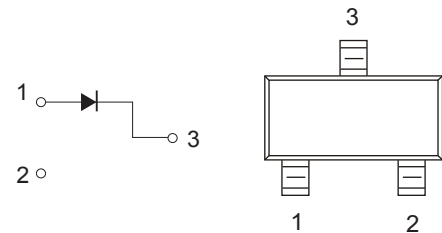


### FEATURES

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

### SOT-323



### Maximum Ratings @Ta=25°C

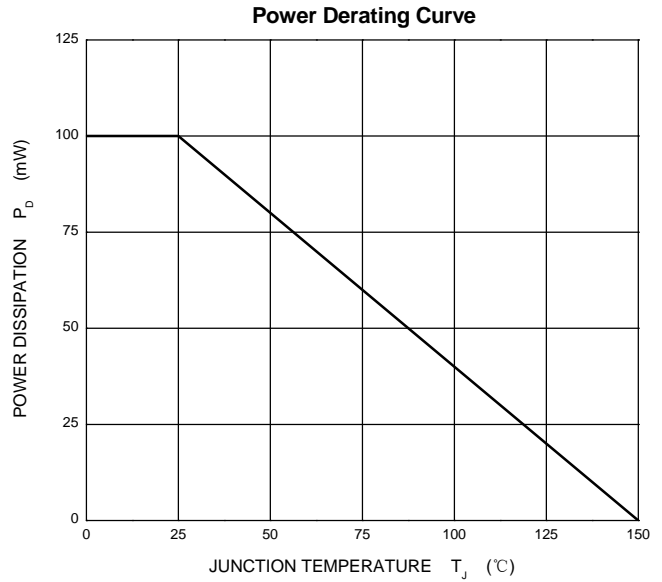
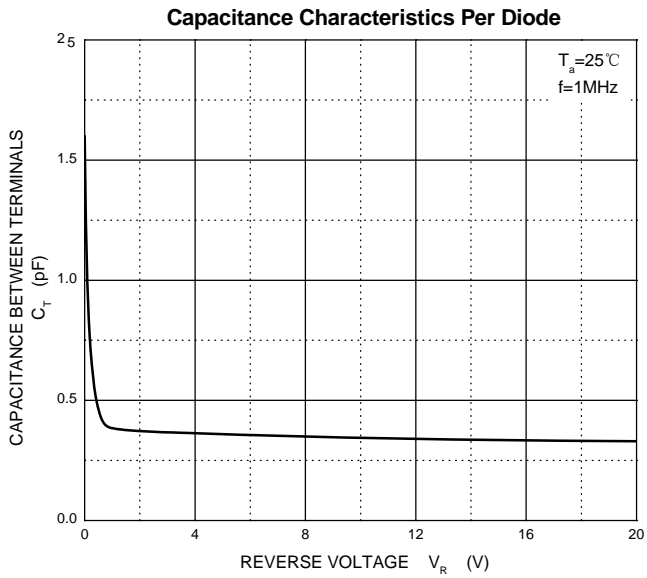
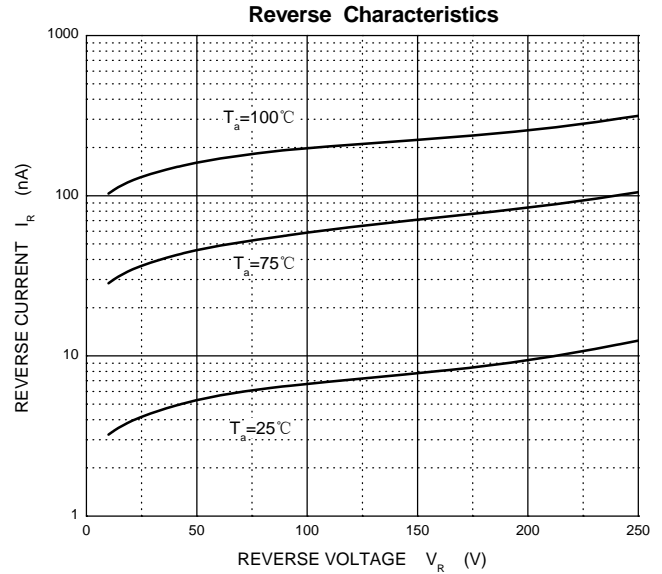
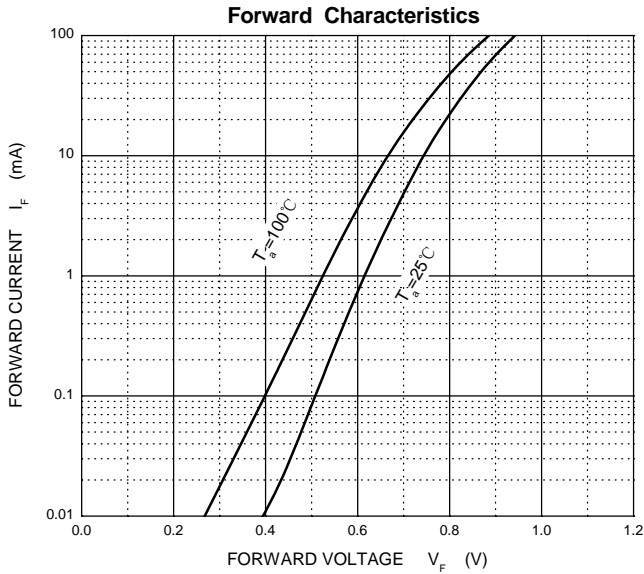
Parameter	Symbol	Limit	Unit
Peak reverse voltage	$V_{RM}$	250	V
DC reverse voltage	$V_R$	200	V
Peak forward current	$I_{FM}$	300	mA
Mean rectifying current	$I_o$	100	mA
Non-Repetitive Peak Forward Surge current @t=8.3ms	$I_{FSM}$	2.0	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55~+150	°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	$\mu A$	$V_R=50V$
				1	$\mu A$	$V_R=200V$
Capacitance between terminals	$C_T$			3.0	pF	$V_R=0, f=1MHZ$
Reverse recovery time	$t_{rr}$		60		ns	$V_R=6V, I_F=10mA, I_{rr}=0.1 \cdot I_R$

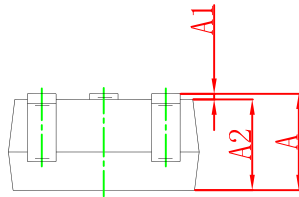
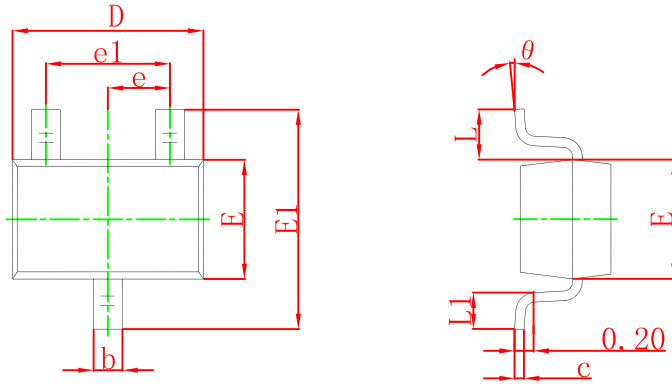


### Typical Characteristics



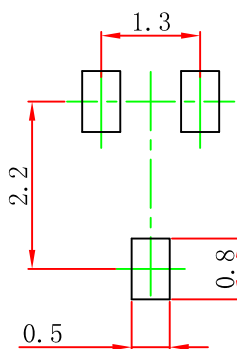


### SOT-323 Package Outline Dimensions



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

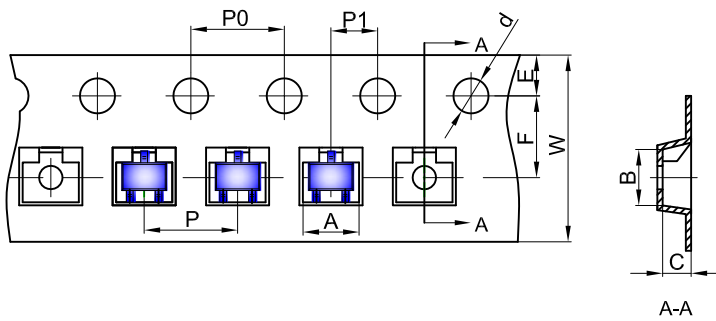


Note:

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

### 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

#### SOT-323 Tape Leader and Trailer

