

»Features

- The best ESD protection for high speed, low voltage applications
- RoHS compliant and halogen free
- Ultra low capacitance, 0.2 pF (typ.)
- Low leakage current (<200nA)
- Fast response time (<1ns)
- Bi-directional, single line protection
- Surface mount
- MSL 3



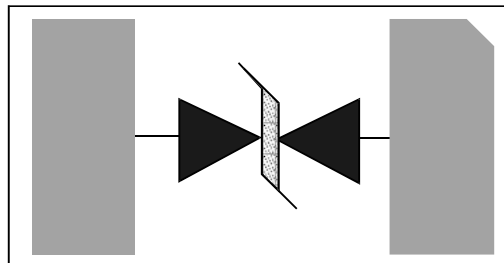
»Applications

- Smart Phone/Mobile Internet Device
- Laptop/Desktop Computer
- Antennas
- High Speed Ethernet
- USB 2.0 and USB 3.0
- Lightning and Thunder Bolt Interface

»Mechanical Data

- Surface mount
- RoHS Compliant
- Halogen Free

»Schematic & PIN Configuration



0603

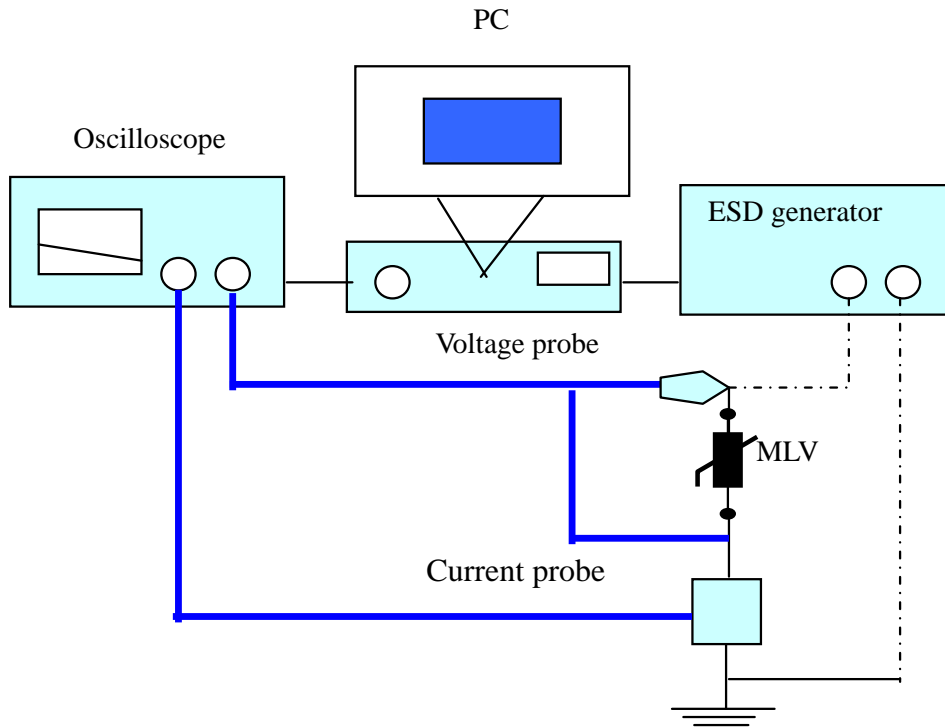
»Absolute Maximum Rating

Rating	Symbol	Conditions	Value	Units
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}		15 8	kV
Lead Soldering Temperature	T_L		260(10seconds)	°C
Operating Temperature	T_O		-55 to + 125	°C
Storage Temperature	T_{stg}		-40 to + 125	°C

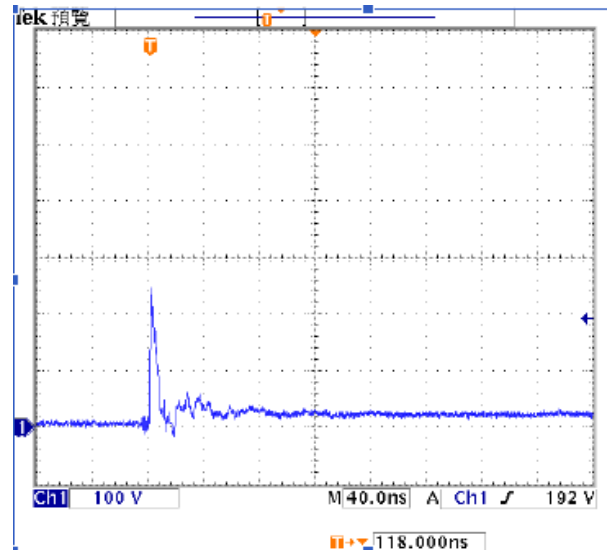
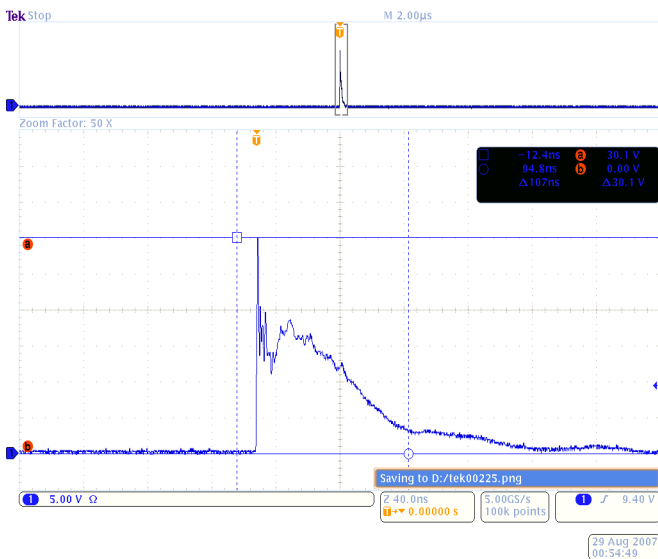
»Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Continuous Operating Voltage	V_{DC}				24	V
Trigger Voltage	V_T	IEC61000-4-2 8KV contact discharge		450		V
Leakage Current	I_L	VDC=24V,T=25 °C			200	nA
Clamping Voltage	V_C	IEC61000-4-2 8KV contact discharge		40		V
Capacitance	C_p	Measured at 10MHz		0.2		pF
ESD Pulse Withstand	Pulses	IEC61000-4-2 8KV contact discharge	1000			

»ESD Clamping Test



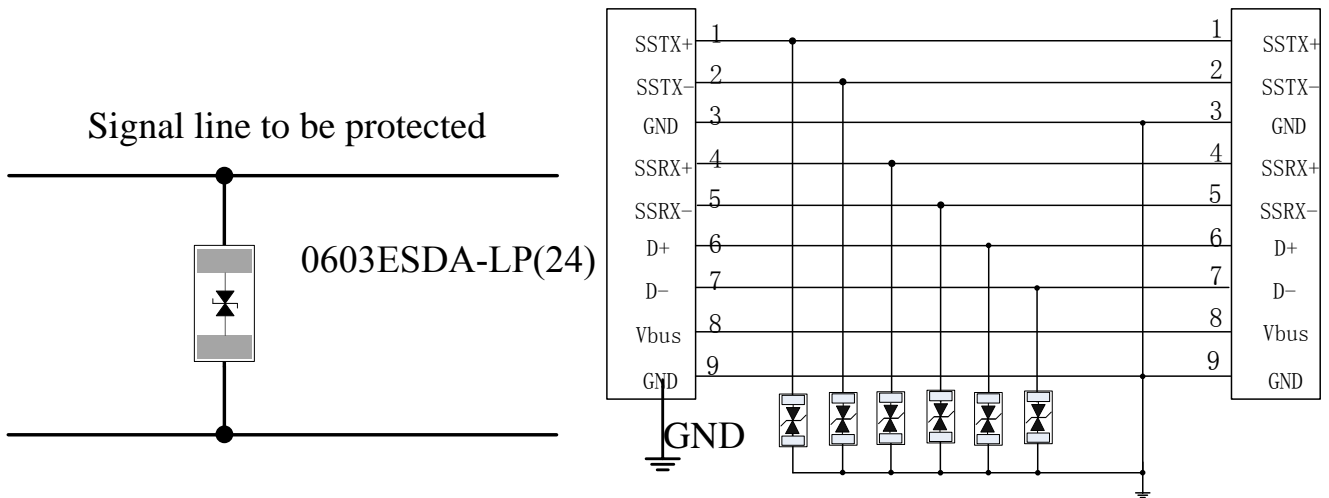
ESD testing circuit



with 0603ESD(0.2) sample

Test with high voltage probe of attenuation factor
x250
without ESD protection sample

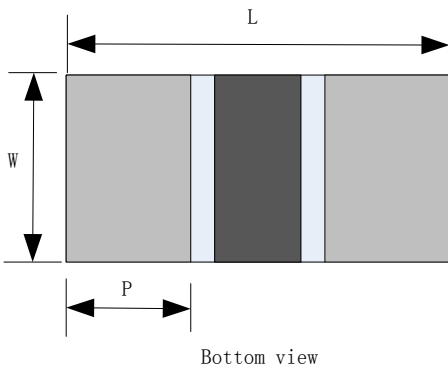
»Outline Drawing – 0603



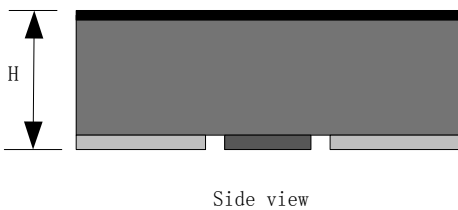
0603ESDA-LP(24) in Signal line protected

0603ESDA-LP(24) in USB3.0 application

»Outline Drawing – 0603



Dimension	Unit: Millimeters		
	Min.	Typ.	Max.
L	1.45	1.60	1.75
W	0.70	0.80	0.90
P	0.20	0.30	0.40
H			0.90



»Ordering information

Order code	Package	Base qty	Delivery mode
0603ESDA-LP(24)	0603	5k	Tape and reel