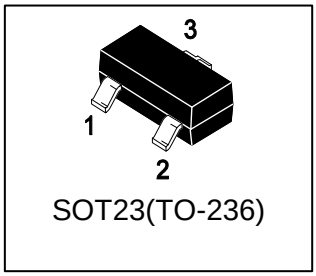
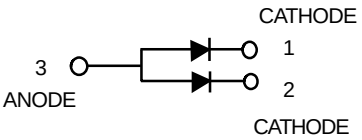
L1SS181LT1G
S-L1SS181LT1G

Ultra High Speed Switching Application





1. FEATURES

- Low forward voltage : VF (3) = 0.92V (typ.)
- Fast reverse recovery time : trr = 1.6ns (typ.)
- Small total capacitance : CT = 2.2pF (typ.)
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
L1SS181LT1G	A3	3000/Tape&Reel
L1SS181LT3G	A3	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

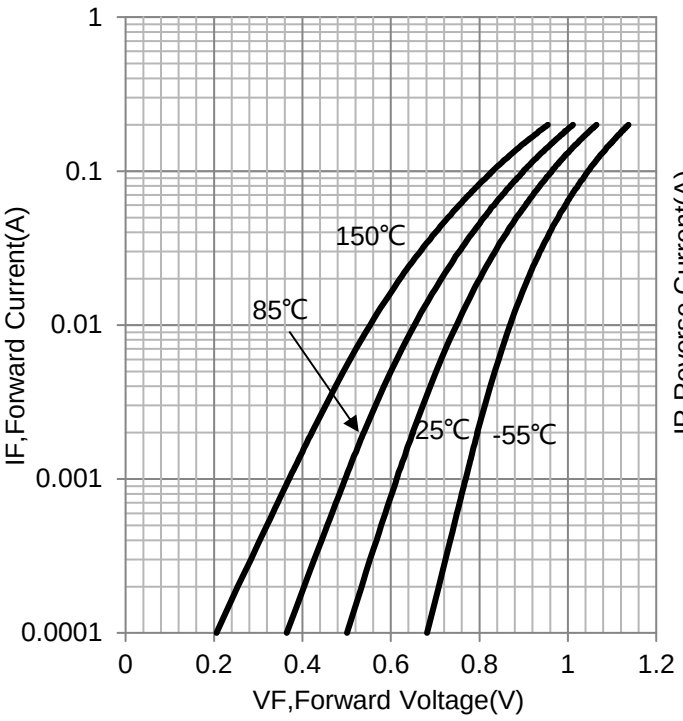
Parameter	Symbol	Limits	Unit
Maximum (peak) reverse voltage	VRM	85	V
Reverse voltage	VR	80	V
Maximum (peak) forward current	IFM	300(Note 1)	mA
Average forward current	IO	100(Note 1)	mA
Surge current (10ms)	IFSM	2(Note 1)	A
Power dissipation	P	150	mW
Junction temperature	Tj	125	℃
Storage temperature range	Tstg	-55 to +125	℃

1.Unit rating. Total rating = Unit rating × 1.5.

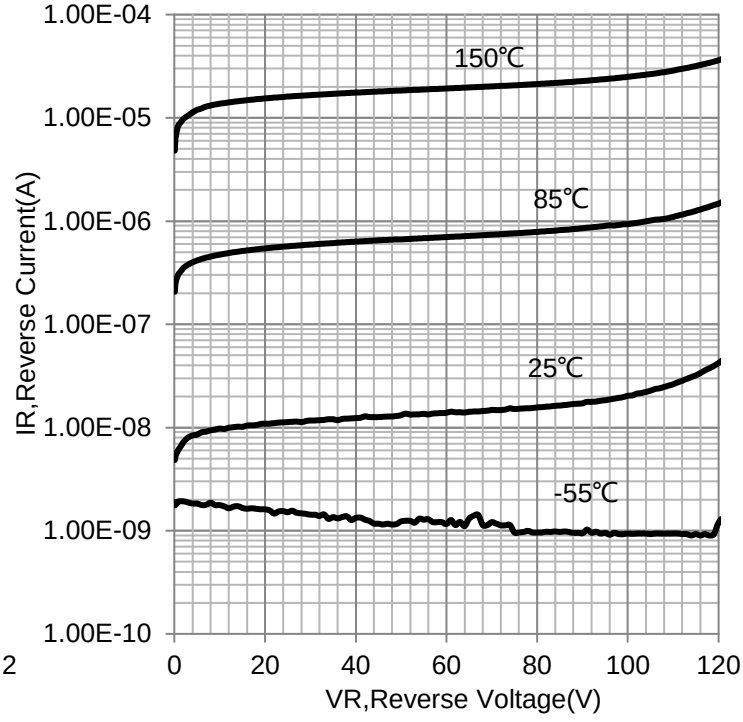
4. ELECTRICAL CHARACTERISTICS (Ta= 25ºC)

CHARACTERISTICS	Symbol	Min	Typ.	Max	Unit
Forward voltage (IF =1mA) (IF =10mA) (IF =100mA)	VF	 - - -	 0.61 0.74 0.9	 - - 1.2	V
Reverse current (VR = 30V) (VR=80V)	IR	 - -	 - -	 0.1 0.5	μA
Total capacitance (f=1MHz,VR =0)	CT	 -	 2.2	 4	pF
Reverse Recovery Time (IF=10mA)	Trr	 -	 1.6	 4	nS

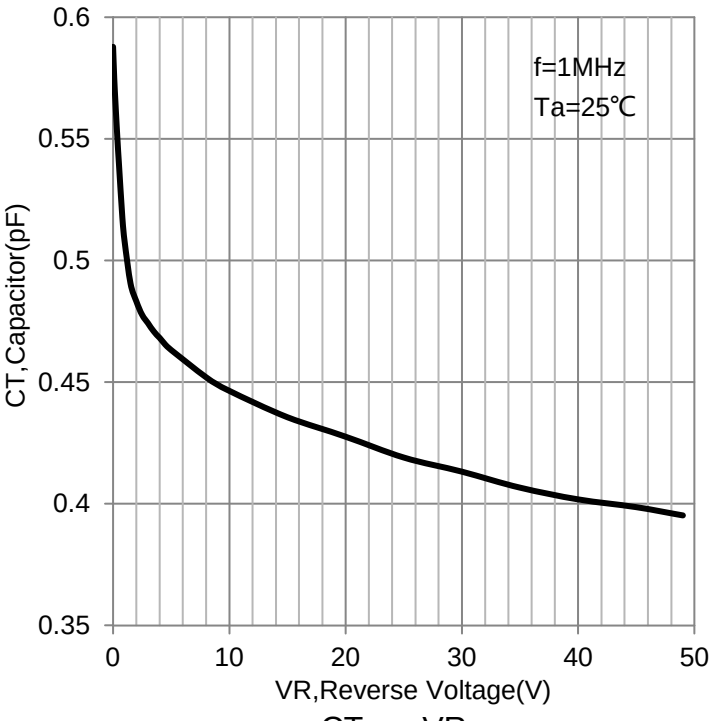
5.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

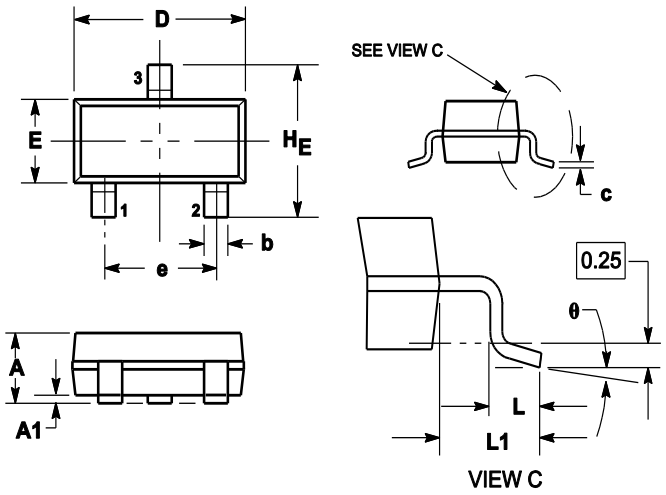


IR vs. VR



CT vs. VR

6.OUTLINE AND DIMENSIONS



Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
H_E	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

7.SOLDERING FOOTPRINT