

Monolithic Dual Switching Diode Common Anode

FEATURES

- We declare that the material of product compliance with RoHS requirements.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

ORDERING INFORMATION

Device	Package	Shipping
L1SS360TT1G S-L1SS360TT1G	SC89	3000 Tape & Reel
L1SS360TT3G S-L1SS360TT3G	SC89	10000 Tape & Reel

MAXIMUM RATINGS (EACH DIODE)

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	80	Vdc
Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	2	Adc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-4 Board, (1) $T_A = 25^\circ\text{C}$	P_D	150	mW
Derate above 25°C		1.2	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Total Device Dissipation FR-4 Board(2), $T_A = 25^\circ\text{C}$	P_D	200	mW
Derate above 25°C		1.6	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	600	$^\circ\text{C/W}$
Junction and Storage Temperature	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

DEVICE MARKING

L1SS360TT1G = A3

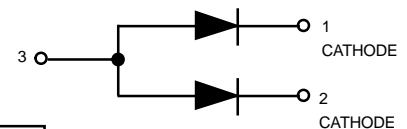
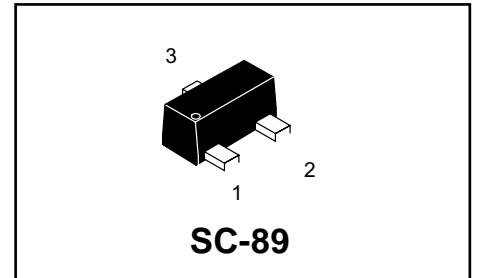
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted) (EACH DIODE)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ($I_{(BR)} = 100 \mu\text{Adc}$)	$V_{(BR)}$	80	-	Vdc
Reverse Voltage Leakage Current ($V_R = 30 \text{ Vdc}$) ($V_R = 80 \text{ Vdc}$)	I_R	-	0.1 0.5	μAdc
Diode Capacitance ($V_R = 0, f = 1.0 \text{ MHz}$)	C_D	-	4.0	pF
Forward Voltage ($I_F = 1.0 \text{ mAdc}$) ($I_F = 10 \text{ mAdc}$) ($I_F = 100 \text{ mAdc}$)	V_F	-	750 900 1200	mVdc
Reverse Recovery Time ($I_F = I_R = 10 \text{ mAdc}, I_{R(REC)} = 1.0 \text{ mAdc}$) (Figure 1) $R_L = 100\Omega$	t_{rr}	-	4.0	ns

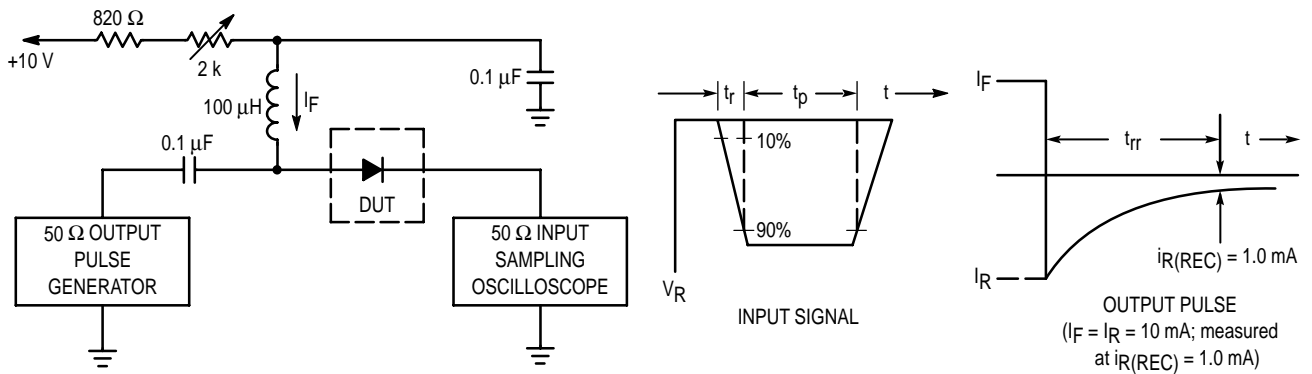
1. FR-5 = 1.0 x 0.75 x 0.062 in.

2. Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

L1SS360TT1G
S-L1SS360TT1G



L1SS360TT1G, S-L1SS360TT1G



- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
- 2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
- 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

CURVES APPLICABLE TO EACH CATHODE

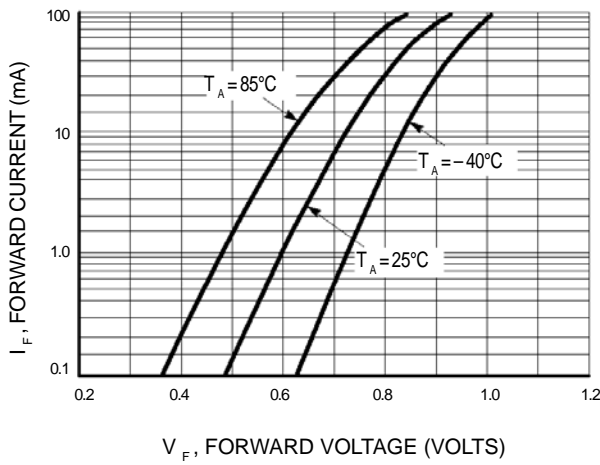


Figure 2. Forward Voltage

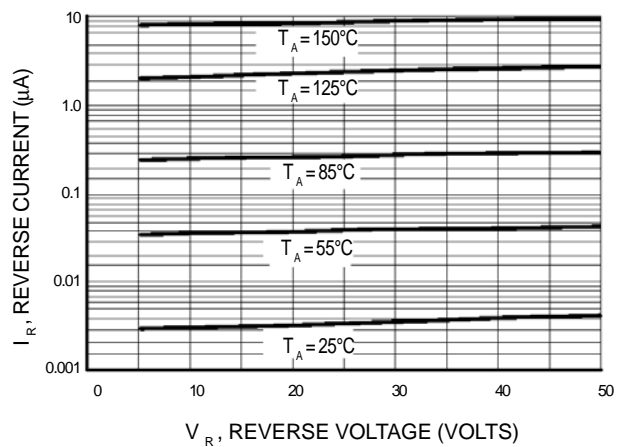


Figure 3. Leakage Current

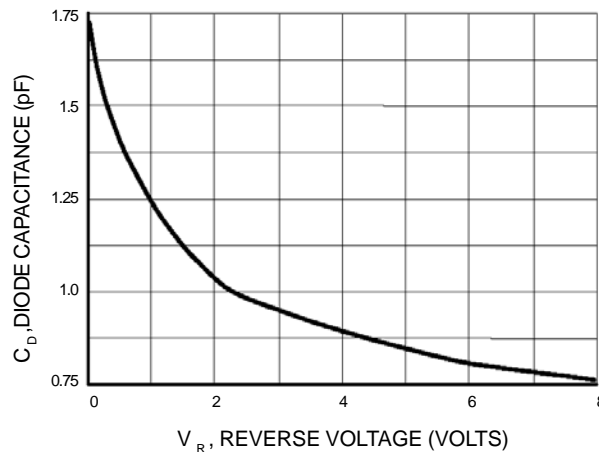
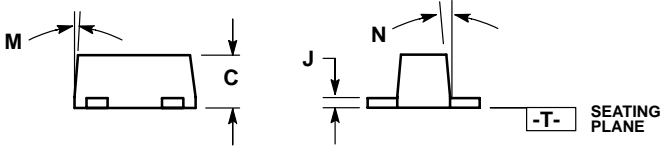
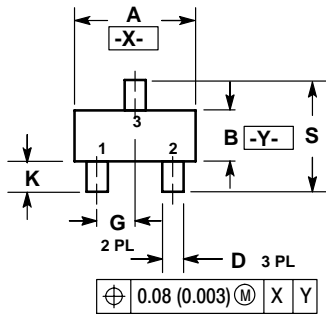


Figure 4. Capacitance

L1SS360TT1G, S-L1SS360TT1G

SC-89

Dimension Outline:



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. 463C-01 OBSOLETE, NEW STANDARD 463C-02.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.50	1.60	1.70	0.059	0.063	0.067
B	0.75	0.85	0.95	0.030	0.034	0.040
C	0.60	0.70	0.80	0.024	0.028	0.031
D	0.23	0.28	0.33	0.009	0.011	0.013
G	0.50 BSC			0.020 BSC		
H	0.53 REF			0.021 REF		
J	0.10	0.15	0.20	0.004	0.006	0.008
K	0.30	0.40	0.50	0.012	0.016	0.020
L	1.10 REF			0.043 REF		
M	---	---	10°	---	---	10°
N	---	---	10°	---	---	10°
S	1.50	1.60	1.70	0.059	0.063	0.067

Soldering Footprint:

