

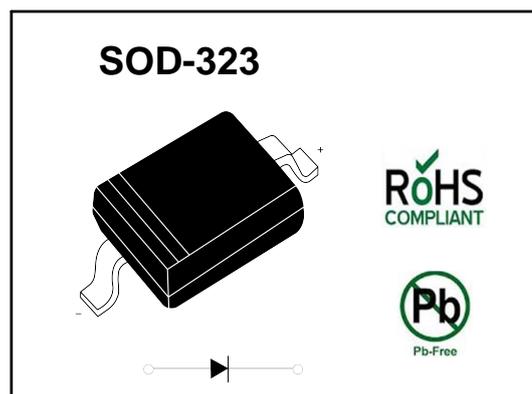
Surface Mount Schottky Barrier Diodes

Features

- Low forward voltage
- Low reverse capacitance

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}	60	V
SD101AWS		50	
SD101BWS		40	
Reverse Voltage	V_R	60	V
SD101AWS		50	
SD101BWS		40	
SD101CWS			
Forward Continuous Current	I_{FM}	15	mA
Power Dissipation	P_d	200	mW
Non-Repetitive Peak Forward Surge Current	I_{FSM}	50	mA
at $t = 10\text{ }\mu\text{s}$		2	A
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 125	$^\circ\text{C}$

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

Parameter		Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\ \mu\text{A}$	SD101AWS	$V_{(BR)R}$	60	-	V
	SD101BWS		50	-	
	SD101CWS		40	-	
Forward Voltage at $I_F = 1\ \text{mA}$	SD101AWS	V_F	-	0.41	V
	SD101BWS		-	0.4	
	SD101CWS		-	0.39	
at $I_F = 15\ \text{mA}$	SD101AWS	V_F	-	1	V
	SD101BWS		-	0.95	
	SD101CWS		-	0.9	
Reverse Current at $V_R = 50\ \text{V}$ at $V_R = 40\ \text{V}$ at $V_R = 30\ \text{V}$	SD101AWS	I_R	-	200	nA
	SD101BWS		-	200	
	SD101CWS		-	200	
Total Capacitance at $V_R = 0\ \text{V}$, $f = 1\ \text{MHz}$	SD101AWS	C_T	-	2	pF
	SD101BWS		-	2.1	
	SD101CWS		-	2.2	
Reverse Recovery Time at $I_F = I_R = 5\ \text{mA}$, $I_{rr} = 0.1X I_R$, $R_L = 100\ \Omega$		t_{rr}	-	1	ns

Typical Characteristics

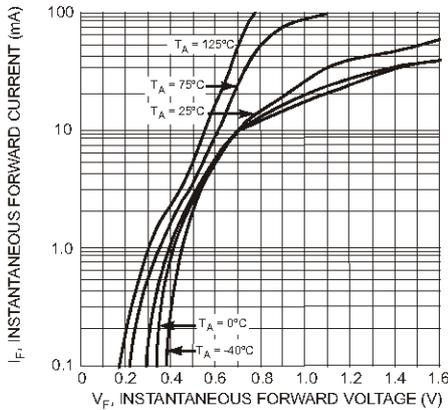


Fig. 1 Typical Forward Characteristics

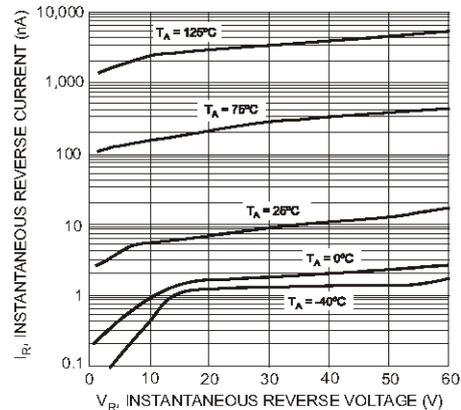


Fig. 2 Typical Reverse Characteristics

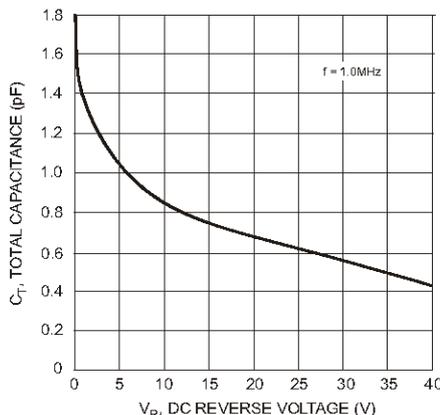


Fig. 3 Total Capacitance vs. Reverse Voltage

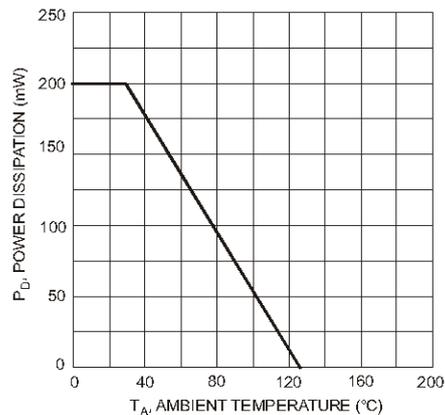
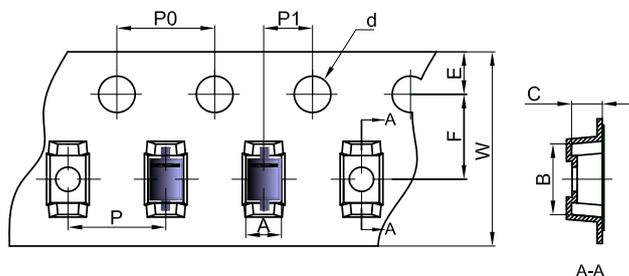


Fig. 4 Power Derating Curve

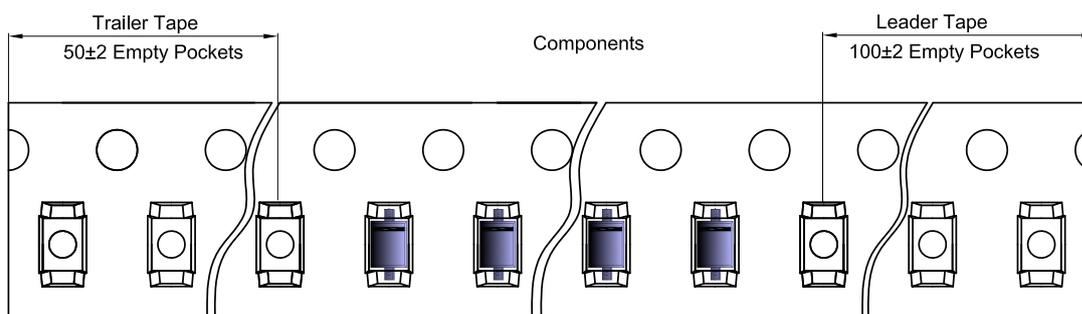
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

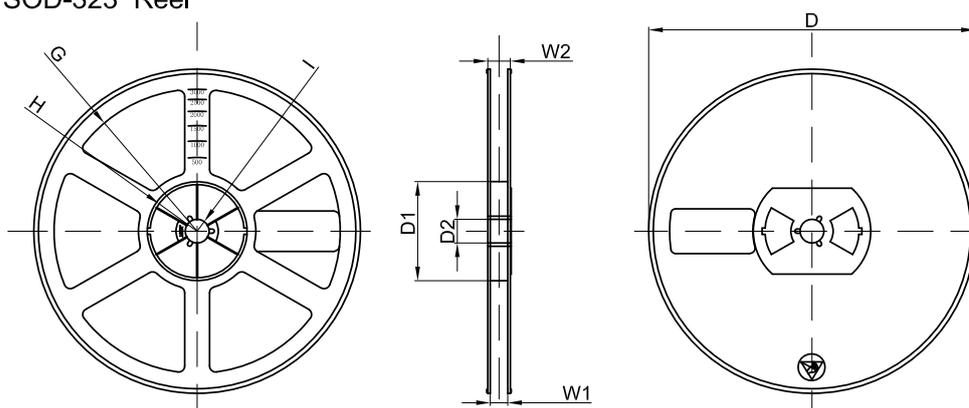


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



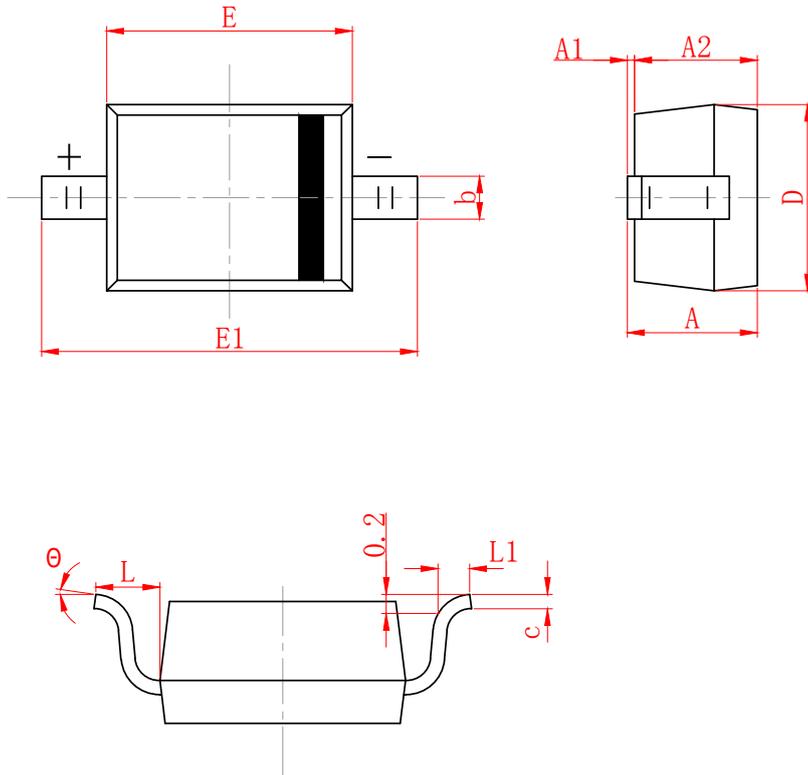
SOD-323 Reel



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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