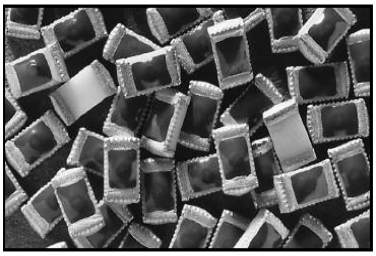
Feature

- Insulator over coat keeps excellent low and stable leakage current.
- Solder layer plating for terminal electrode keep excellent assembly Solderability even after long term storage.
- Low trigger voltage
- Compact size for EIA 0402,0603.
- Quick response time (<1ns)..
- High transient current capability.
- Meet IEC 61000-4-2,61000-4-4,and 61000-4-5 standard.
- RoHS Compliance.



Applications

Application for Mother Board, Notebook, Cellular Phone, PDA, handheld device,DSC,DV,Scanner , and Set-Top Box etc.

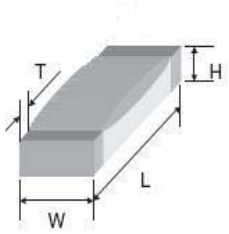
Specifications

Part Number	Working Voltage (V_{DC})	Trigger Voltage(Vv) △Vv=±20%	Clamping Voltage(Vc)	Capacitance (Cp)	Capacitance (△Cp)	Leakage Current(I_L)
0402SIZE						
ESDA0402/04	4	8V	20V	10pF	±10%	<1nA
ESDA0402/05	5.5	12V	25V	5pF	±10%	<1nA
ESDA0402/09	9	25V	50V	3PF	±10%	<1nA
ESDA0402/11	11	25V	55V	18pF	±10%	<1nA
ESDA0402/14	14	28V	58V	20pF	±10%	<1nA
0603SIZE						
ESDA0603/04	4	8V	20V	10pF	±10%	<1nA
ESDA0603/05	5.5	12V	25V	5pF	±10%	<1nA
ESDA0603/09	9	25V	50V	3PF	±10%	<1nA
ESDA0603/11	11	25V	55V	18pF	±10%	<1nA
ESDA0603/14	14	28V	58V	20pF	±10%	<1nA

V_{DC} — Maximum DC operating voltage the ESD suppressor can maintain and not exceed 10μA leakage current.
Vv --- Voltage across the device measured at 1mA DC current.
Vc ---- Maximum peak current across the device with 8/20μS waveform and 1A pulse current.
Cp --- Device capacitance measured with zero volt bias 1 Vrms.

Dimensions

SIZE EIA(EIAJ)	0603(1608)	0402(1005))
L	1.60±0.20	1.00±0.15
W	0.80±0.20	0.50±0.10
H	0.80±0.20	0.50±0.10
T	0.30±0.20	0.25±0.15



Ordering Information

ESD A 0402/ 04

(1) (2) (3) (4)

(1) Product function:E-for ESD
(2) Device Characteristics(A=Standard)
(3) Size:EIA
(4) Working Voltage

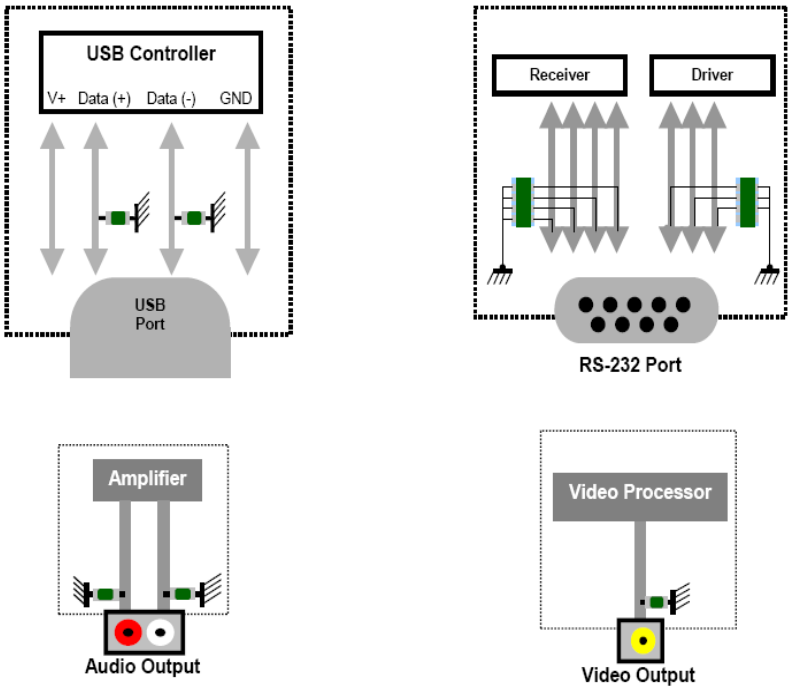
General Technical Data

Operating temperture	-40---+85℃
Storage temperture(on board)	-40---+85℃
Reponse time	<1ns
Solderability(control level:A)	245±5 ℃,3±1Sec
Solder leach resistance(control level:A)	260 ℃,10S

Environmental Specifications

Characteristics	Specifications	Test Condition
Bias humidity	△VvNv <=±10%	90%RH,40 ℃,Working voltage,1000 hours
Thermal shock		-40 ℃ to 85 ℃,30 min. cycle,5 cycles
Full load voltage		Working voltage,85 ℃,1000hours
Solder leach resistance	1.△VvNv <=±10% 2.Ir<=50mA at working voltage 3.Solder Wetting area>=95%	260 ℃,10s

Application Guide



Static Discharge Susceptibility of Some Normal Devices

Device Type	Static Discharge Susceptibility(V)
MOSFET	100~200
GaAsFET	100~1000
EPROM	100
JFET	140~7000
CMOS	250~300
Film Resistors	300~3000

Recommend Item for System Data I/O Used

Device description	Data Rate & Frequency	Rise Time	Capacitance
USB 2.0 Data Port	480M bps	0.5~0.6ns	<4pF
USB1.1Data Port	12M bps	04~20ns	5~10pF
Wireless Device	1.5M bps	75~300ns	5~10pF
RS232,IrDA1.0	115.2K	1us~8us	10~100pF
Audio (Microphone /Speaker)	20~20K Hz	0.05ms~5ms	10~1000pF