

SOD-323 Plastic-Encapsulate Diodes



• Features

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



SOD-323

• MAXIMUM RATINGS (T_C=25°C)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	40	V
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	9	A
Power Dissipation	P_D	250	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	400	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	°C

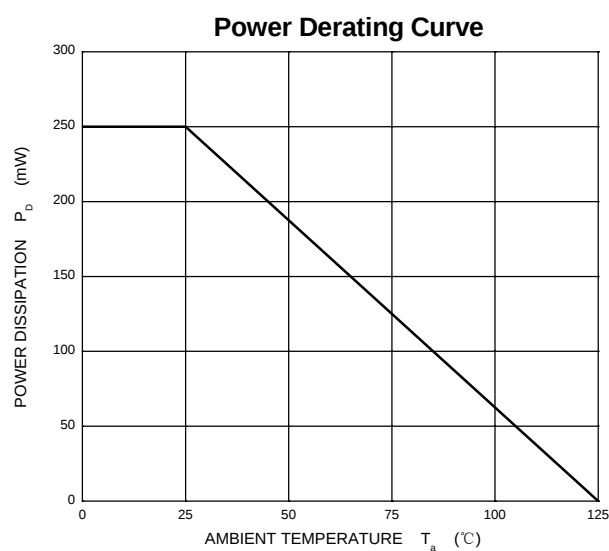
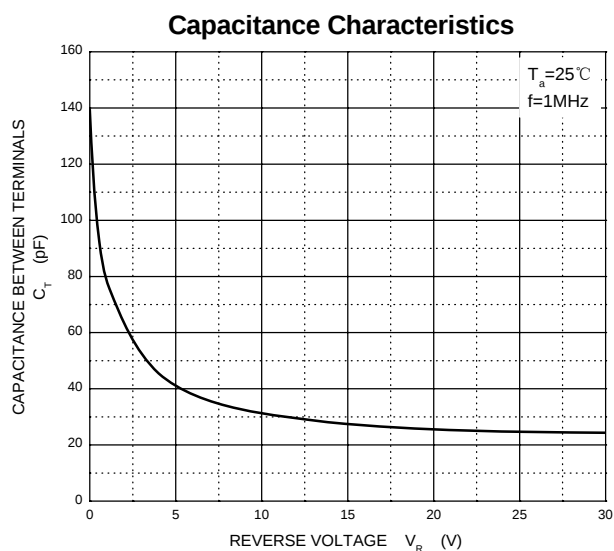
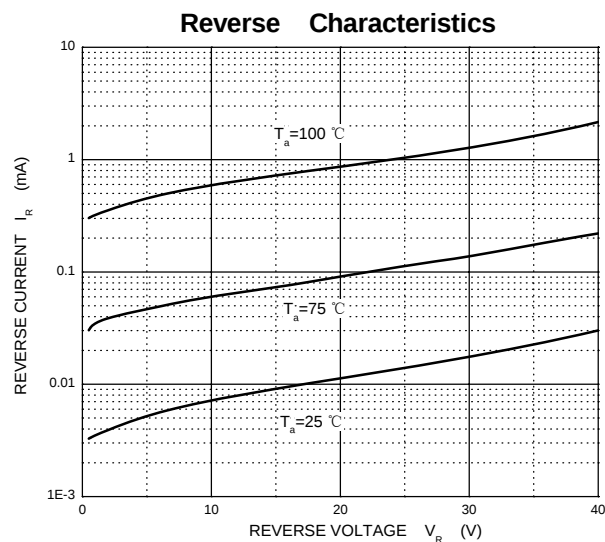
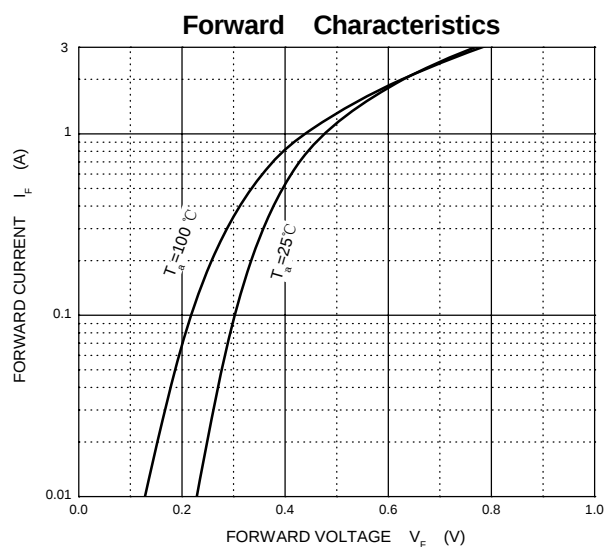
• ELECTRICAL CHARACTERISTICS (T_a=25°C)

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_D	$V_R = 4V, f = 1MHz$		120	pF

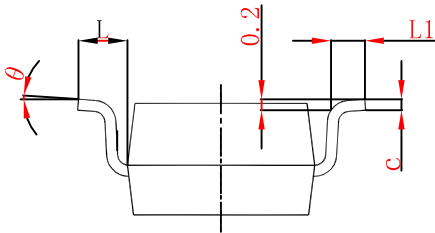
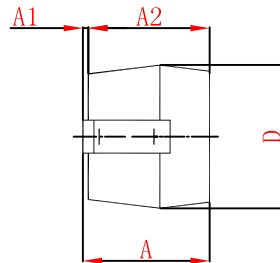
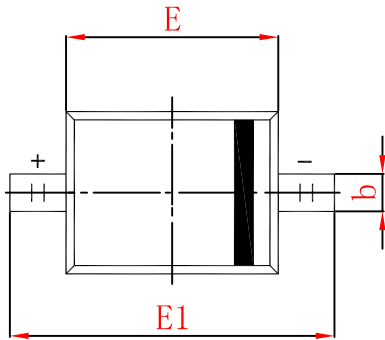
• Ordering Information:

Part NO.	B5819WS
Marking	SL
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

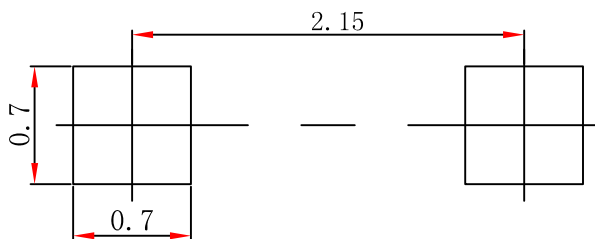
• Typical Characteristics



SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		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°



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.