

Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

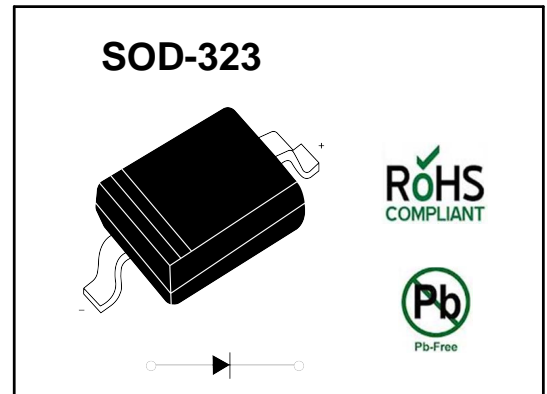
Applications

- Ultra high speed switching application

MARKING: A6

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Reverse Voltage	V_R	75	V
Forward Current (DC)	I_F	215 125	mA
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5 1 4	A
Power Dissipation	P_{tot}	350	mW
Operating Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage	V_F	715	mV
at $I_F = 1\text{ mA}$	V_F	855	mV
at $I_F = 10\text{ mA}$	V_F	1	V
at $I_F = 50\text{ mA}$	V_F	1.25	V
Reverse Current	I_R	30	nA
at $V_R = 25\text{ V}$	I_R	1	μA
at $V_R = 75\text{ V}$	I_R	30	μA
at $V_R = 25\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$	I_R	50	μA
at $V_R = 75\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$	I_R		
Diode Capacitance	C_d	2	pF
at $V_R = 0$, $f = 1\text{ MHz}$			
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$			

Typical Characteristics

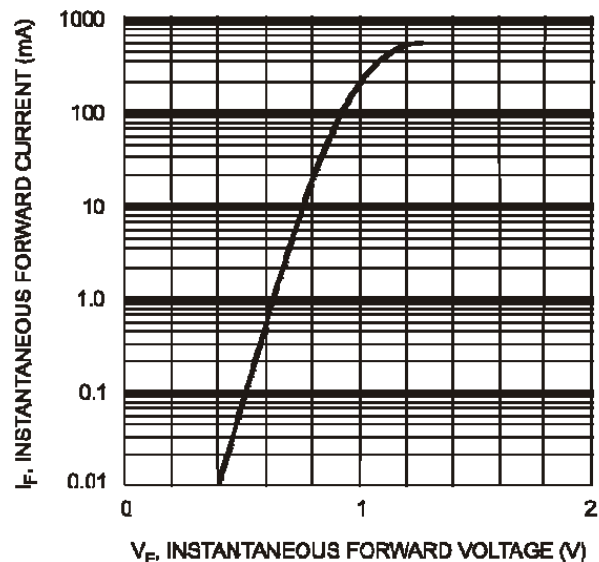


Fig. 1 Forward Characteristics

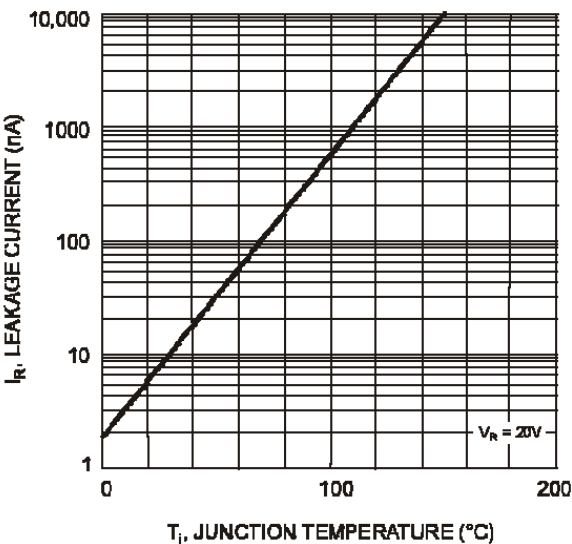


Fig. 2 Leakage Current vs Junction Temperature

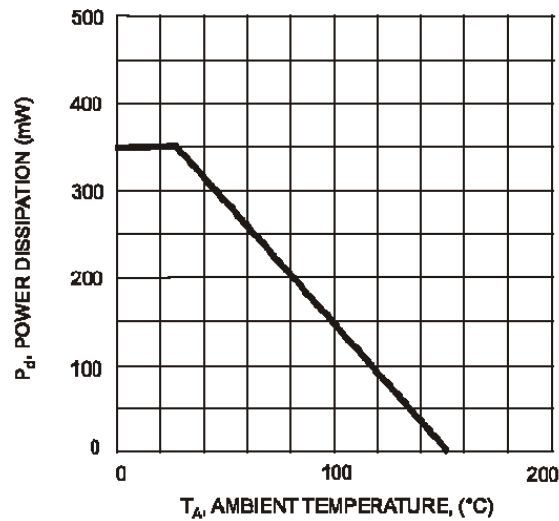
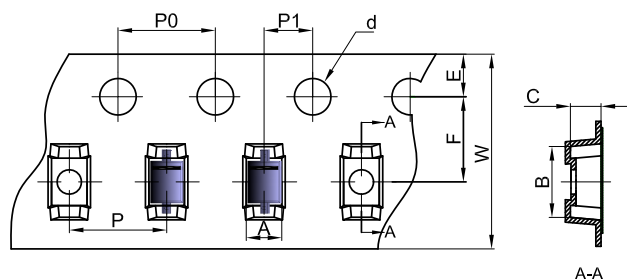


Fig. 3 Power Derating Curve, total package

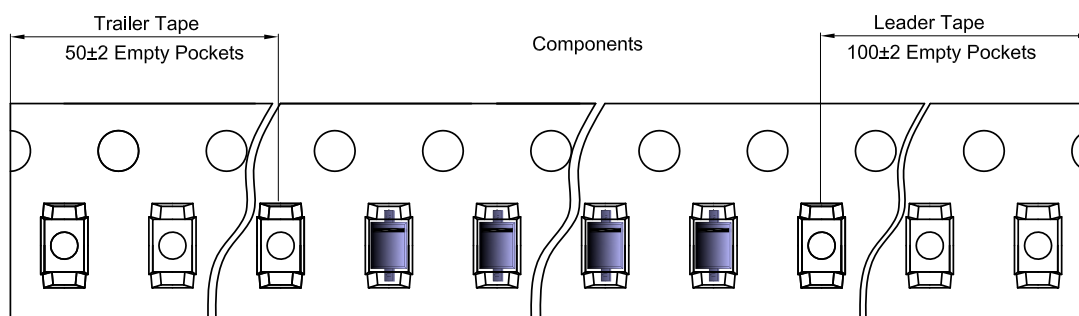
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

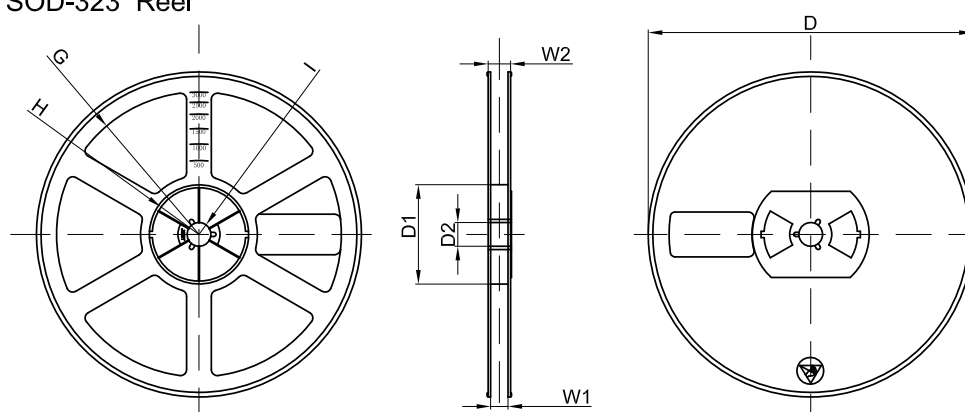


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



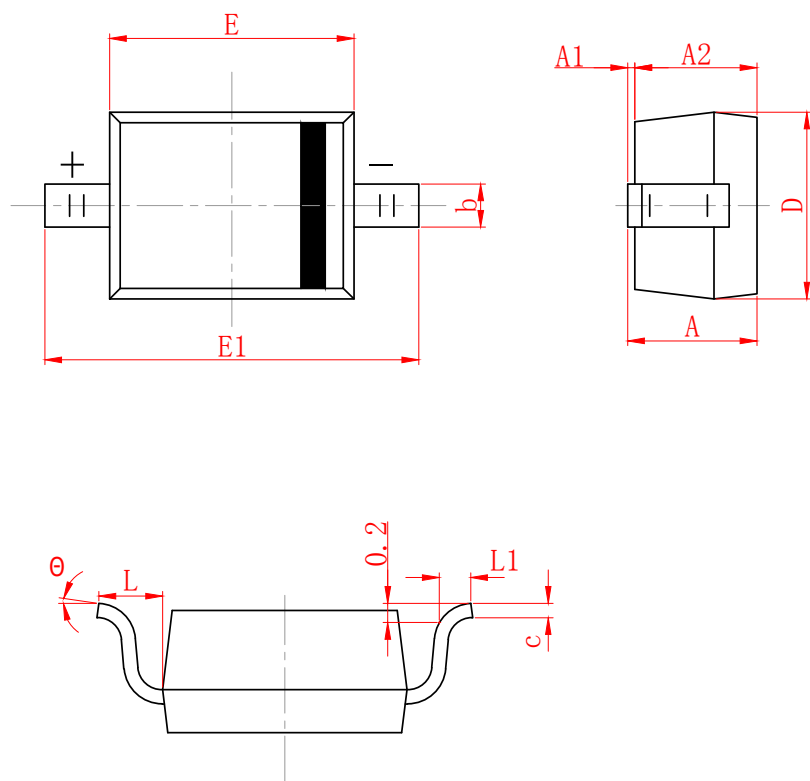
SOD-323 Reel



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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