



## Features

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



SOD-323

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
B16WS	SOD-323	SM	3000



## Maxmim Ratings (Ta=25 unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{RRM}$	Maximum recurrent peak reverse voltage	60	V
$V_{RMS}$	Maximum RMS voltage	42	
$V_{DC}$	Maximum DC blocking voltage	60	
$I_F$	Continuous forward current	1	A
$I_{FSM}$	Non-repetitive Peak forward surge current@t=8.3ms	10	
$P_{tot}$	Total power dissipation	250	mW
$R_{\theta JA}$	Thermal resistance junction to ambient air	400	°C/W
$T_J$	Operating Junction Temperature Range	-40 ~ +125	°C
$T_{stg}$	storage Temperature Range	-55 ~ +150	°C

## Electrcal Charcteristics (Ta=25 unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum instantaneous forward voltage	$V_F$	$I_F=1A$			0.7	V
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$V_R=60V$			0.1	mA
Total capacitance	$C_{tot}$	$V_R=4V, f=1MHz$			120	pF

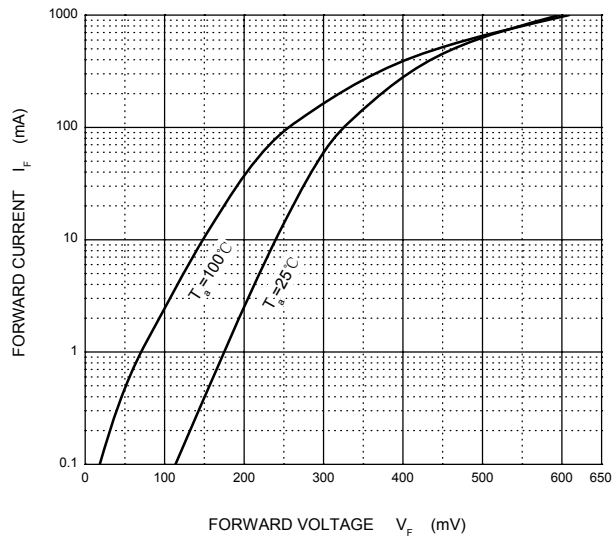
## Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

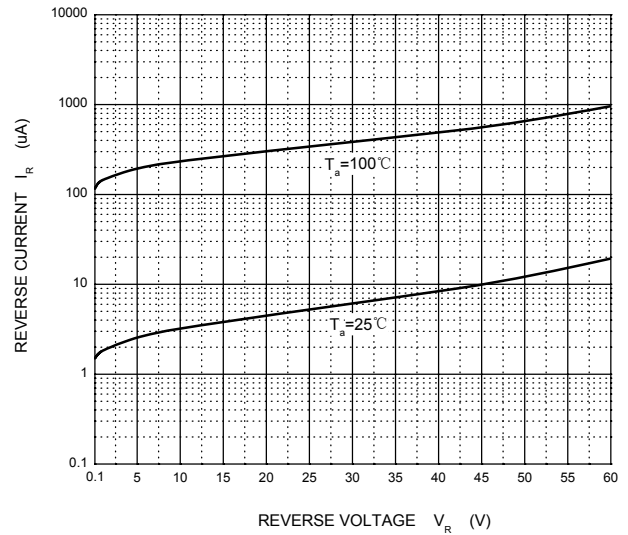


## Typical Characteristics

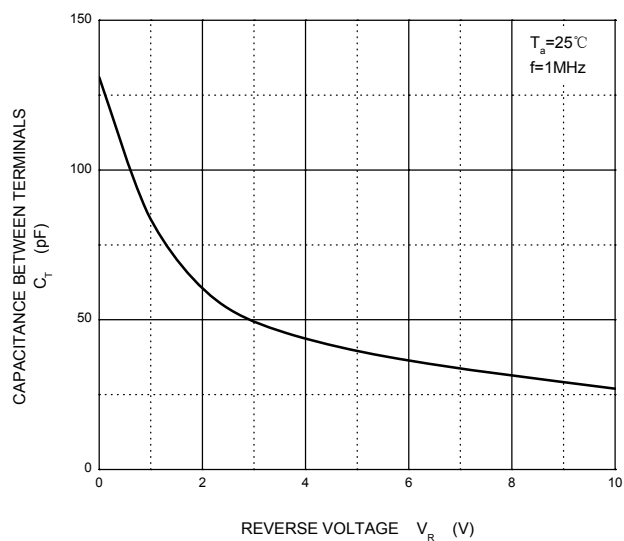
Forward Characteristics



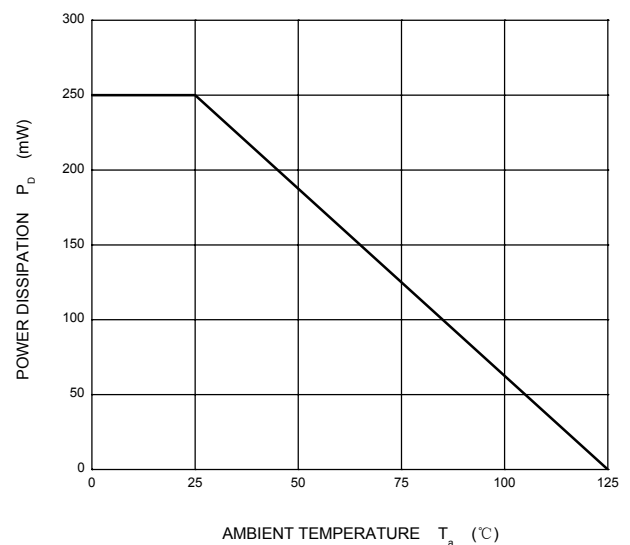
Reverse Characteristics



Capacitance Characteristics

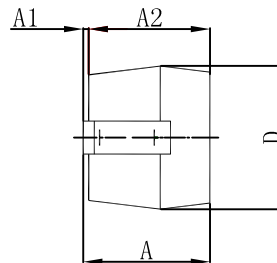
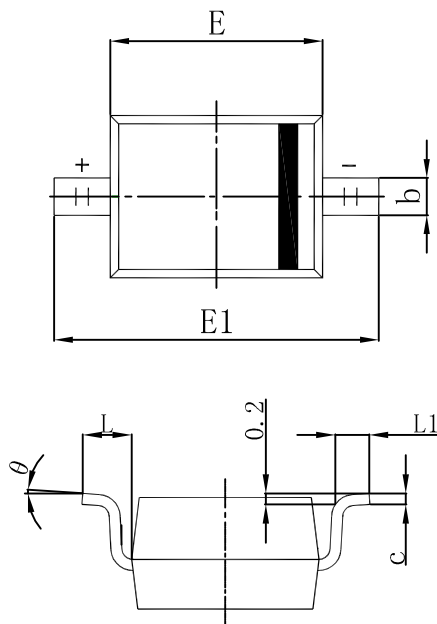


Power Derating Curve



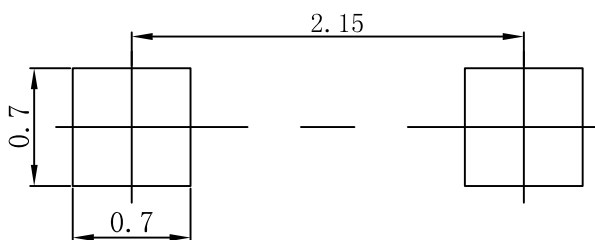


### SOD-323 Package Outline Dimensions



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.



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