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

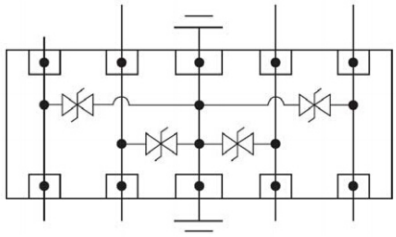
2.5mm * 1.0mm



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

Functional Diagram



Applications

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

- USB2.0
- DVI
- HDMI

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

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Electrical Characteristics (@ 25℃ Unless Otherwise Specified)

Charateristics	ULC1204P
Rated voltage (max.)	12V
Leakage current (max) (@12VDC	0.01μA
Trigger voltage (Vt)	300V typ.
Clamping voltage (Vc)	30V typ.
Capacitance (Cp), @ 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	$I_L \leqq 10\mu A$	**90% RH, 40℃, Rated Voltage, 1000hrs**
Thermal Shock		**-40℃ to 85℃, 30min. cycle, 5 cycles**
Full Load Voltage		**Rated Voltage, 85℃, 1000 hrs**
Solder Leach Resistance		**260±5℃, 10±1 sec.**

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

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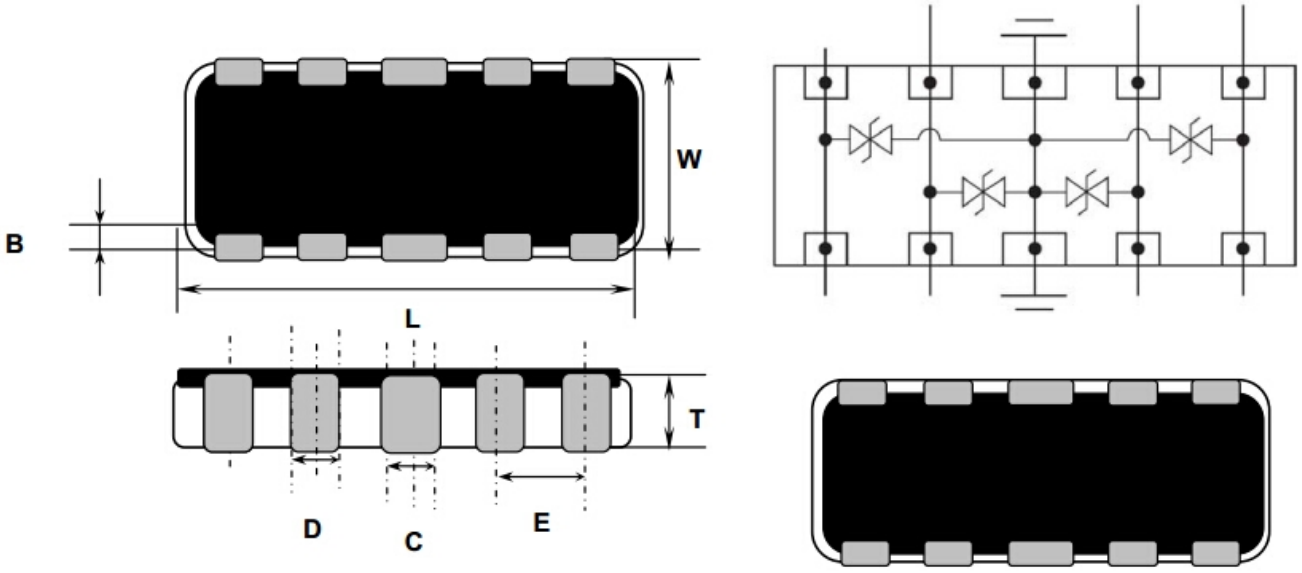
Characteristic Curves



◆ 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

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