

ESD Array Series

ULC1204P

Description

The ULC1204P is applied to high speed signal interface, including Antenna circuit, USB2.0, IEEE-1394, DVI HDMI

Protection against ESD voltages and currents (IEC61000-4-2 Level 4)

Extremely quick response time (<1ns) present ideal ESD protection

Feature

- ◆ Extremely low capacitance (0.1pF typical)
- ◆ Extremely low leakage current
- ◆ SMD (Surface Mount Device)
- ◆ Zero signal distortion
- ◆ Channel : 4 channels
- ◆ Working Voltage: V_{DC} 12V
- ◆ Capacitance : 0.1pF

Applications

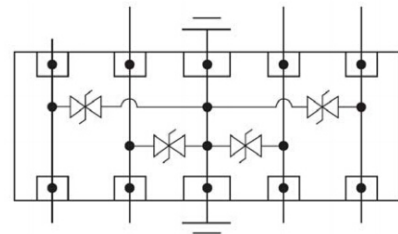
Suitable for Digital Video Equipment Mobile Phone, GPS Antenna, Bluetooth Communication Equipment.

- ◆ USB2.0
- ◆ DVI
- ◆ HDMI

2.5mm * 1.0mm



Functional Diagram



Mechanical Data

- ◆ Chip Size: L:2.5mm W: 1.0mm
- ◆ Quantity Per Reel : 5,000pcs
- ◆ Lead Finish : Lead Free

General Technical Data

Operating Temperature	-40 to +85°C
Storage Temperature (on board)	-55 to +125°C
Response Time	< 1nS
Solderability	245±5 °C , 3±1sec.

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Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Charateristics	ULC1204P
Rated voltage (max.)	12V
Leakage current (max) (@12V _{DC})	0.01μA
Trigger voltage (V _t)	300V typ.
Clamping voltage (V _c)	30V typ.
Capacitance (C _p), @ 1 MHz	0.1p F typ.
Response time	< 1 ns
ESD voltage capability, IEC 61000-4-2 Contact discharge mode	8KV
ESD voltage capability, IEC 61000-4-2 Air discharge mode	15KV
ESD withstand pulses	100 typ.

Characteristic Curves

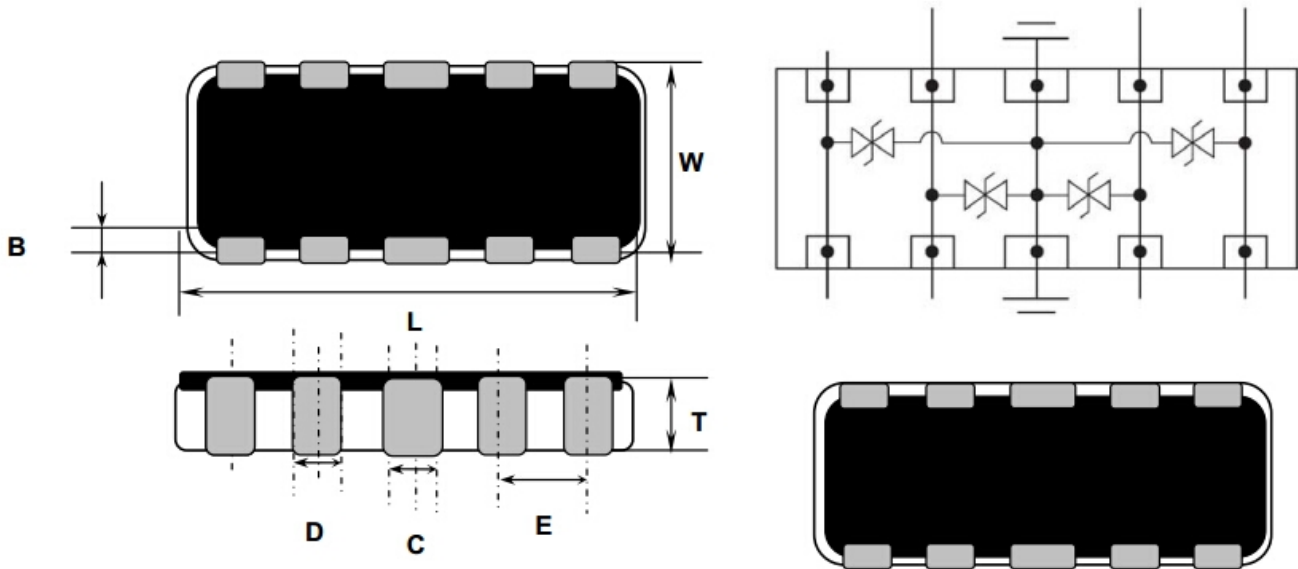
Item	Specifications	Test Condition
Bias Humidity	I _L ≤ 10μA	90% RH, 40°C, Rated Voltage, 1000hrs
Thermal Shock		-40°C to 85°C, 30min. cycle, 5 cycles
Full Load Voltage		Rated Voltage, 85°C, 1000 hrs
Solder Leach Resistance		260±5°C, 10±1 sec.

I_L – Leakage current at rated voltage, the maximum leakage current was measured after reliability test.

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Characteristic Curves



◆ Dimension

Unit: mm

Size EIA (EIAJ)	1004 (2510)
L	2.5±0.1
W	1.0±0.1
T	0.5±0.1
B	0.2±0.1
C	0.3±0.05
D	0.2±0.05
E	0.5±0.05