

LR1LINT1G S-LR1LINT1G ESD Protection Diode

1. FEATURES

- Ultra low leakage current.
- Low clamping voltage.
- ESD protection diode.
- Complies with IEC 61000-4-2 level 4 (ESD).
- 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 ORDERING INFORMATION

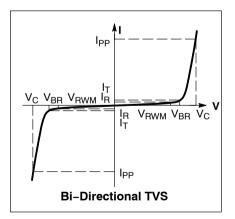
Device	Marking	Shipping		
LR1LINT1G	LN	3000/Tape&Reel		

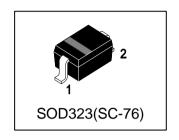
3. MAXIMUM RATINGS(Ta = 25°C)

Parameter		Symbol	Limits	Unit
IEC 61000-4-2 (ESD)	Contact		± 30	kV
	Air		±30	
peak pulse power@8/20 µ	S	PPP	160	W
peak pulse current @8/20 µs		IPP	3	А
Storage Temperature Ran	ge	Tstg	-65~+150	°C
Junction temperature		TJ	150	°C

4. 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				
PPK	Peak Power Dissipation				
С	Capacitance @ VR = 0 and f = 1.0 MHz				







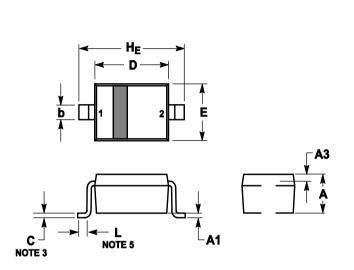


5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Тур.	Max.	Unit
reverse stand-off voltage					
(Pin 1 to 2)	VRWM	-	-	15	V
(Pin 2 to 1)		-	-	24	
reverse leakage current					
(VRWM = 15 V, Pin 1 to 2)	IRM	-	-	50	nA
(VRWM = 24 V, Pin 2 to 1)		-	-	50	
breakdown voltage					
(IR = 5 mA , Pin 1 to 2)	VBR	17.1	18.9	20.3	V
(IR = 5 mA , Pin 2 to 1)		25.4	27.8	30.3	
diode capacitance	Cd				ηĘ
(VR = 0 V, f = 1 MHz)	Cu	-	13	17	pF
Clamping Voltage					
(IPP = 1A (8 x 20µs pulse), Pin 1 to 2)		-	-	25	
(IPP = 5A (8 x 20µs pulse), Pin 1 to 2)	VC	-	-	44	V
(IPP = 1A (8 x 20µs pulse), Pin 2 to 1)		-	-	40	
(IPP = 3A (8 x 20µs pulse), Pin 2 to 1)		-	-	70	
differential resistance					
(IR = 1 mA, Pin 1 to 2)	rdif	-	-	225	Ω
(IR = 1 mA, Pin 2 to 1)		-	-	300	



6.OUTLINE AND DIMENSIONS



Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.

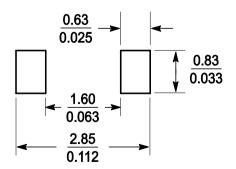
2. CONTROLLING DIMENSION: MILLIMETERS.

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
А	0.8	0.9	1	0.031	0.035	0.04
A1	0	0.05	0.1	0	0.002	0.004
A3	0.15REF			0.006REF		
b	0.25	0.32	0.4	0.01	0.012	0.016
С	0.089	0.12	0.177	0.003	0.005	0.007
D	1.6	1.7	1.8	0.062	0.066	0.07
Е	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
H _E	2.3	2.5	2.7	0.09	0.098	0.105

7.SOLDERING FOOTPRINT





DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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