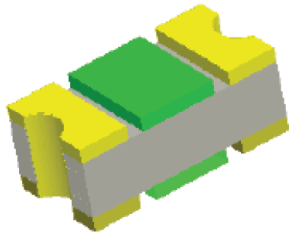
Description

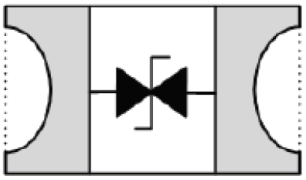
This device is an ultra low capacitance PESD product designed to protect very high speed data interfaces. ESLP1608V05 has a typical capacitance of only 0.05pf (I/O to GND), and it can be used to meet the ESD immunity requirements of IEC 61000-4-2 (15KV air, 8KV contact discharge).



1608 Size

Feature

- ESD protection for high speed data lines to
  IEC61000-4-2 ESD contact discharge typical 8KV, max 15KV
  IEC61000-4-2 ESD air discharge typical 15KV, max 25KV
- Multilayer structure
- Surface mount
- Extremely low capacitance
- Very low leakage current
- Fast response time
- Bi-directional ESD protection
- Lead free solder termination
- The best ESD protection for high frequency, low voltage applications



Schematic Diagram

Application

- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)
- Display Port Interface (DP)
- Unified Display Interface (UDI)
- Mobile Display Digital Interface (MDDI)
- Gigabit Ethernet
- USB2.0 and USB3.0
- IEEE1394 interface

Caution: This component is designed for signal line protection only, not intended to be used under bias, not for application with a power line.

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Maximum Contact discharge voltage Per IEC61000-4-2	---	15KV	V
Maximum Air discharge voltage Per IEC61000-4-2	---	25KV	V
Maximum Operating temperature	T_{OPER}	-40 to +90	℃
Maximum Storage temperature	T_{STG}	-55 to +125	℃
Maximum lead temperature for soldering during 10s	T_L	260	℃

Electrical characteristics (T_A =25°C)

Electrical Characteristics						
Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Continuous operating voltage	V_{DC}	---	---	---	5	V
Trigger voltage	V_T	IEC61000-4-2 8KV contact discharge	---	200	---	V
Clamping voltage	V_C	IEC61000-4-2 8KV contact discharge	---	20	---	V
Leakage current	I_L	DC 5V shall be applied on component	---	0.10	100	nA
Capacitance	C_P	V_R = 0V, f = 1MHz	---	0.05	0.30	pF
ESD pulse withstand	Pulses	IEC61000-4-2 8KV contact discharge	100	---	---	---

Notes: 1, Trigger and clamping voltage are measured per IEC 61000-4-2, 8KV contact discharge method.
2, After reliability tests such as high Temp storage, Temp cycles, continuous ESD strike etc, the maximum leakage current is less than 10uA.