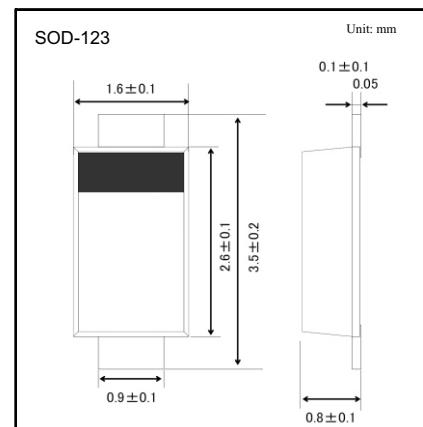


Schottky Barrier Diodes

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 Ta = 25°C

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	40	V
Peak repetitive Peak reverse voltage	V _{R_{RM}}		
Working Peak Reverse Voltage	V _{R_{WM}}	40	V
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 _{θ JA}	222	K/W
Storage temperature	T _{STG}	-65 to 150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R = 1mA	40			V
Reverse voltage leakage current	I _R	V _R =40V			1	mA
Forward voltage	V _F	I _F =1A I _F =3A			0.6 0.9	V
Diode capacitance	C _D	V _R =4V, f=1MHz			120	pF

■ Marking

Marking	SL
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1N5819W

■ Typical Characteristics

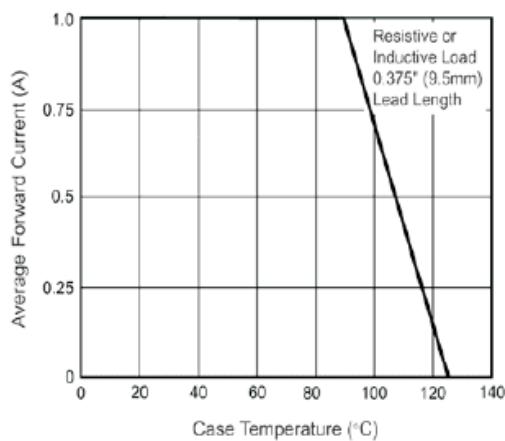


Fig.1 Forward Current Derating Curve

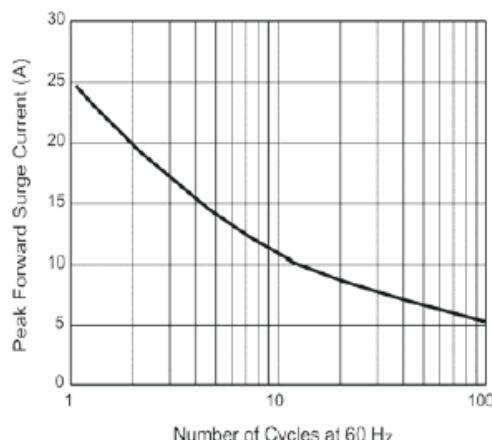


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

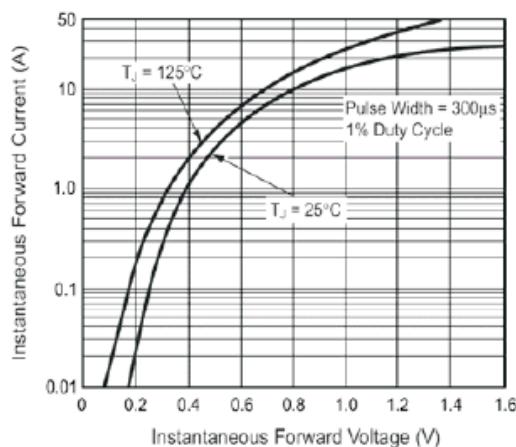


Fig.3 Typical Instantaneous Forward Characteristics

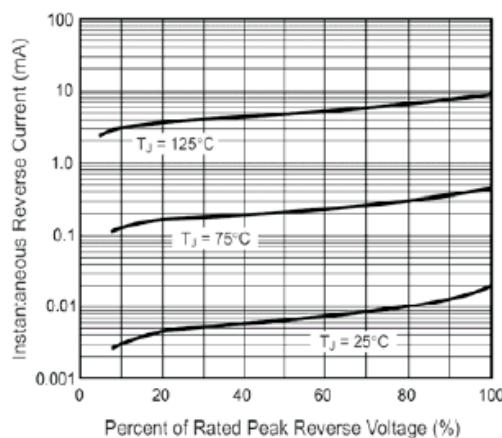


Fig.4 Typical Reverse Characteristics

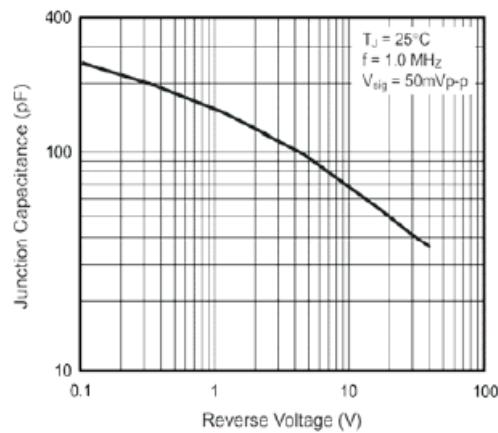


Fig.5 Typical Junction Capacitance

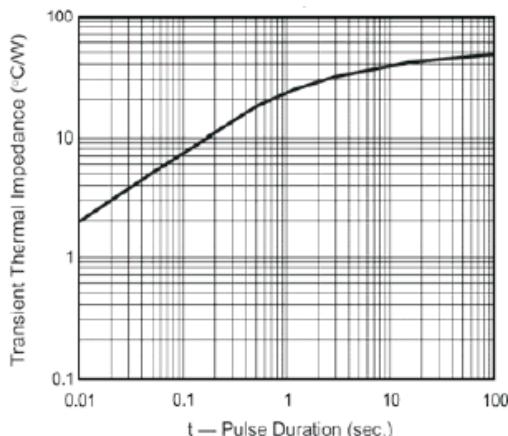


Fig.6 Typical Transient Thermal Impedance