

# Switching diode

## • Applications

High speed switching

## • Features

- 1) Small surface mounting type.
- 2) High Speed.( $t_{rr} = 1.2\text{ns}$  Typ.)
- 3) High reliability with high surge current handling capability.
- 4) We declare that the material of product compliance with RoHS requirements.

## • Construction

Silicon epitaxial planar

## • Device Marking and Ordering Information

Device	Marking	Shipping
L1SS355T1G	5D	3000/Tape&Reel
L1SS355T3G	5D	10000/Tape&Reel

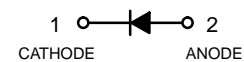
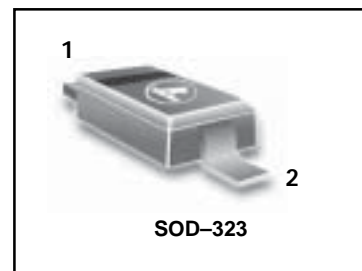
## • Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	90	V
DC reverse voltage	$V_R$	80	V
Peak forward current	$I_{FM}$	225	mA
Mean rectifying current	$I_O$	100	mA
Surge current (1s)	$I_{surge}$	500	mA
Junction temperature	$T_J$	125	°C
Storage temperature	$T_{stg}$	-55~+125	°C

## • Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditons
Forward voltage	$V_F$	—	—	1.2	V	$I_F = 100\text{mA}$
Reverse current	$I_R$	—	—	0.1	$\mu\text{A}$	$V_R = 80\text{V}$
Capacitance between terminals	$C_T$	—	—	3.0	pF	$V_R = 0.5\text{V}$ , $f = 1\text{MHz}$
Reverse recovery time	$t_{rr}$	—	—	4	ns	$V_R = 6\text{V}$ , $I_F = 10\text{mA}$ , $R_L = 100\Omega$

**L1SS355T1G**



## L1SS355T1G

### • Electrical characteristic curves ( $T_a=25^\circ\text{C}$ )

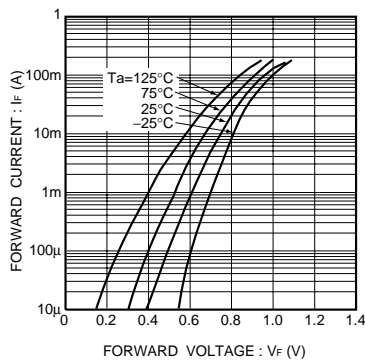


Fig.1 Forward characteristics

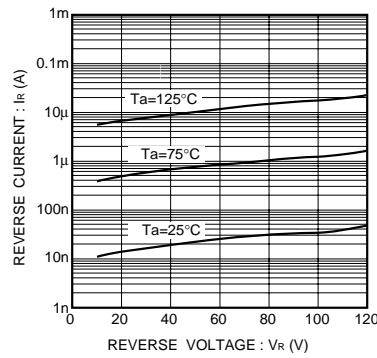


Fig.2 Reverse characteristics

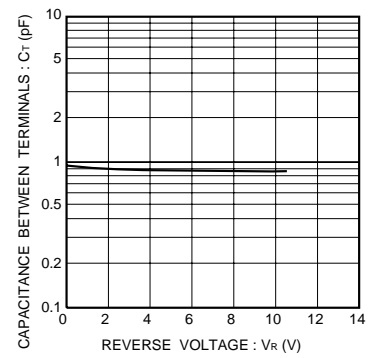


Fig.3 Capacitance between terminals characteristics

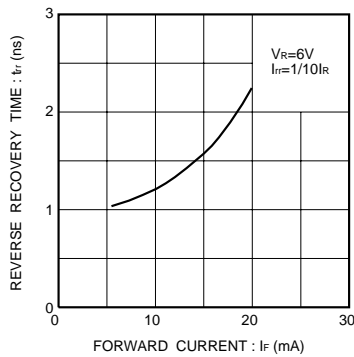


Fig.4 Reverse recovery time characteristics

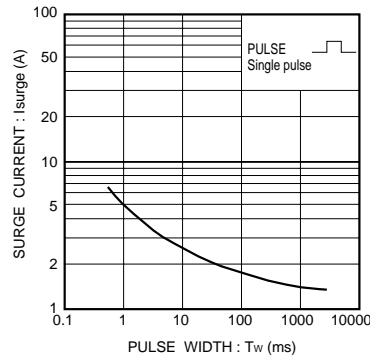


Fig.5 Surge current characteristics

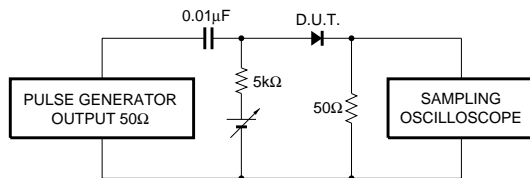
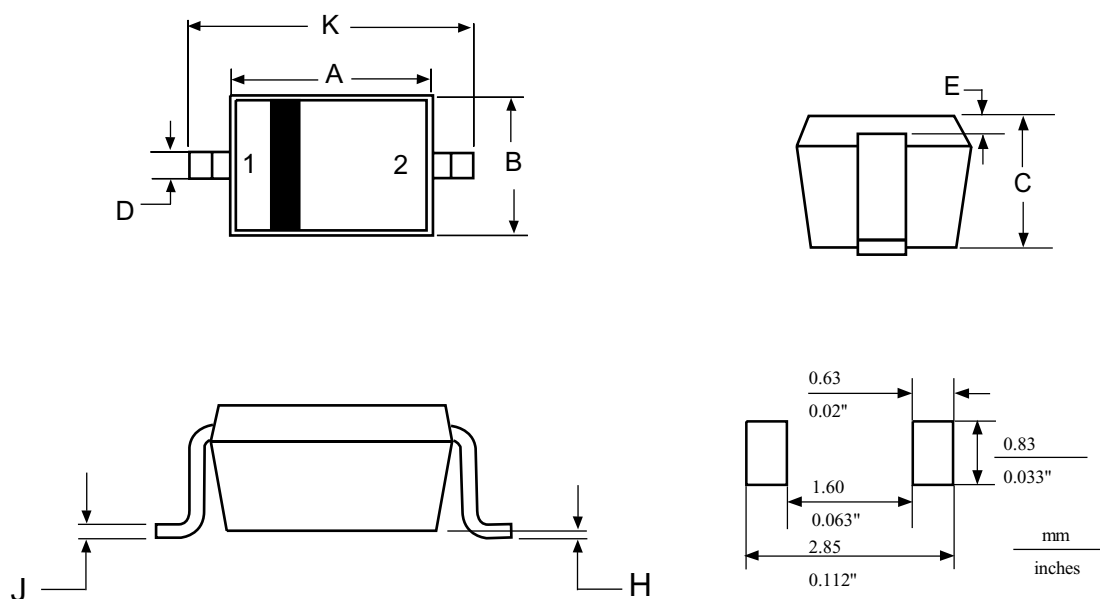


Fig.6 Reverse recovery time ( $t_R$ ) measurement circuit

# L1SS355T1G

## SOD-323



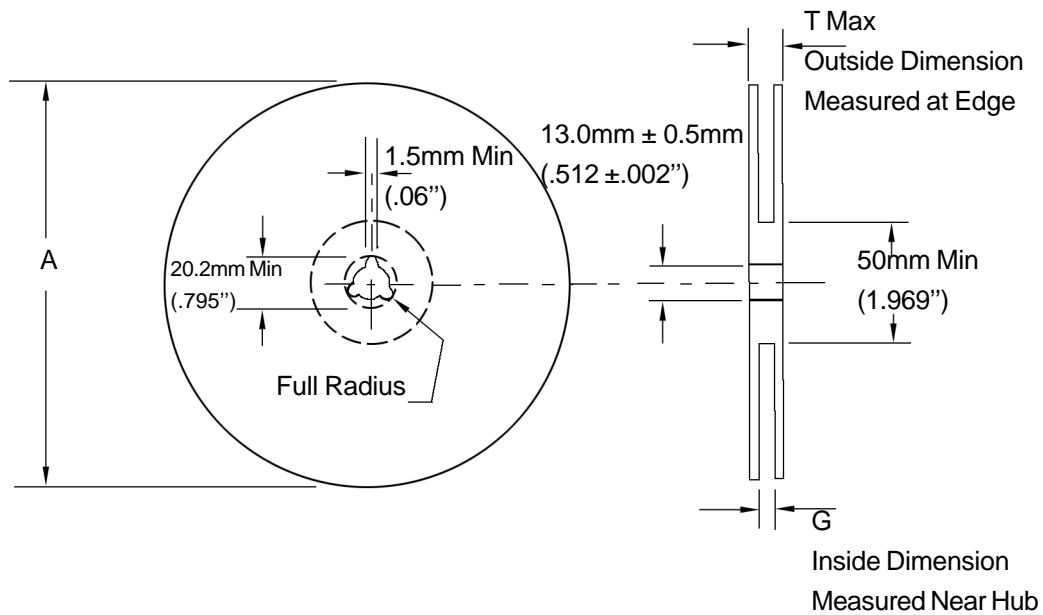
### NOTES:

1. DIMENSIONING AND TOLERANCING  
PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.80	0.063	0.071
B	1.15	1.35	0.045	0.053
C	0.80	1.00	0.031	0.039
D	0.25	0.40	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.00	0.10	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.30	2.70	0.091	0.106

PIN:1:CATHODE  
2:ANODE

## EMBOSSED TAPE AND REEL DATA FOR DISCRETES



Size	A Max	G	T Max
8 mm	330mm (12.992")	8.4mm+1.5mm, -0.0 (.33"+.059", -0.00)	14.4mm (.56")

### Reel Dimensions

Metric Dimensions Govern — English are in parentheses for reference only

### Storage Conditions

Temperature: 5 to 40 Deg.C (20 to 30 Deg. C is preferred)

Humidity: 30 to 80 RH (40 to 60 is preferred )

Recommended Period: One year after manufacturing

(This recommended period is for the soldering condition only. The characteristics and reliabilities of the products are not restricted to this limitation)

## Shipment Specification

