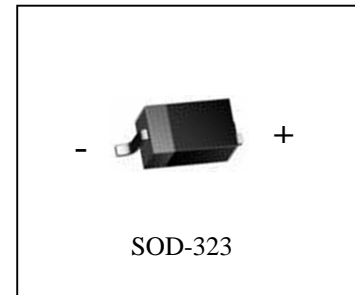


SCHOTTKY BARRIER DIODE
1N5819WS
FEATURES

or use in low voltage, high frequency inverters
Free wheeling, and polarity protection applications.

MARKING : 1N5819WS:SL



Maximum Ratings and Electrical Characteristics, Single Diode @TA=25 °C

Paramete	Symbol	1N5819WS	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}	9	A
Repetitive Peak Forward Current	I _{FR}	1.5	A
Power Dissipation	P _d	250	mW
ThermalResistanc Junction to Ambient	R _{JA}	500	°C/W
Storage temperature	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25 °C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	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	V _R =4V, f=1MHz		120	pF

1N5819WS

Typical Characteristics

Fig. 1 - Forward Current Derating Curve

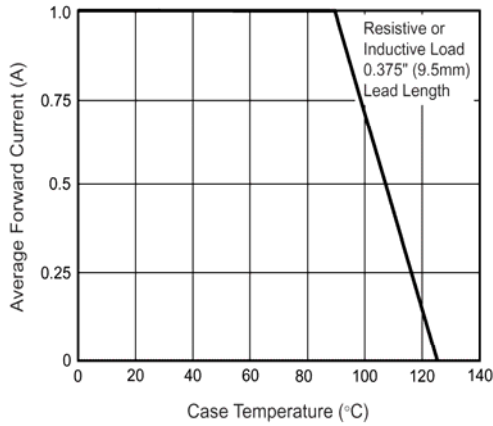


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

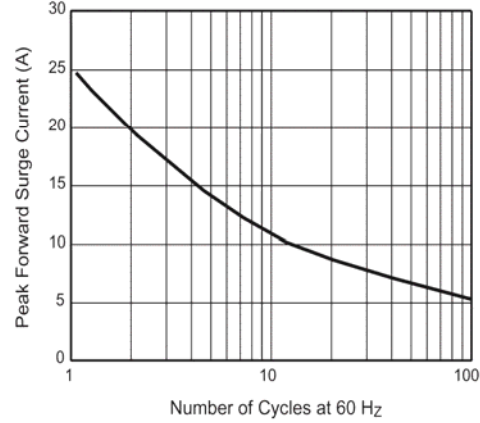


Fig. 3 - Typical Instantaneous Forward Characteristics

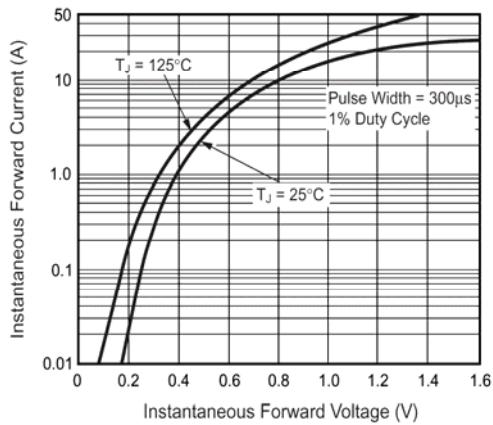


Fig. 4 - Typical Reverse Characteristics

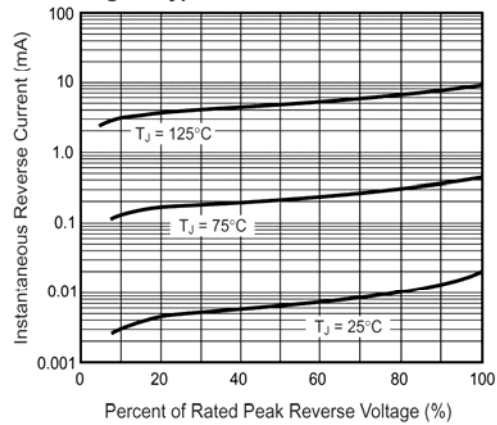


Fig. 5 - Typical Junction Capacitance

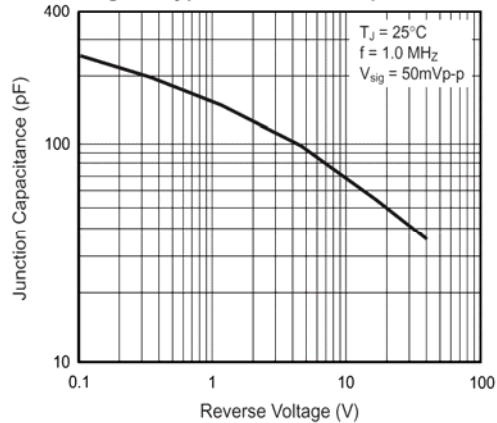


Fig. 6 - Typical Transient Thermal Impedance

