

SOT-323 Plastic-Encapsulate Diode

1SS370

SWITCHING DIODE

FEATURES

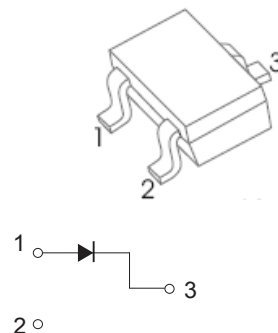
- High voltage, high speed switching applications
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

MAKING: F5



Solid dot = Green molding compound device,
if none, the normal device.

SOT-323



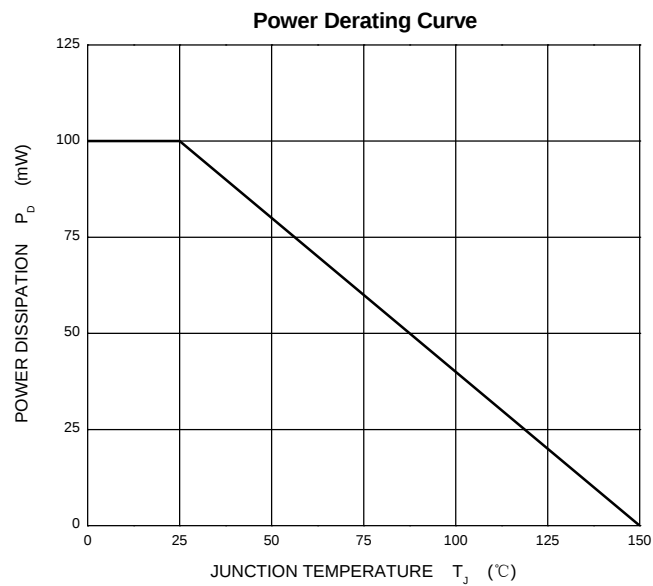
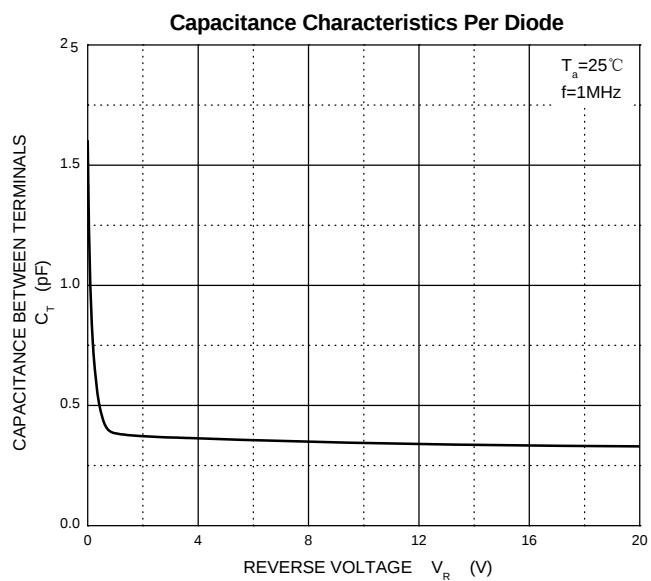
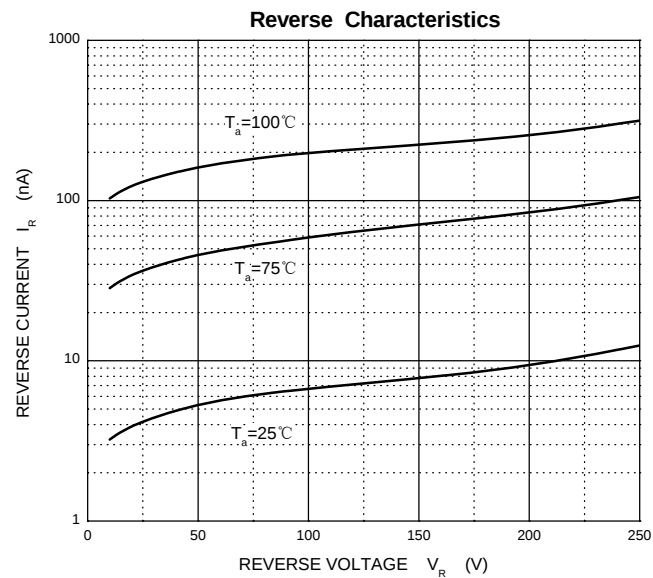
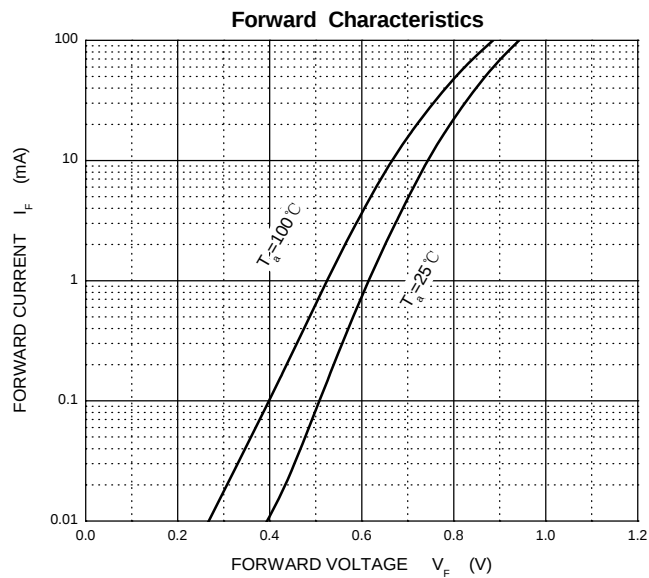
Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	250	V
DC reverse voltage	V_R	200	V
Peak forward current	I_{FM}	300	mA
Mean rectifying current	I_O	100	mA
Non-Repetitive Peak Forward Surge current@t=8.3ms	I_{FSM}	2.0	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~+150	°C

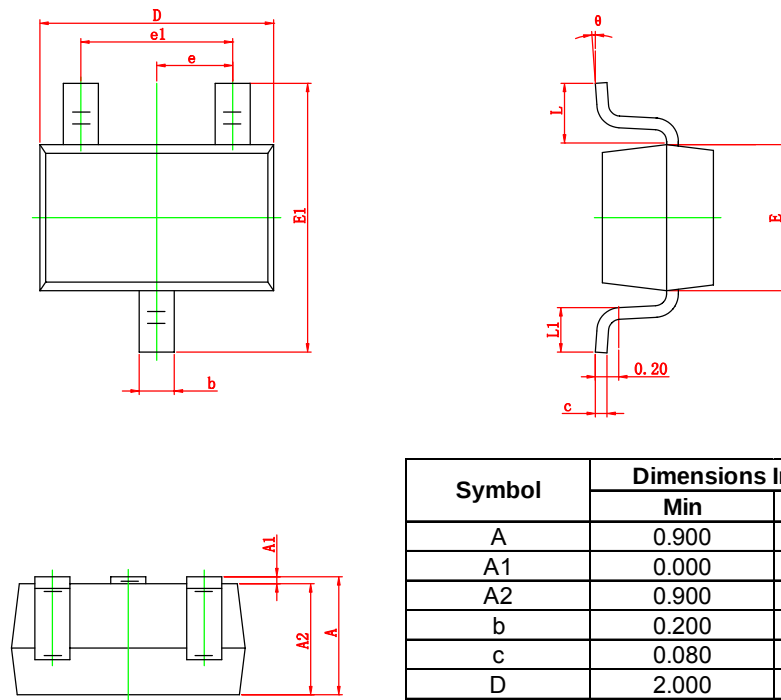
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			1	V	$I_F=10mA$
				1.2	V	$I_F=100mA$
Reverse current	I_R			0.1	μA	$V_R=50V$
				1	μA	$V_R=200V$
Capacitance between terminals	C_T			3.0	pF	$V_R=0, f=1MHz$
Reverse recovery time	t_{rr}		60		ns	$V_R=6V, I_F=10mA, I_{rr}=0.1 \cdot I_R$

Typical Characteristics

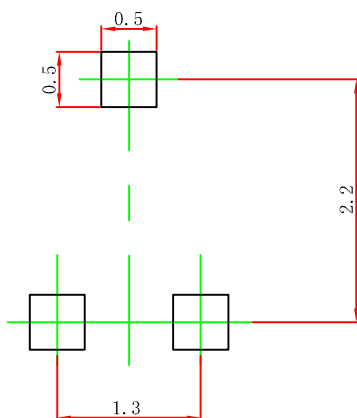


SOT-323 Package Outline Dimensions



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°

SOT-323 Suggested Pad Layout



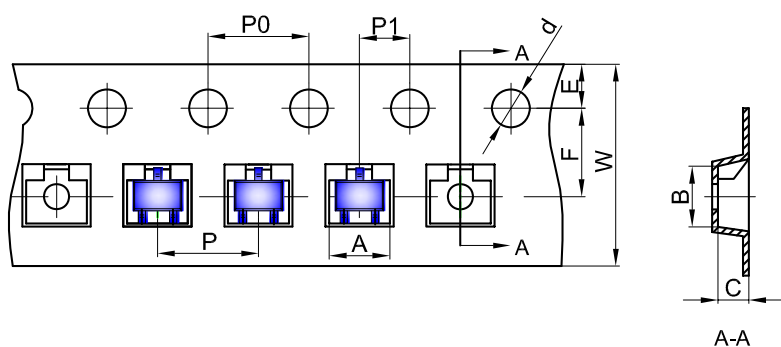
Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

SOT-323 Tape and Reel

SOT-323 Embossed Carrier Tape



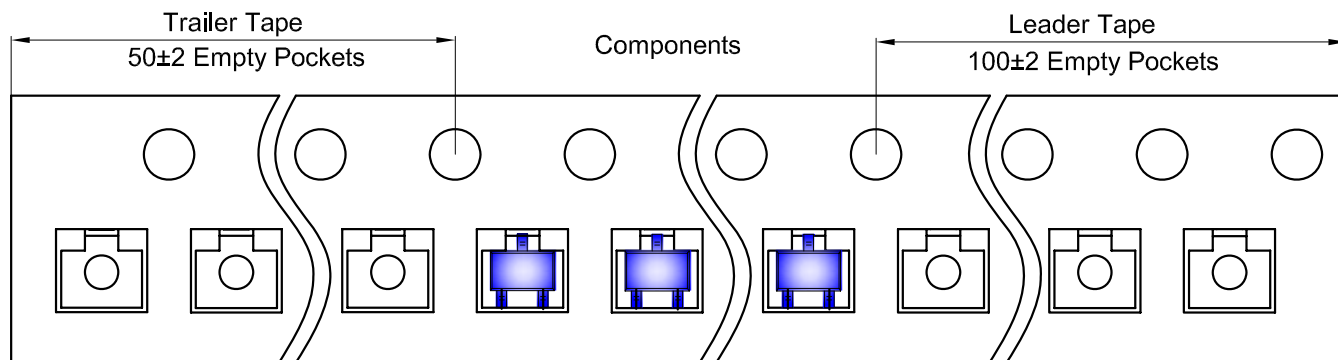
Packaging Description:

SOT-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).

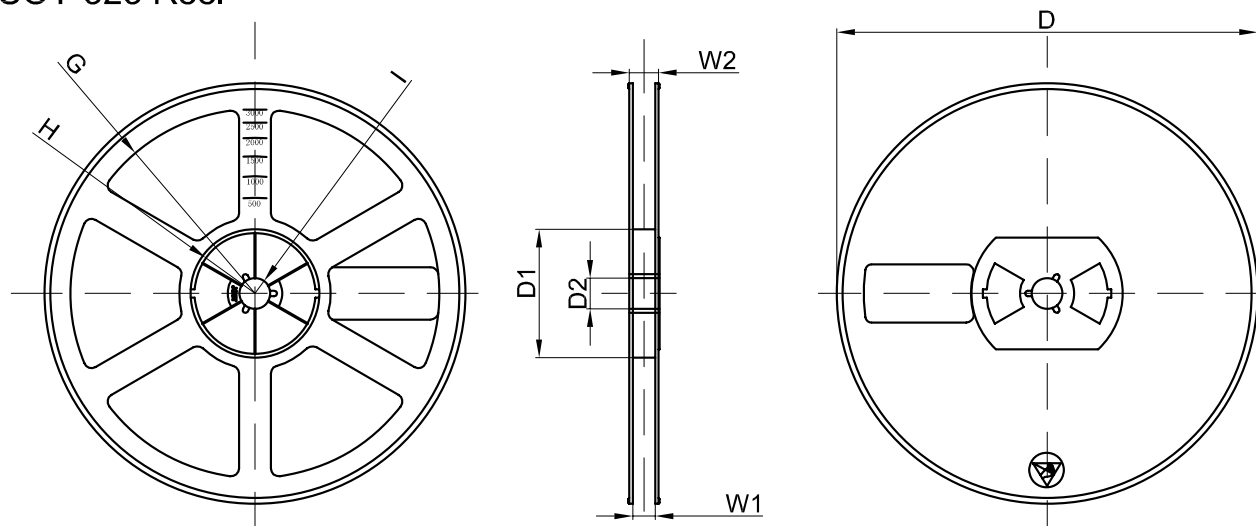
Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-323	2.25	2.55	1.19	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

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
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

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	