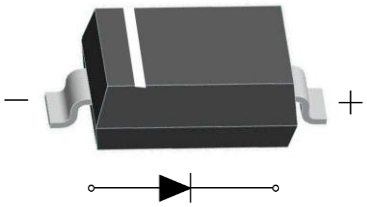
1N5817WS-1N5819WS

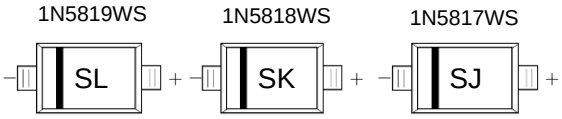
SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance



SOD-323 top view



Marking and pin assignment

Pb-Free

RoHS

Halogen-Free

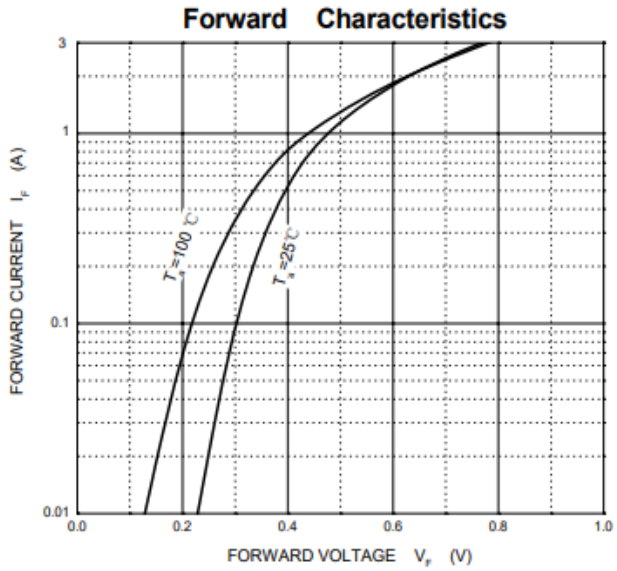
Maximum Ratings(T_a=25℃ unless otherwise noted)

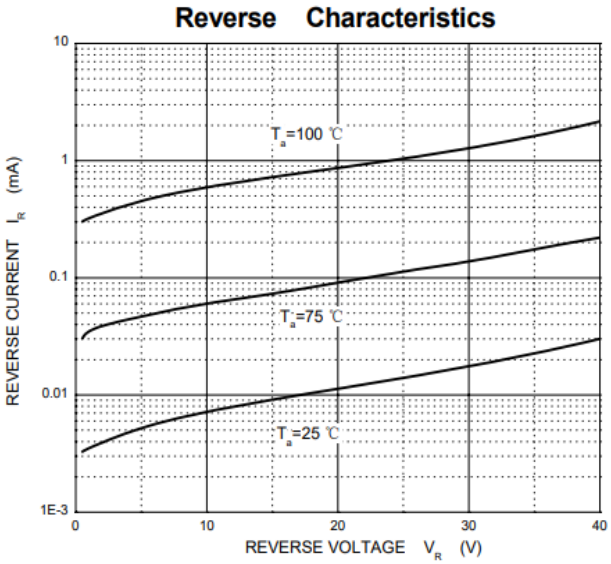
Symbol	Parameter	1N5819WS	1N5818WS	1N5817WS	Unit
V_{RM}	Non-repetitive peak reverse voltage	40	30	20	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage	40	30	20	V
V_{RWM}	Working Peak Reverse Voltage				
V_R	DC Blocking Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	28	21	14	V
I_O	Average rectified output current	1			A
I_{FRM}	Repetitive peak forward current	1.5			A
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	9			A
P_D	Power Dissipation	250			mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	400			°C/W
T_J	Junction Temperature	-40~+125			°C
T_{stg}	Storage Temperature	-55~+150			°C

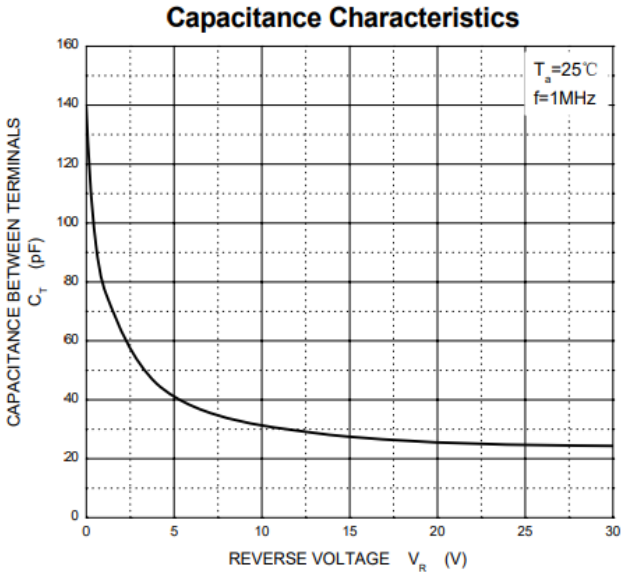
Electrical Characteristics (T_J=25℃ unless otherwise noted)

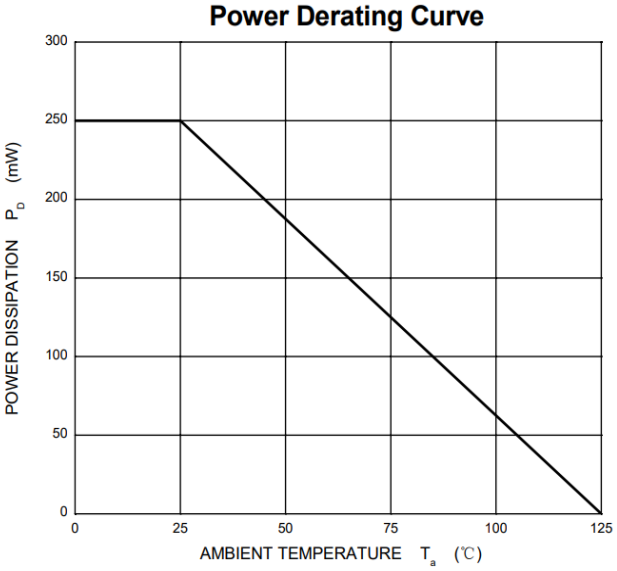
Symbol	Parameter		Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	1N5819WS	I_R=1mA	40			V
		1N5818WS		30			
		1N5817WS		20			
V_F	Forward voltage		1N5819WS I_F=1A			0.6	V
			I_F=3A			0.9	
			1N5818WS I_F=1A			0.55	
			I_F=3A			0.875	
			1N5817WS I_F=1A			0.45	
			I_F=3A			0.75	
I_R	Reverse current	1N5819WS	V_R=40V			1	mA
		1N5818WS	V_R=30V				
		1N5817WS	V_R=20V				
C_D	Diode capacitance		V_R=4V,f=1MHz			120	pF

Typical Operating Characteristics

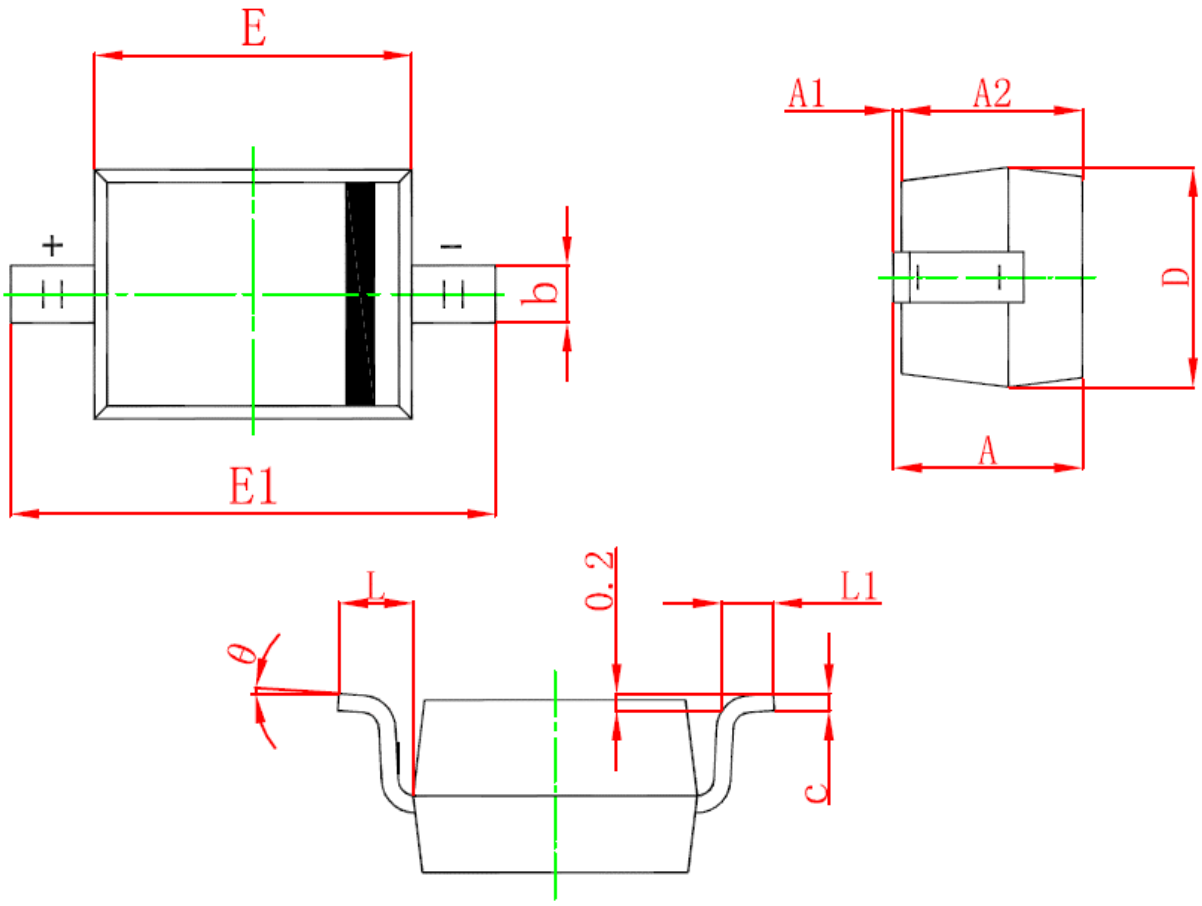








SOD-323 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	-	1.100	-	0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°