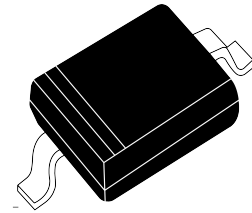


Silicon Epitaxial Planar Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

SOD-323



RoHS
COMPLIANT



Marking Code: "W2"

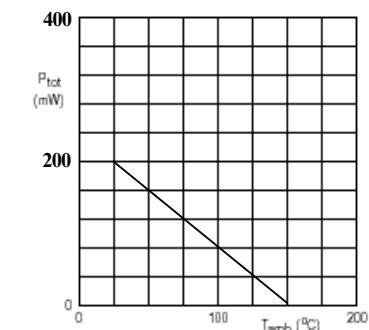
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	85	V
Reverse Voltage	V_R	75	V
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5	A
at $t = 1\text{ s}$		1	
at $t = 1\text{ ms}$		4	
at $t = 1\text{ }\mu\text{s}$			
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

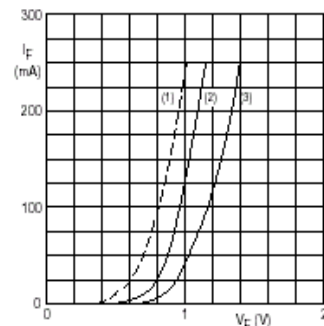
Parameter	Symbol	Max.	Unit
Forward Voltage	V_F	0.715	V
at $I_F = 1\text{ mA}$		0.855	
at $I_F = 10\text{ mA}$		1	
at $I_F = 50\text{ mA}$		1.25	
Reverse Current	I_R	30	nA
at $V_R = 25\text{ V}$		1	μA
at $V_R = 75\text{ V}$		30	μA
at $V_R = 25\text{ V}, T_J = 150^\circ\text{C}$		50	μA
at $V_R = 75\text{ V}, T_J = 150^\circ\text{C}$			
Diode Capacitance	C_{tot}	1.5	pF
at $V_R = 0\text{ V}, f = 1\text{ MHz}$			
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}, I_R = 1\text{ mA}, R_L = 100\text{ }\Omega$			

Typical Characteristics



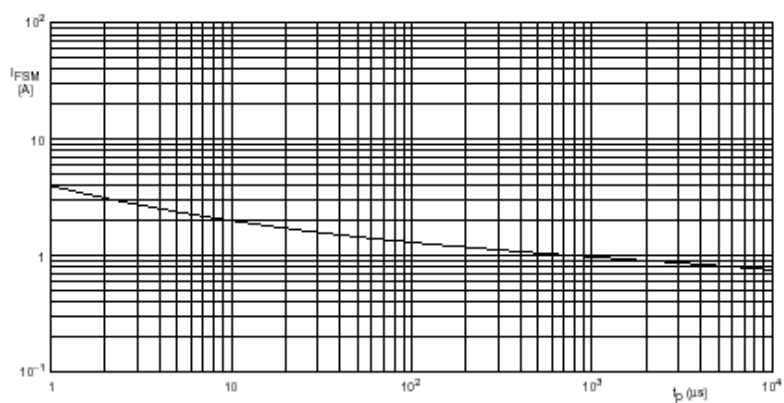
Devices mounted on an FR4 printed-circuit board.

fig.4 Maximum permissible total power dissipation as a function of ambient



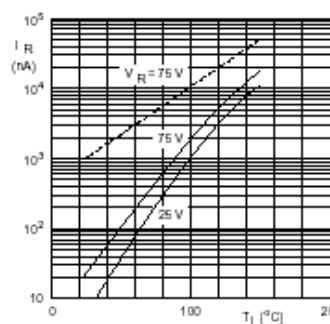
(1) $T_J = 150\text{ }^{\circ}\text{C}$; typical values.
(2) $T_J = 25\text{ }^{\circ}\text{C}$; typical values.
25 $^{\circ}\text{C}$; maximum values.

fig.3 Forward current as a function of forward



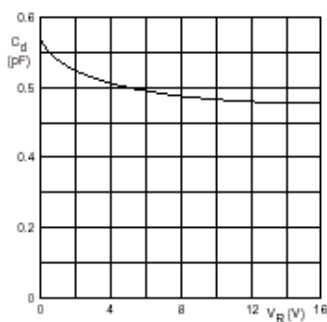
Based on square wave currents.
 $T_J = 25\text{ }^{\circ}\text{C}$ prior to surge.

Maximum permissible non-repetitive peak forward current as a function of pulse duration.



Dotted line: maximum values.
Solid line: typical values.

Reverse current as a function of junction temperature.

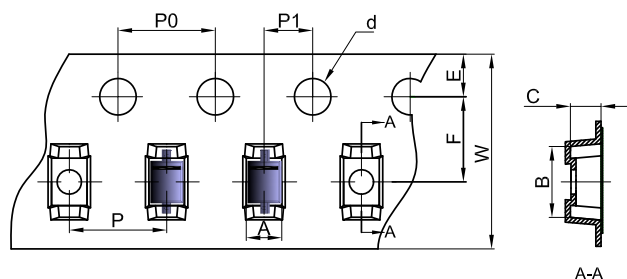


$f = 1\text{ MHz}$; $T_J = 25\text{ }^{\circ}\text{C}$.

6 Diode capacitance as a function of reverse voltage; typical values.

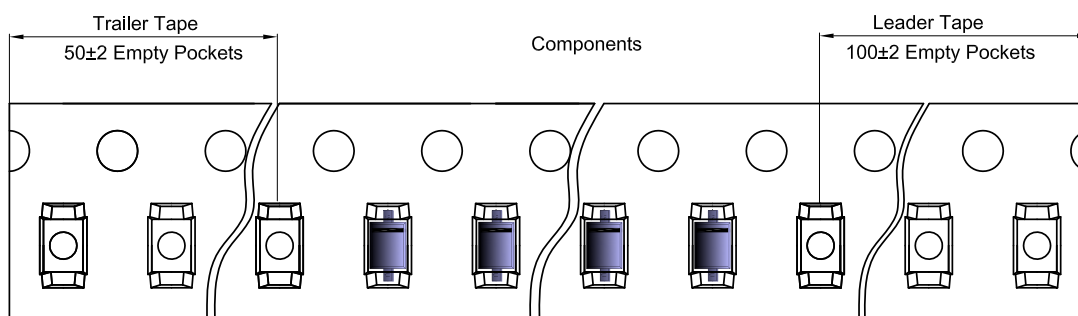
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

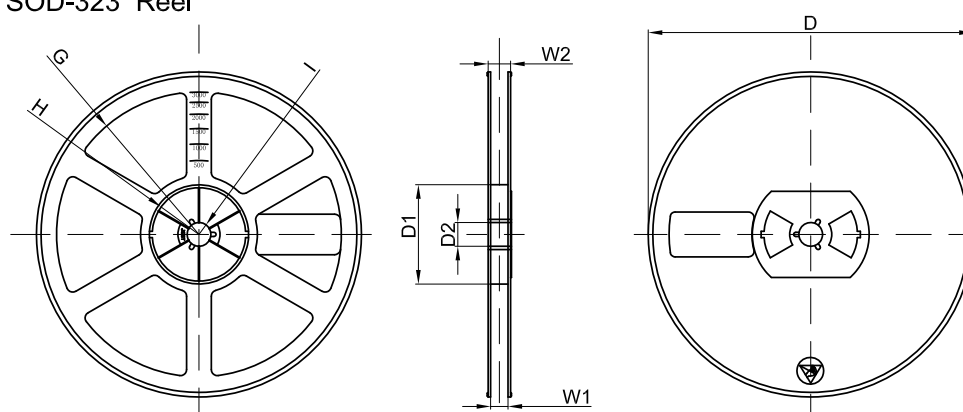


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



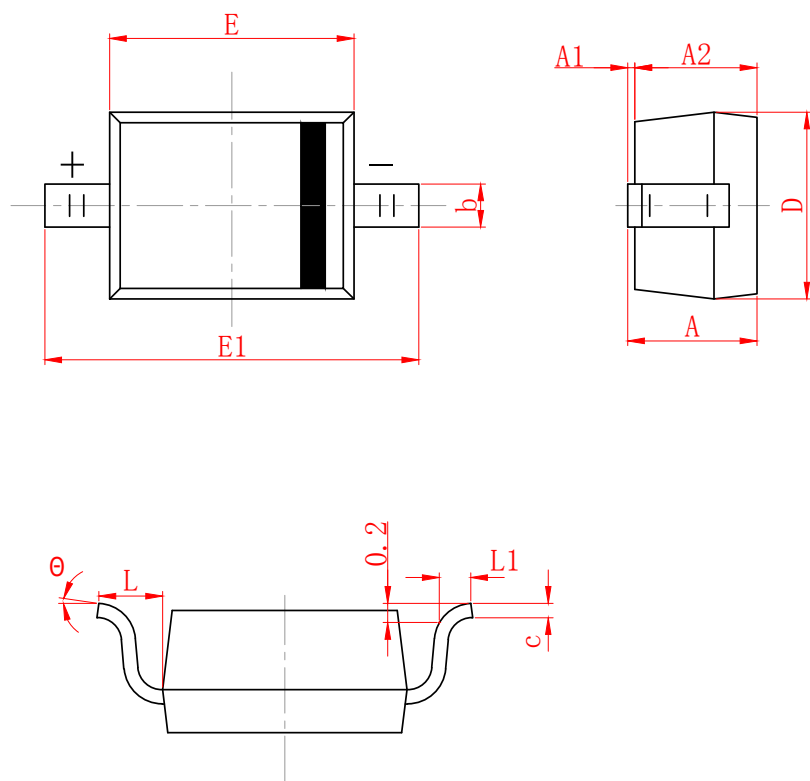
SOD-323 Reel



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	

SOD-323 Package Outline Dimensions



SYMBOL	MILLIMETER	
	MIN	MAX
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.008	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475 (REF)	
L1	0.250	0.400
θ	0°	8°

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