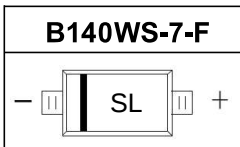


SOD-323

FEATURES

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

MARKING:



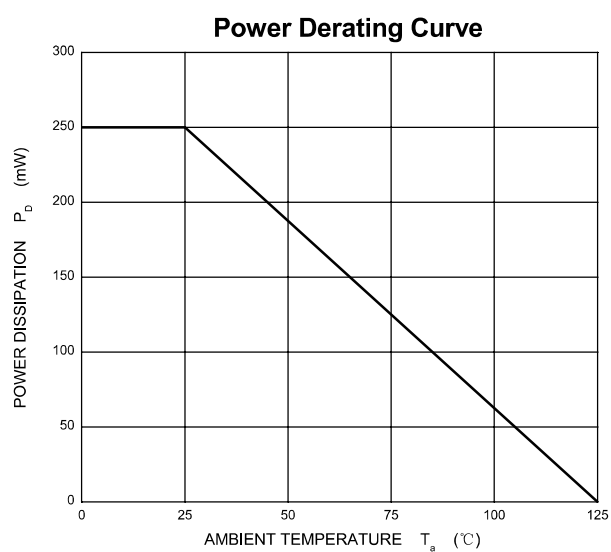
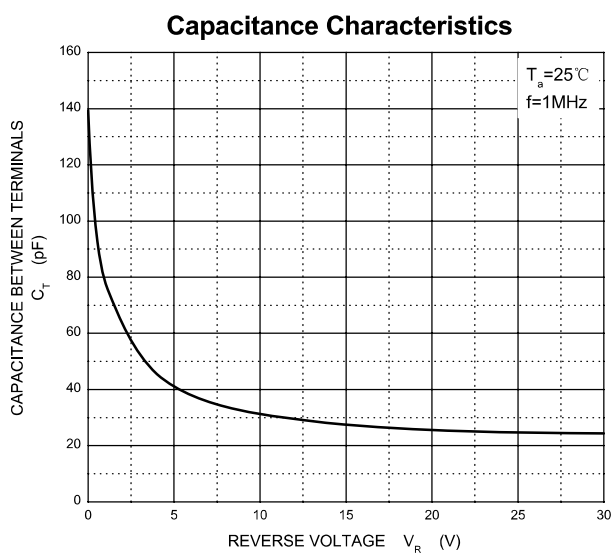
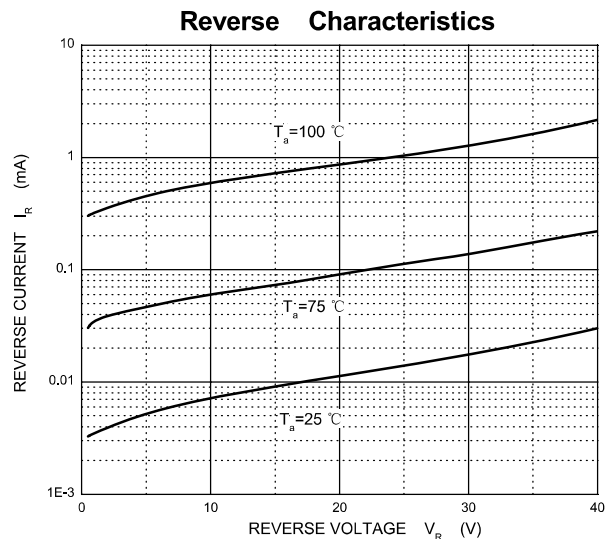
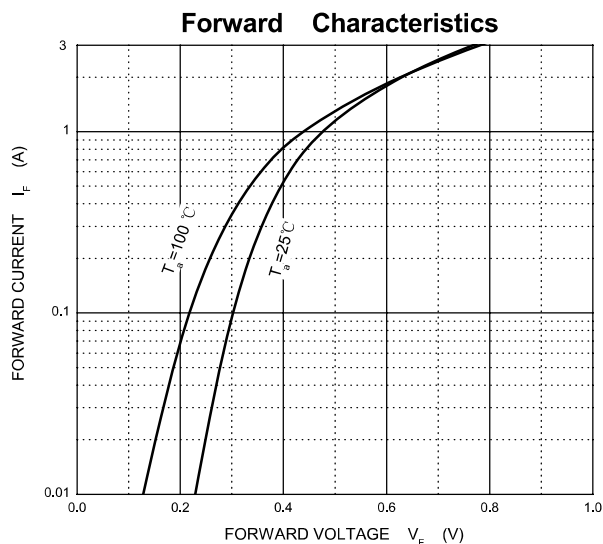
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	B140WS-7-FS	Unit
Non-repetitive peak reverse voltage	V_{RM}	40	V
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R	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
Repetitive peak forward current	I_{FRM}	1.5	A
Power dissipation	P_d	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400	°C/W
Operation Junction temperature Range	T_J	-40~+125	°C
Storage temperature Range	T_{STG}	-55~+150	°C

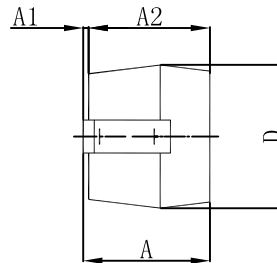
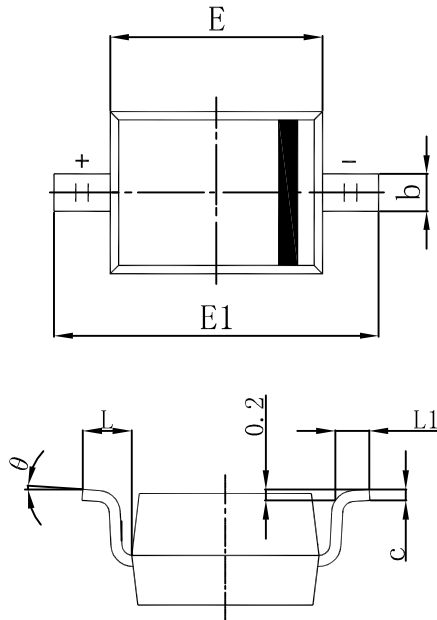
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

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	$I_F = 1A$		0.6	V
Diode capacitance	C_D	$V_R = 4V, f = 1MHz$		120	pF

Typical Characteristics

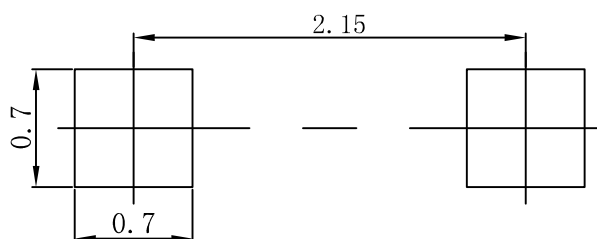


SOD-323 Package Outline Dimensions



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°

SOD-323 Suggested Pad Layout



Note:

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