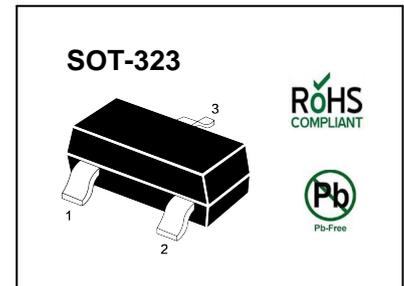


Silicon Epitaxial Planar Diode

Low leakage switching double diode
For low leakage current applications

Feature

- Very low leakage current
- Medium speed switching times
- Series pair configuration



MARKING; PX

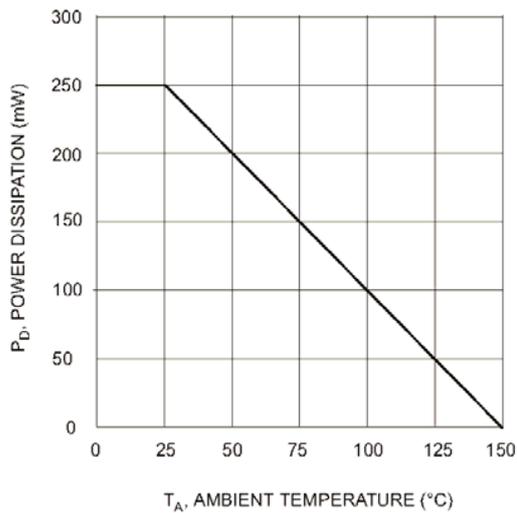
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Reverse Voltage	V_R	85	V
Continuous Forward Current	I_F	160 140	mA
	Single Diode Double Diode		
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4 1 0.5	A
	at $t = 1\text{ }\mu\text{s}$ at $t = 1\text{ ms}$ at $t = 1\text{ s}$		
Power Dissipation	P_D	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

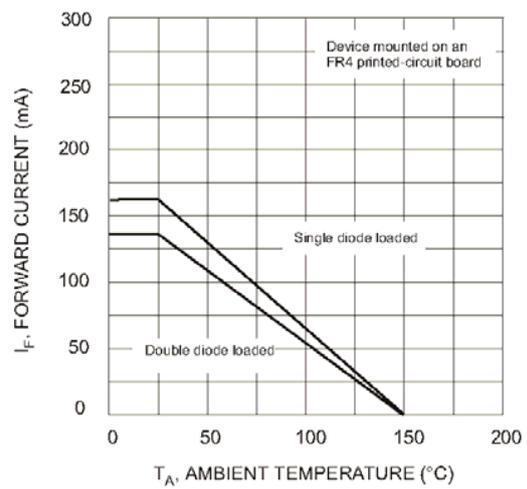
Electrical Characteristics ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	85	-	-	V
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	- - - -	- - - -	0.9 1 1.1 1.25	V
Reverse Current at $V_R = 75\text{ V}$ at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	I_R I_R	- -	- -	5 80	nA
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_T	-	2	-	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}, I_{tr} = 0.1 \times I_R, R_L = 100\text{ }\Omega$	t_{rr}	-	-	3	μs

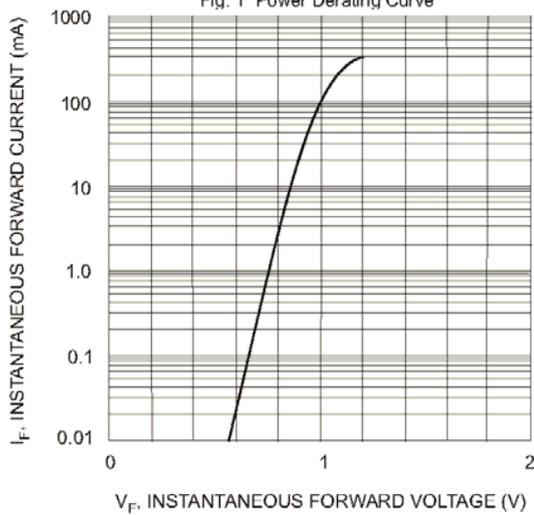
Typical Characteristics



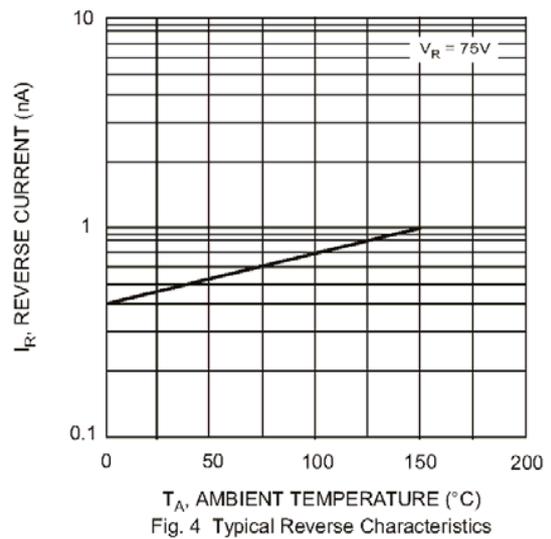
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



T_A , AMBIENT TEMPERATURE (°C)
Fig. 2 Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 3 Typical Forward Characteristics

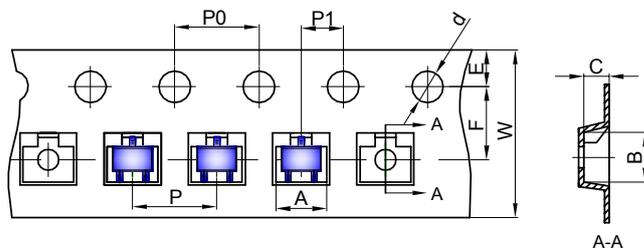


T_A , AMBIENT TEMPERATURE (°C)
Fig. 4 Typical Reverse Characteristics

SOT-323 Tape and Reel

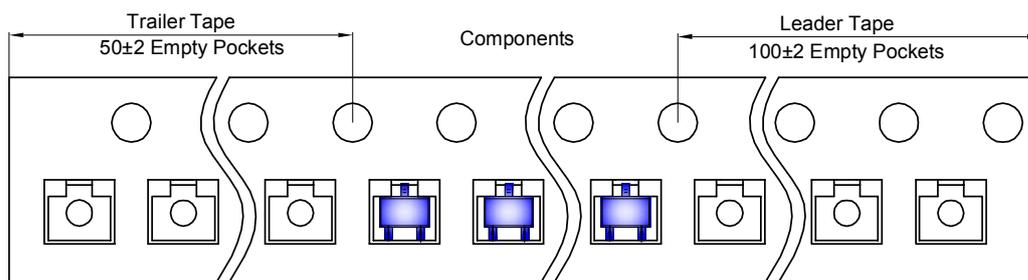
SOT-323 Tape and reel

SOT-323 Embossed Carrier Tape

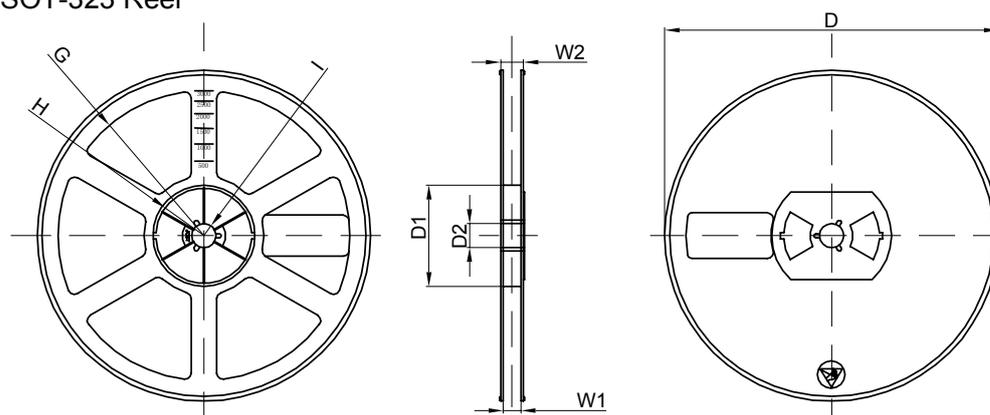


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-323	2.25	2.55	1.19	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOT-323 Tape Leader and Trailer

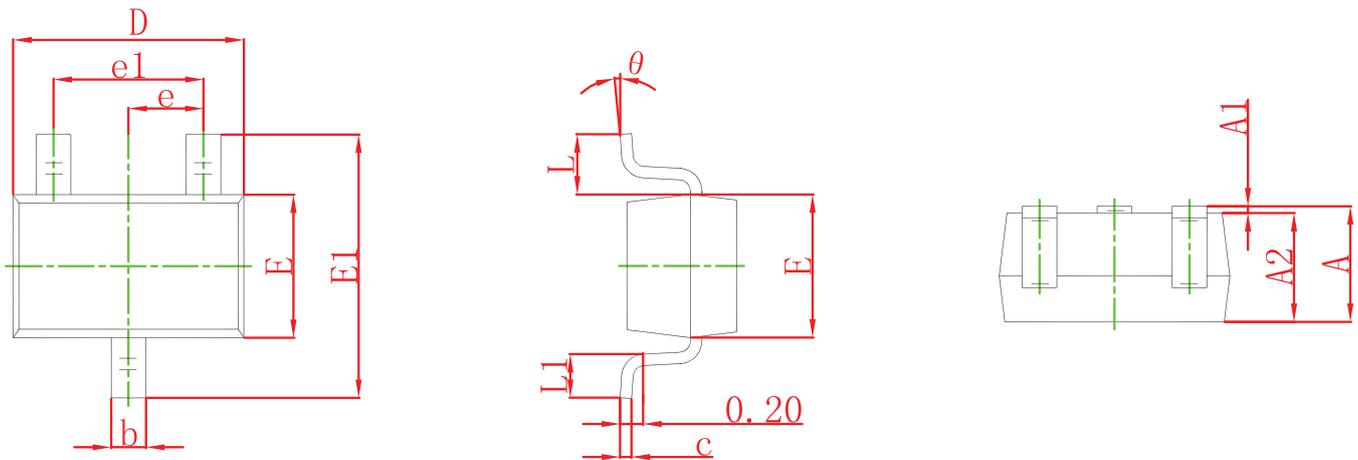


SOT-323 Reel



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	30,000 pcs	203×203×195	120,000 pcs	438×438×220	



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

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