance