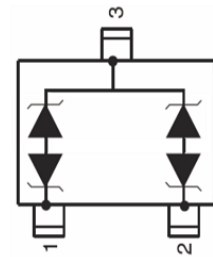
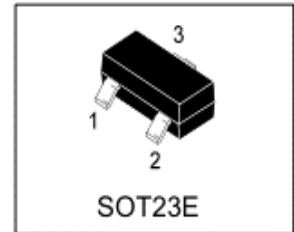


# LR2105LT1G

## S-LR2105LT1G

ESD Protection Diode

LR2105LT1G  
S-LR2105LT1G



### 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.

### APPLICATIONS

- CAN bus protection
- Automotive applications

### DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LR2105LT1G	R21	3000/Tape&Reel

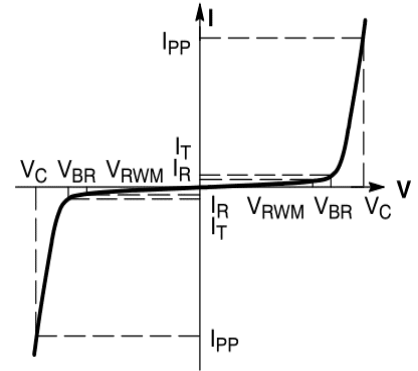
### MAXIMUM RATINGS(Ta = 25°C)

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	°C
Operating Temperature Range	TJ	-55 ~ +125	°C

LR2105LT1G,S-LR2105LT1G

**ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

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

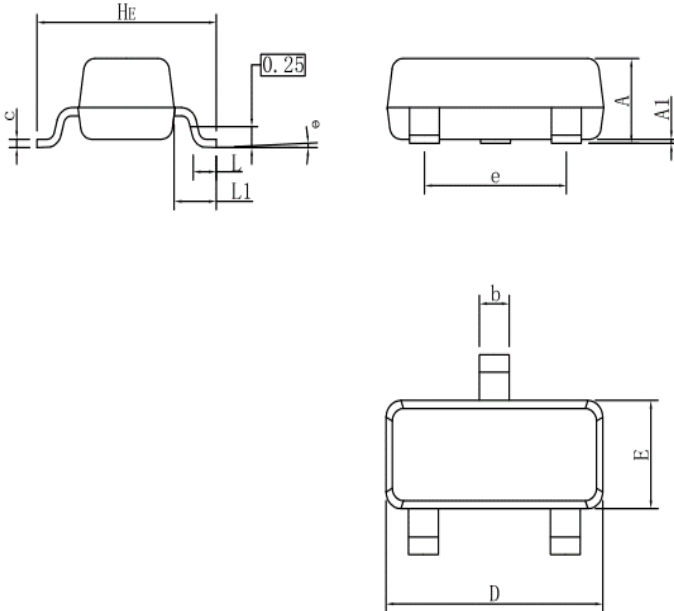


**ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

Characteristic	Symbol	Min.	Typ.	Max.	Unit
reverse stand-off voltage	VRWM	-	-	24	V
reverse leakage current (VRWM = 24 V, Pin 1、 2to Pin 3)	IRM	-	-	200	nA
(VRWM = 24 V, Pin 3 to Pin 1、 2)		-	-	200	
breakdown voltage (IT = 1 mA, Pin 1、 2to Pin 3 ) (IT = 1 mA, Pin 3 to Pin 1、 2 )	VBR	26.2	-	32	V
Clamping Voltage (IPP = 5A (8 x 20µs pulse)	VC	-	-	33	V
Clamping Voltage (IPP = 8A (8 x 20µs pulse)	VC	-	-	36	V
Junction Capacitance (VR = 0V, f = 1MHz)	CJ	-	30	-	pF

# LR2105LT1G,S-LR2105LT1G

## OUTLINE AND DIMENSIONS

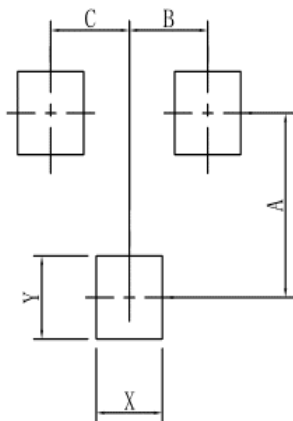


SOT23E			
DIM	MIN	NOR	MAX
A	0.90	1.00	1.10
A1	0.01	0.06	0.10
b	0.30	0.40	0.50
c	0.10	0.17	0.20
D	2.80	2.90	3.00
E	1.20	1.30	1.40
e	1.80	1.90	2.00
L	0.20	0.40	0.60
L1	0.60REF		
HE	2.20	2.40	2.60
θ	0°	-	10°
All Dimensions in mm			

### GENERAL NOTES

- 1.Top package surface finish Ra0.4±0.2um
- 2.Bottom package surface finish Ra0.7±0.2um
- 3.Side package surface finish Ra0.4±0.2um

## SOLDERING FOOTPRINT



SOT23E	
DIM	(mm)
X	0.80
Y	0.90
A	2.00
B	0.95
C	0.95