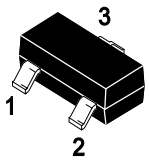
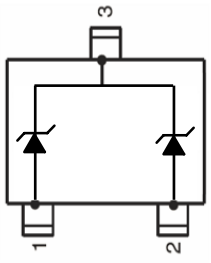
LR1105LT1G
S-LR1105LT1G

ESD Protection Diode



SOT23(TO-236)



1.FEATURES

- Ultra low leakage: nA level.
- Low clamping voltage.
- 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.APPLICATIONS

- CAN bus protection
- Automotive applications

3.DEVICE MARKING AND ORDERING INFORMATION

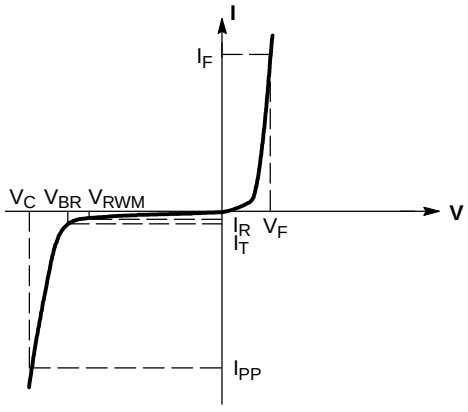
Device	Marking	Shipping
LR1105LT1G	R11	3000/Tape&Reel

4.MAXIMUM RATINGS(Ta = 25ºC)

Parameter		Symbol	Limits	Unit
IEC 61000−4−2 (ESD)	Contact		±30	kV
	Air		±30	
peak pulse power@8/20 μs		PPP	350	W
peak pulse current @8/20 μs		IPP	8	A
Storage Temperature Range		Tstg	−55～+150	ºC
Operating Temperature Range		TJ	−55～+125	ºC

5.ELECTRICAL CHARACTERISTICS (Ta= 25ºC)

Symbol	Parameter
IPP	Maximum Reverse Peak Pulse Current
VC	Clamping Voltage @ IPP
VRWM	Working Peak Reverse Voltage
IR	Maximum Reverse Leakage Current @ VRWM
VBR	Breakdown Voltage @ IT
IT	Test Current
IF	Forward Current
VF	Forward Voltage @ IF
Ppk	Peak Power Dissipation
C	Capacitance @ VR = 0 and f = 1.0 MHz

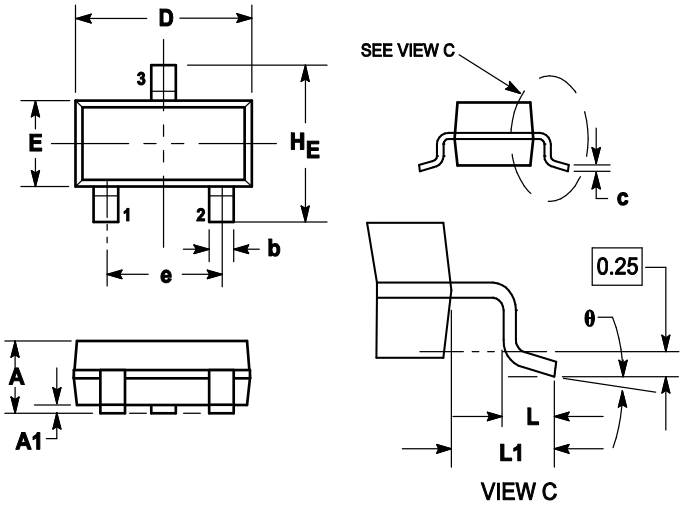


Uni−Directional TVS

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
reverse stand-off voltage	VRWM	-	-	24	V
reverse leakage current (VRWM = 24 V,Pin 1、2to Pin 3) (VRWM = 24 V,Pin 3 to Pin 1、2)	IRM	- -	- -	200 200	nA
breakdown voltage (IT = 1 mA,Pin 1、2to Pin 3) (IT = 1 mA,Pin 3 to Pin 1、2)	VBR	25.7	-	28.4	V
Clamping Voltage (IPP = 5A (8 x 20μs pulse)	VC	-	32	40	V
Clamping Voltage (IPP = 8A (8 x 20μs pulse)	VC	-	35	44	V
Junction Capacitance (VR = 0V, f = 1MHz)	CJ	-	50	60	pF

7.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°

8.SOLDERING FOOTPRINT