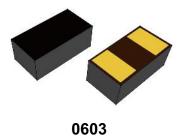


# 1 Channel Ultra-low Capacitance ESD Protection

#### **Features**

- Ultra-Low capacitance:0.05pF(typ.)
- Low leakage current(<10nA)
- Fast response time(<1ns)
- Bi-directional, single line protection IEC 61000-4-2 (ESD Air): 15kV IEC 61000-4-2 (ESD Contact): 8kV



### **Applications**

- USB 3.0/3.1
- HDMI 1.3/1.4/2.0
- RF Antenna
- SATA and eSATA Interface



### Limiting Values( $T_A = 25$ °C, unless otherwise specified)

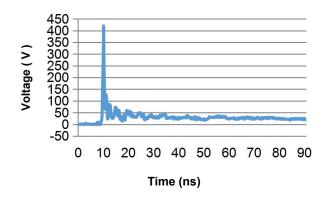
Symbol	Parameter	Conditions		Max	Unit
V <sub>ESD</sub>	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	8	kV
		IEC 61000-4-2; Air Discharge	-	15	kV
T <sub>A</sub>	Operating Temperature Range	-	-55	125	°C
$T_{stg}$	Storage Temperature Range	-	-40	85	°C

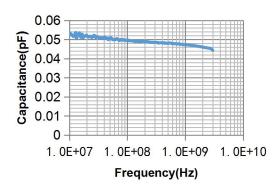
### Electrical Characteristics(T<sub>A</sub> = 25 °C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Тур.	Max	Unit
$V_{\text{DC}}$	Continuous Operating Voltage	-	-	-	5.0	V
$V_{T}$	Trigger Voltage	IEC61000-4-2 8kV contact discharge	-	450	-	V
Vc	Clamping Voltage	IEC61000-4-2 8kV contact discharge	-	40	-	V
lι	Leakage Current	DC 5V shall be applied on component	-	-	10	nA
Сл	Capacitance	Measured at 10MHz	-	0.05	-	pF



### **Typical Characteristics**

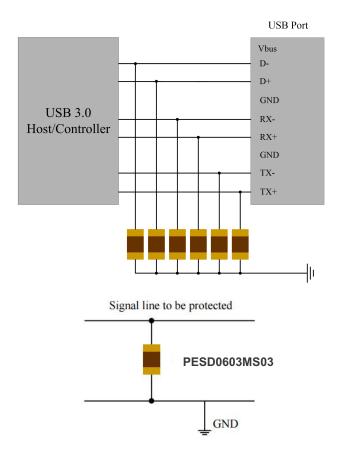




#### **ESD Protection for Signal Line**

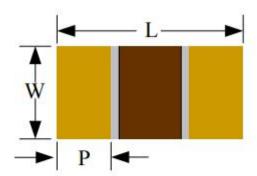
The PESD is designed for the protection of one bidirectional data line from ESD damage.

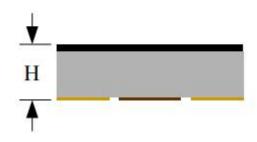
- Place the PESD as close to the input terminal or connector as possible.
- Minimize the path length between the PESD and the protected signal line.
- Use ground planes whenever possible.



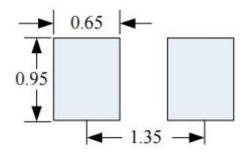


### **Package Dimension**





# **Recommended Solder Pad Footprint**



\*Sizes in mm

#### Notes:

This solder pad layout is for reference purposes only.

Dimension	Unit: Millimeters		
	Min.	Max.	
L	1.45	1.75	
W	0.70	0.95	
Р	0.20	0.50	
Н	0.26	0.46	

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