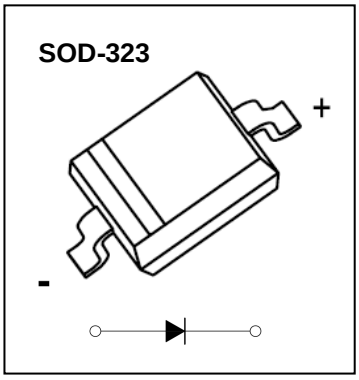
SOD-323 Plastic-Encapsulate Diodes



FEATURES

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

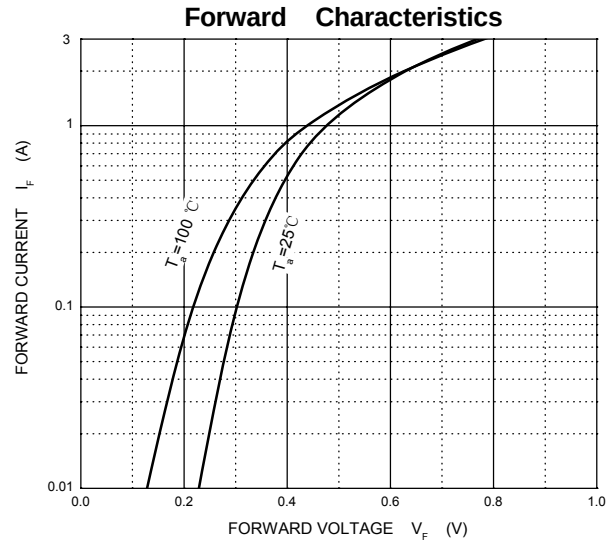
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

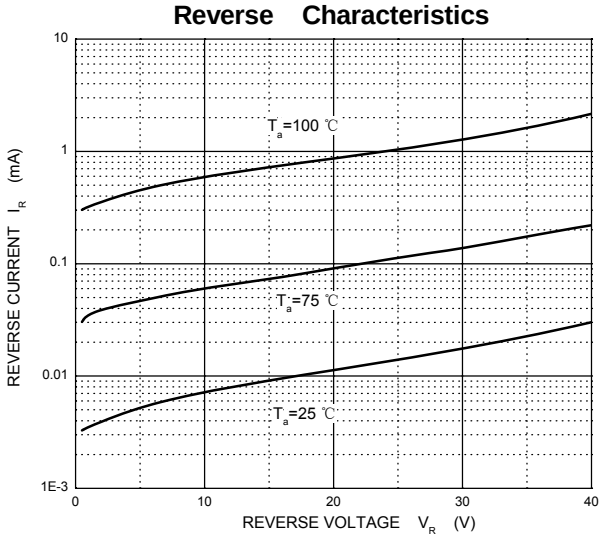
Parameter	Symbol	SBD40V1D3	Unit
Non-repetitive peak reverse voltage	V_{RM}	40	V
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R	40	V
RMS reverse voltage	$V_{R(RMS)}$	28	V
Average rectified output current	I_O	1	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9	A
Repetitive peak forward current	I_{FRM}	1.5	A
Power dissipation	Pd	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400	℃/W
Junction temperature	T_J	125	℃
Storage temperature	T_{STG}	-55~+150	℃

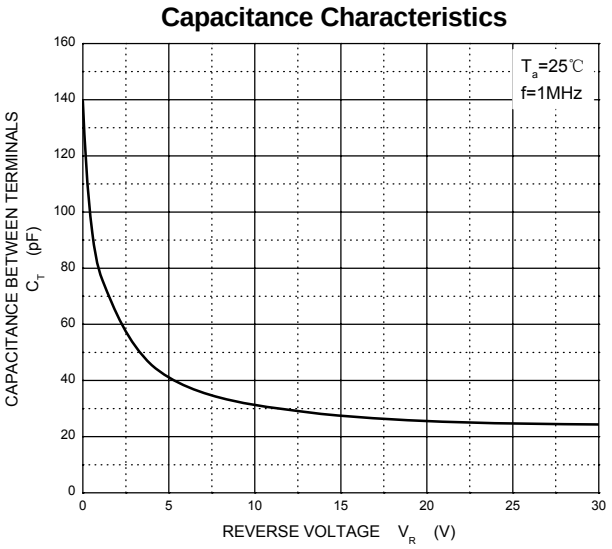
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

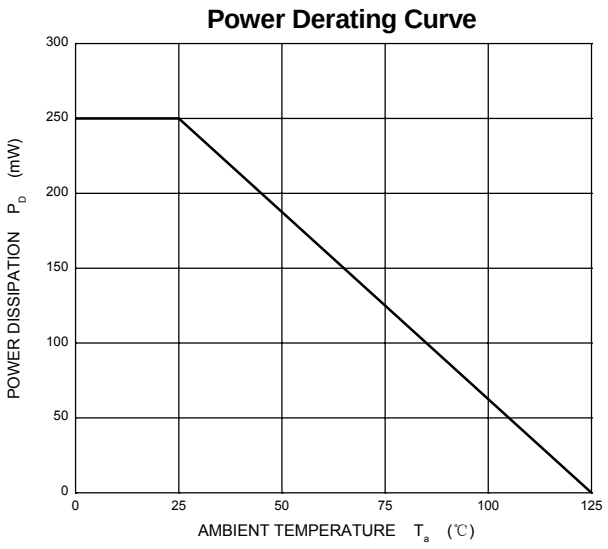
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 1mA	40		V
Reverse voltage leakage current	I_R	V_R=40V		1	mA
Forward voltage	V	I_F=1A		0.6	V
		I_F=3A		0.9	V
Diode capacitance	C_D	V_R=4V, f=1MHz		120	pF

Typical Characteristics

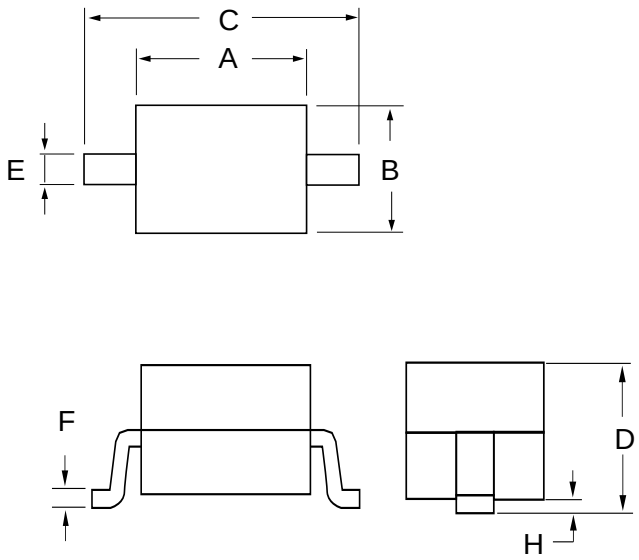






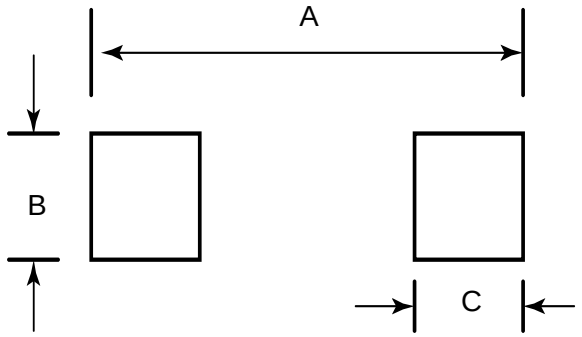


SOD-323 Package Outline Drawing



SYM	DIMENSIONS			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.95	0.063	0.077
B	1.10	1.50	0.043	0.059
C	2.30	3.10	0.104	
D	0.80	1.15	0.031	0.045
E	0.20	0.45	0.008	
F	0.10	0.15	0.004	0.006
H	-	0.10	-	0.004

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.20	0.126
B	0.60	0.024
C	0.80	0.031