

Switching diode

L1SS355T1



• Applications

High speed switching

• Features

- 1) Small surface mounting type.
- 2) High Speed.($t_r=1.2\text{ns}$ Typ.)
- 3) High reliability with high surge current handling capability.
- 4) Pb-Free package is available.



SOD-323

• Construction

Silicon epitaxial planar

• Device Marking and Ordering Information

Device	Marking	Shipping
L1SS355T1	A	3000/Tape&Reel
L1SS355T1G	A (Pb-Free)	3000/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	μA	$V_R=80\text{V}$
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	$V_R=6\text{V}$, $I_F=10\text{mA}$, $R_L=100\Omega$

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

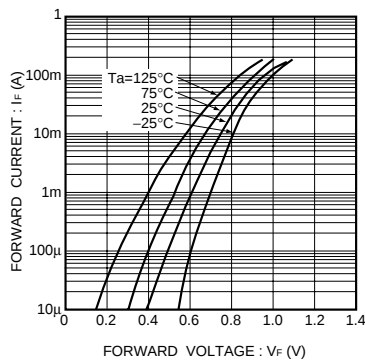


Fig.1 Forward characteristics

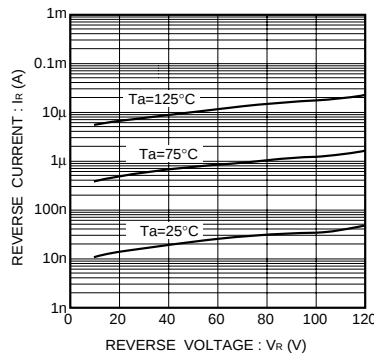


Fig.2 Reverse characteristics

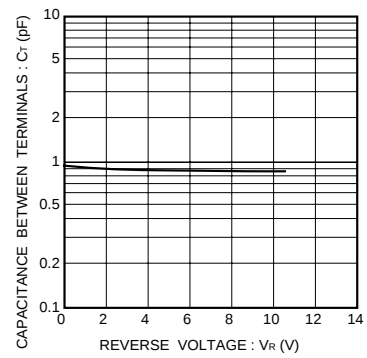


Fig.3 Capacitance between terminals characteristics

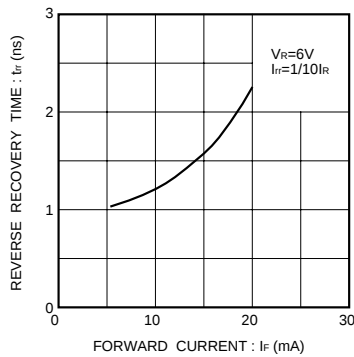


Fig.4 Reverse recovery time characteristics

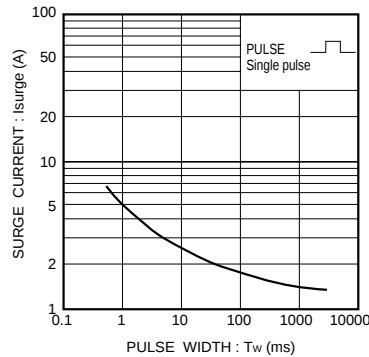


Fig.5 Surge current characteristics

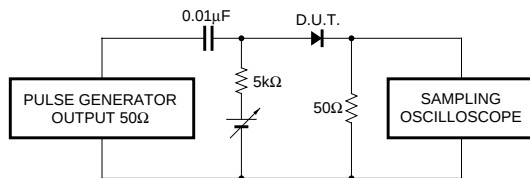
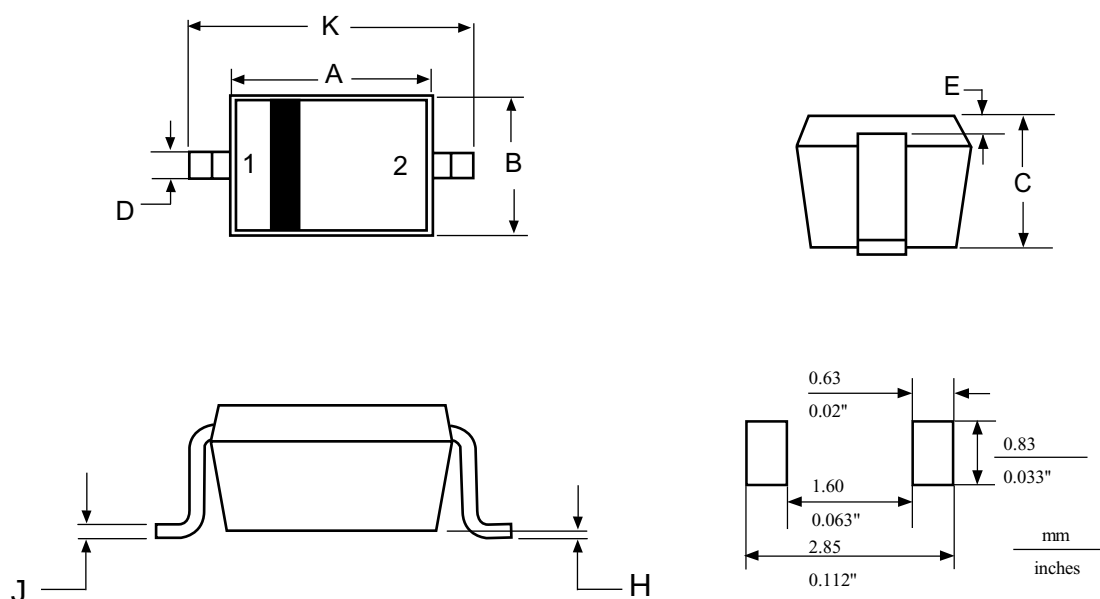


Fig.6 Reverse recovery time (t_R) measurement circuit

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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