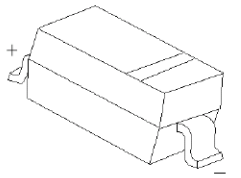
SOD-323 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop
- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications

SOD-323



Mechanical Data

- package:SOD-323
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Ordering Information

Part Number	Package	Marking	Packing	Quantity per reel	Reel Size
1N5817WS	SOD-323	SJ	Tape & Reel	3000 PCS	7 inches
1N5818WS	SOD-323	SK	Tape & Reel	3000 PCS	7 inches
1N5819WS	SOD-323	SL	Tape & Reel	3000 PCS	7 inches

Maximum Ratings & Thermal Characteristics (T_A=25℃ unless otherwise noted.)

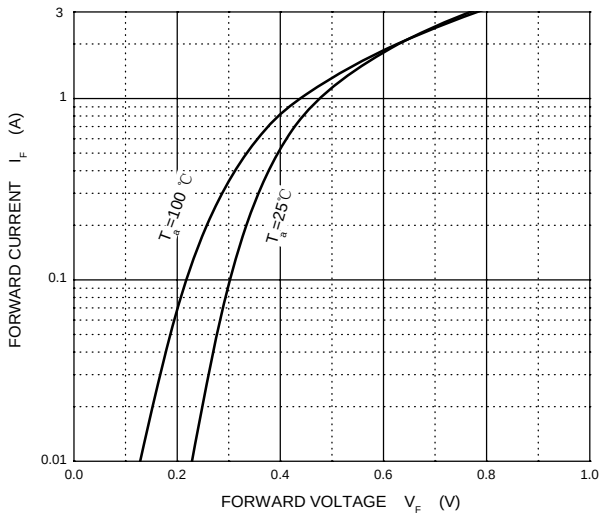
Parameters	Symbol	1N5817WS	1N5818WS	1N5819WS	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current	I_{FM}	1			A
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	9			A
Power Dissipation	P_D	400			mW
Typical thermal resistance	$R_{\theta JA}$	250			℃/W
Operating junction temperature	T_j	125			℃
Storage temperature range	T_{STG}	-50-+150			℃

Electrical Characteristics (T_A=25℃ unless otherwise noted.)

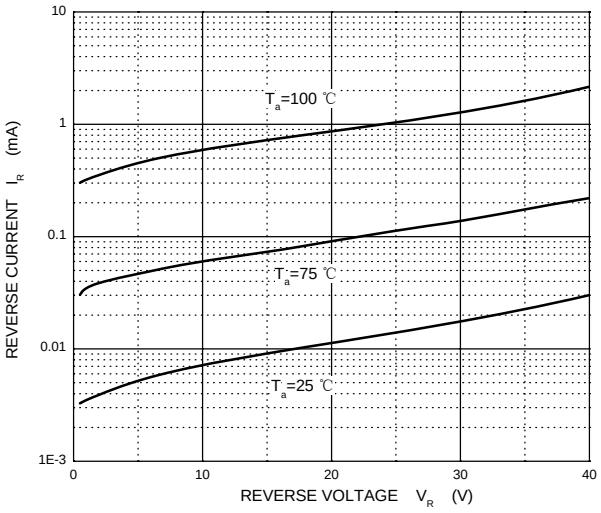
Parameters	Symbol	Test conditions	1N5817WS	1N5818WS	1N5819WS	Unit
Maximum forward voltage	V_F	I_F = 1.0A I_F = 3.0A	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	V_R	I_R=1mA	20	30	40	V
Maximum reverse current	I_R	V_R=20V 1N5817WS V_R=30V 1N5818WS V_R=40V 1N5819WS	1.0			mA
Type junction capacitance	C_j	V_R = 4.0V, f = 1MHz	120			pF

Typical Characteristics

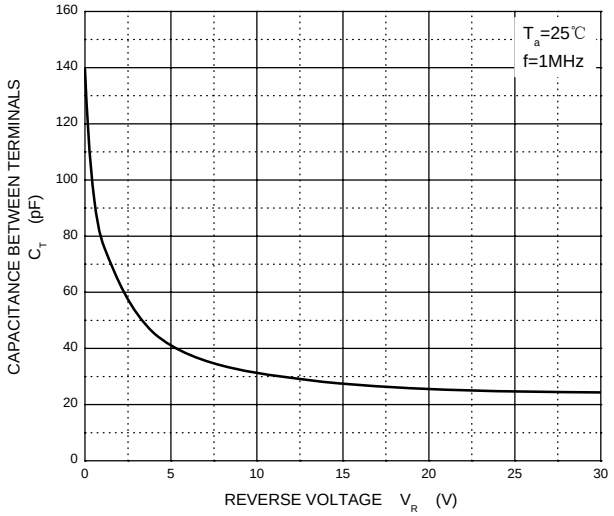
Forward Characteristics



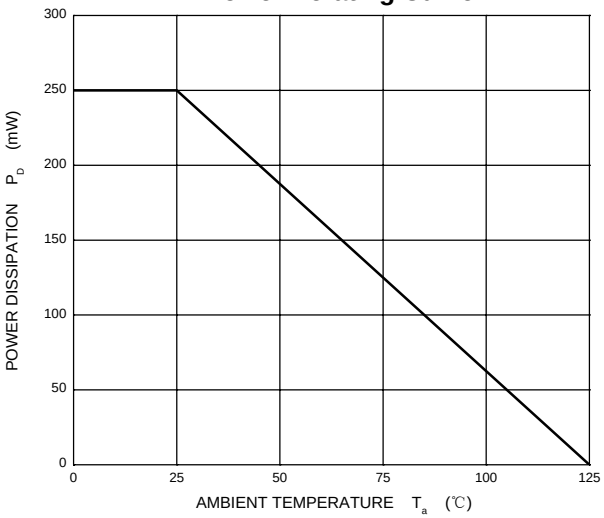
Reverse Characteristics



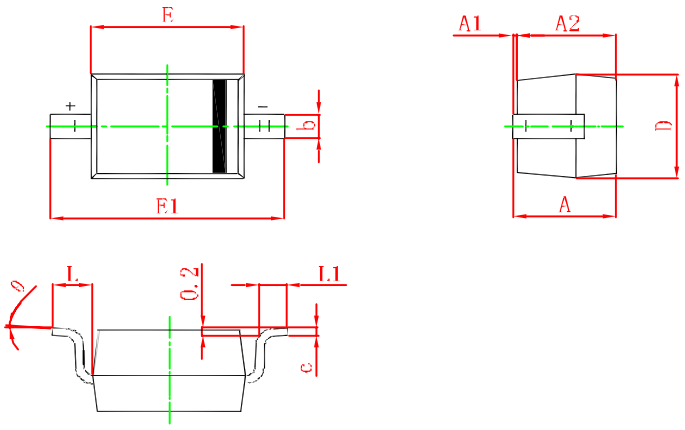
Capacitance Characteristics



Power Derating Curve



SOD-323 Package Outline Dimensions



Symbol	Min	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°