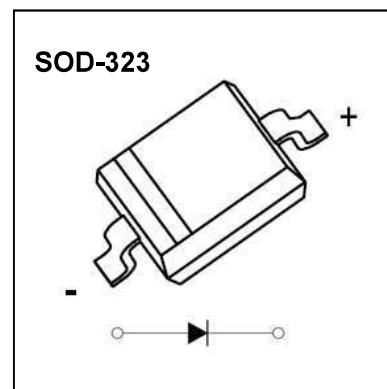


SOD-323 Plastic-Encapsulate Diodes

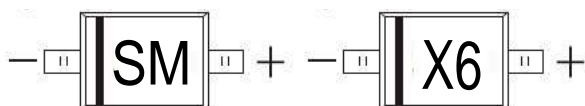
Schottky Barrier Diode

Features:

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



Marking: SM,X6



MAXIMUM RATINGS(Ta=25°C unless otherwise noted)

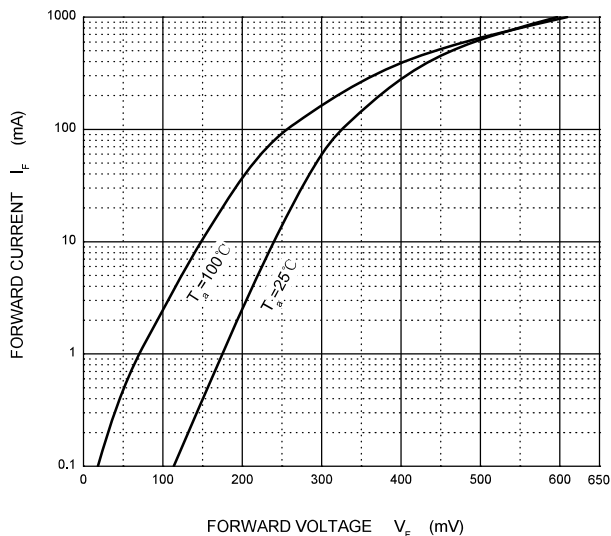
Symbol	Parameter	Value	Unit
V _{RRM}	Maximum recurrent peak reverse voltage	60	V
V _{RMS}	Maximum RMS voltage	42	
V _{DC}	Maximum DC blocking voltage	60	
I _F	Continuous forward current	1	A
I _{FSM}	Non-repetitive Peak forward surge current@t=8.3ms	10	
P _{tot}	Total power dissipation	250	mW
R _{θJA}	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

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

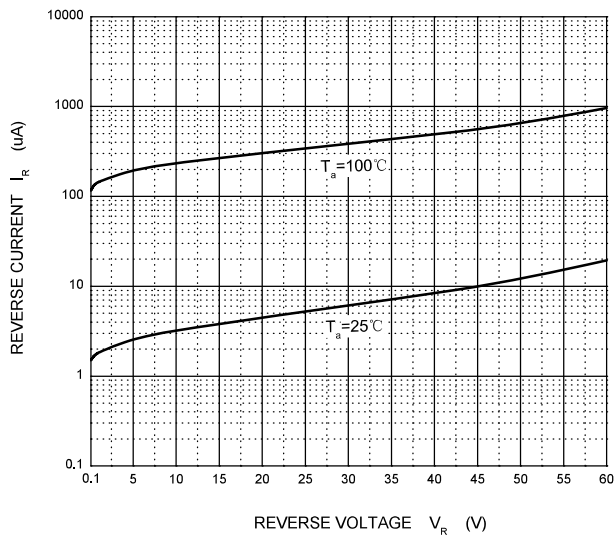
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum instantaneous forward voltage	V _F	I _F =1A			0.7	V
Maximum DC reverse current at rated DC blocking voltage	I _R	V _R =60V			0.1	mA
Total capacitance	C _{tot}	V _R =4V,f=1MHz			120	pF

Typical Characteristics

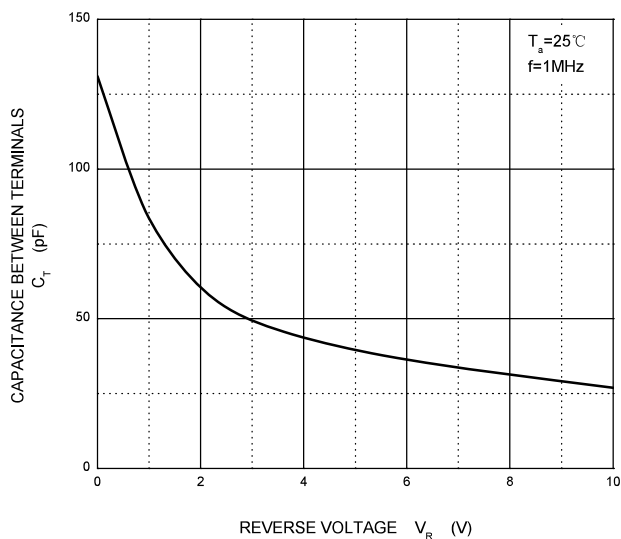
Forward Characteristics



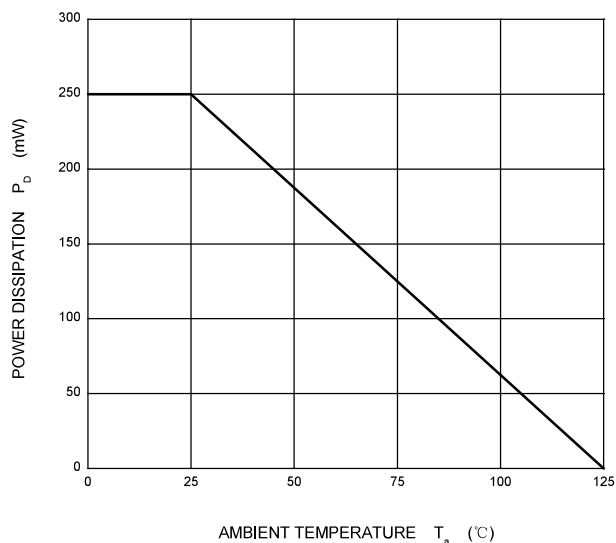
Reverse Characteristics



Capacitance Characteristics

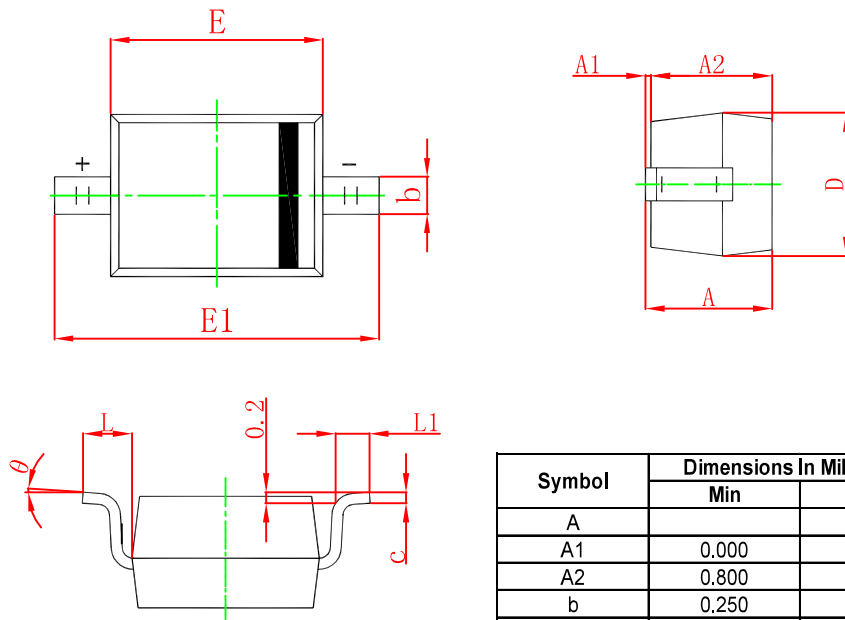


Power Derating Curve



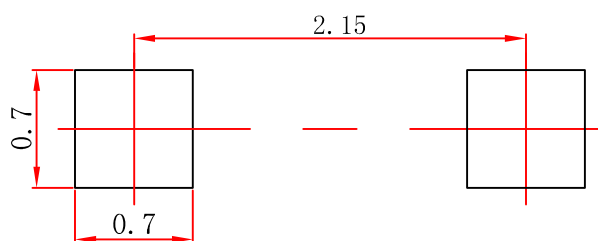
PACKAGE OUTLINE AND PAD LAYOUT INFORMATION

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°

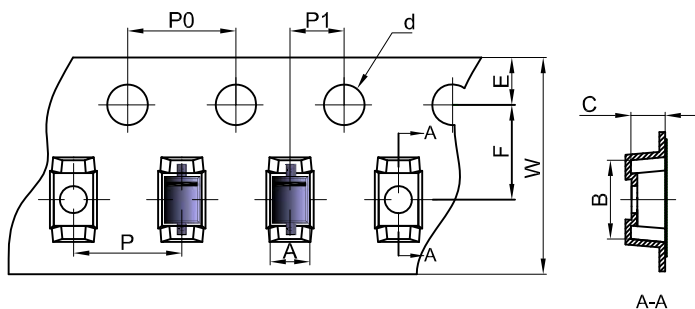
SOD-323 Suggested Pad Layout



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

SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

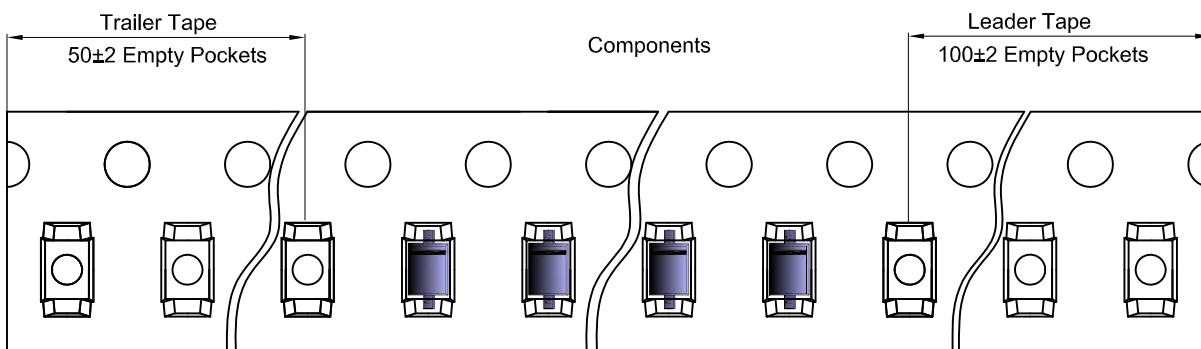


Packaging Description:
 SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

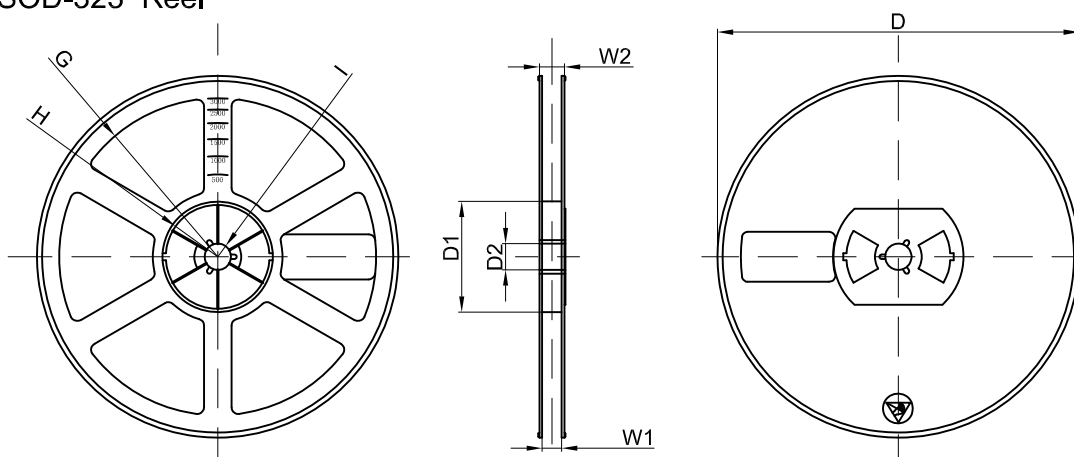
Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



SOD-323 Reel



Dimensions are in millimeter

Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	