

Features

- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability



SOD-323 top view



Schematic diagram



Marking and pin assignment



Pb-Free



Halogen-Free

Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum recurrent peak reverse voltage	60	V
$V_{R(RMS)}$	RMS Reverse Voltage	42	
V_{DC}	Maximum DC blocking voltage	60	
I_F	Forward Continuous Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	10	A
P_{tot}	Total power dissipation	250	mW
$R_{\theta JA}$	Thermal resistance junction to ambient air	400	$^{\circ}\text{C/W}$
T_J	Operating Junction Temperature Range	$-40\sim+125$	$^{\circ}\text{C}$
T_{stg}	Operation Junction and Storage Temperature Range	$-55\sim+150$	$^{\circ}\text{C}$

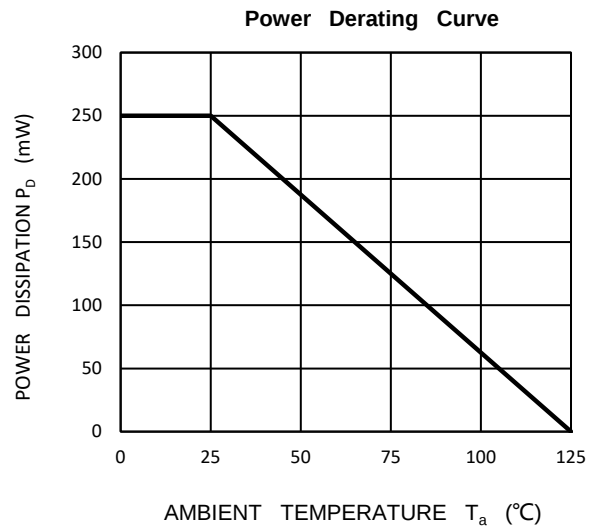
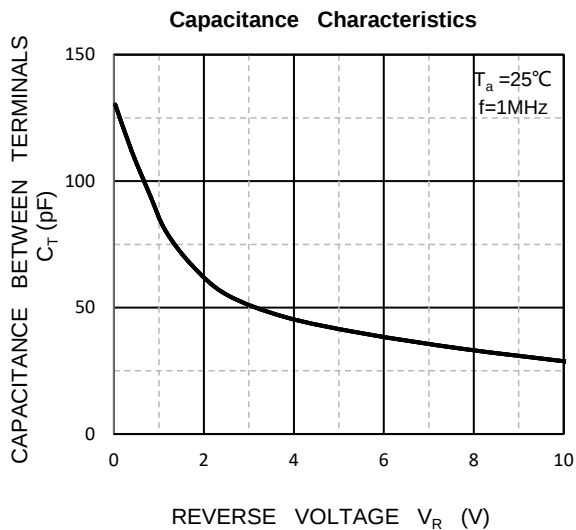
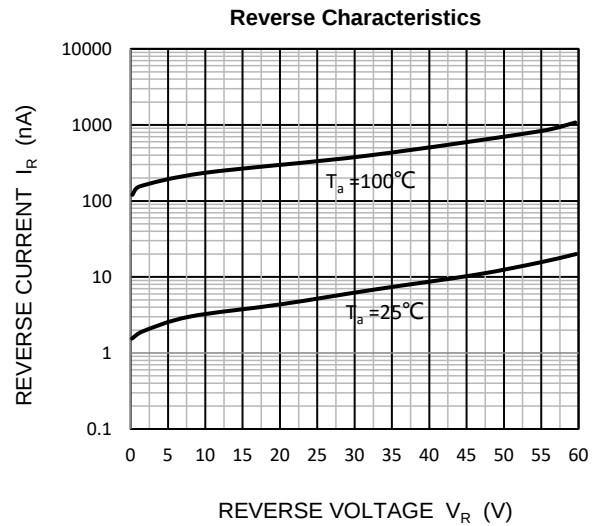
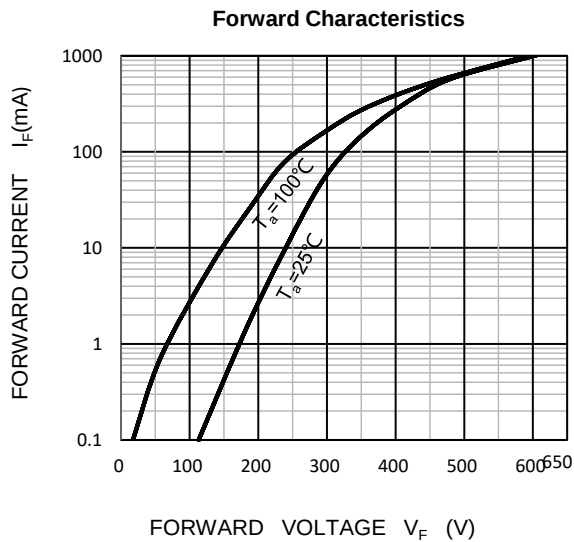
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
I_R	Reverse voltage leakage current	$V_R=60\text{V}$	--	--	0.1	mA
V_F	Forward voltage	$I_{F1}=1\text{A}$	--	--	0.7	V
C_{tot}	Total capacitance	$V_R=4\text{V}, f=1\text{MHz}$	--	--	120	pF

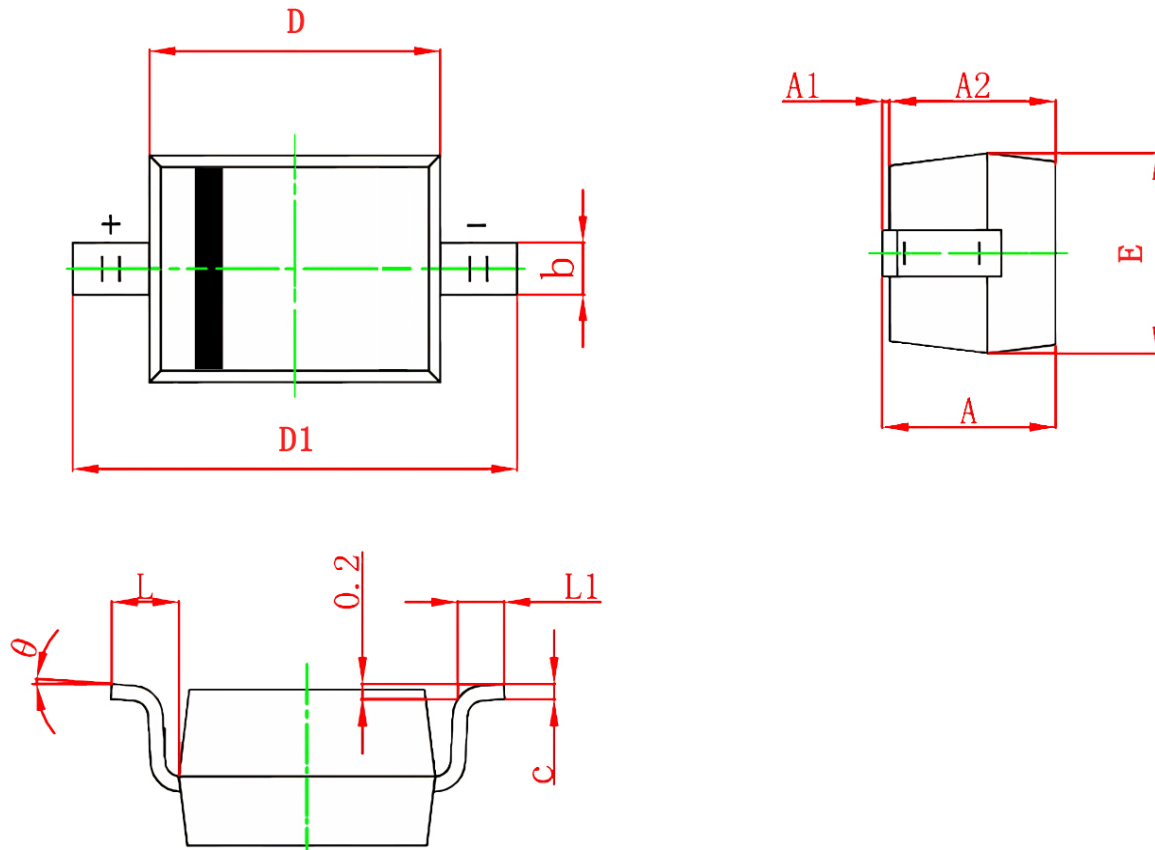
Ordering Information (Example)

Type	Package	Marking	Minimum	Inner Box	Outer	Delivery
B16WS	SOD-323	SM	3,000	45,000	180,000	7"reel

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	1.600	1.800	0.063	0.071
D1	2.500	2.750	0.098	0.108
E	1.200	1.400	0.047	0.055
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°