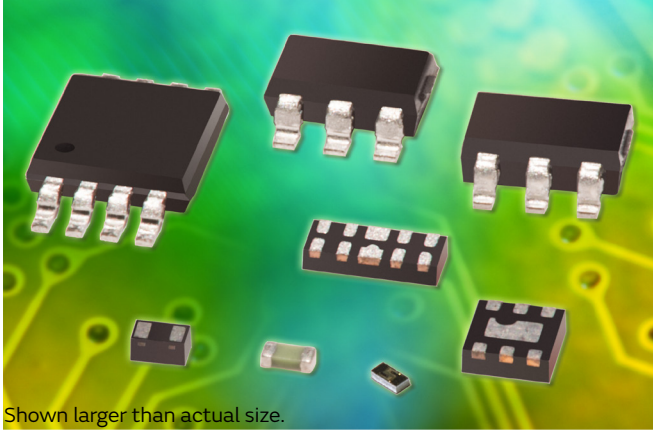


# LXES Series

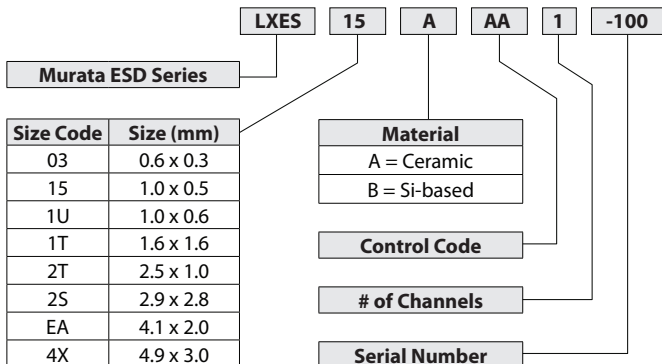
## ESD Protection Devices



### Features

- Ideal for high-speed data lines
- Manufactured in compliance with IEC 61000-4-2 Level 4 (8kV contact and 15kV air discharge)
- Ultra-low Capacitance (0.05pF typical) in the ceramic version. The ceramic version is also Bi-directional, RoHS compliant, Halogen free, and Lead free.
- A capacitance as low as 0.25pF can be achieved with the silicon versions. These versions are available in single- or multi-channel configurations and offer very low-level triggering and clamping voltages.
- Fast response time (<1ns)

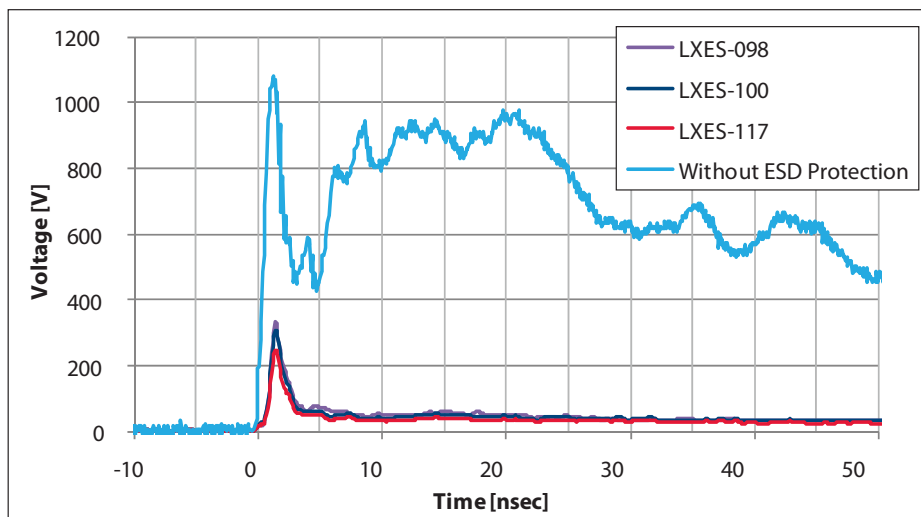
### Part Numbering System



### Applications

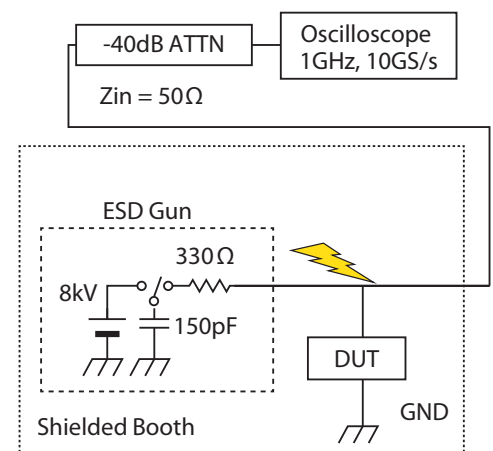
- HDMI 1.3, USB 2.0, USB 3.0, IEEE 1394b
- Cell Phones, Computers, and Peripherals
- A/V Equipment, STB, DVD, HDTV, etc.
- Antenna Ports

### ESD Test Measurement System



Resultant waveforms show how the addition of ESD protection devices can help protect electronic equipment from electrostatic discharge.

### Test Equipment Setup










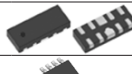



# Product Brief

# LXES Series

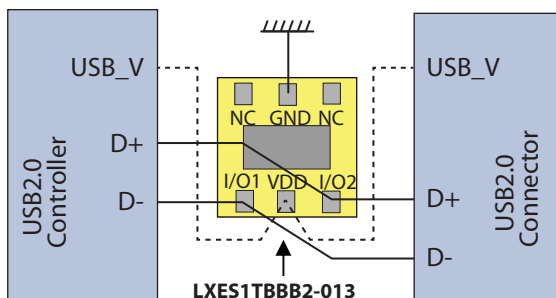
## ESD Protection Devices

### Product Lineup

Type	# of Channels	Part number	Capacitance (pF - typical)	Breakdown Voltage (V)**		L x W (mm)	T (mm max)	Package (not to scale)
				Min.	Max.			
Ceramic		LXES15AAA1-117	0.05			1.0 x 0.5	0.33	0402 
		LXES03AAA1-098	0.05			0.6 x 0.3	0.33	0201 
Silicon	1	LXES1UBBB1-008	0.50	7	10	1.0 x 0.6	0.6	
		LXES1UBAB1-007		18		1.0 x 0.6	0.6	
		LXES1UBAA1-096	7.50	5.8		1.0 x 0.6	0.55	FBP1006P2 
		LXES03BAA1-131	0.50	6		0.6 x 0.3	0.32	
		LXES03BAA1-110	5	5.6		0.6 x 0.3	0.32	
		LXES03TBB1-141	0.45	7		0.6 x 0.3	0.2	0201 
		2	LXES1TBCC2-004	0.55	6	9	1.6 x 1.6	0.55
	LXES1TBBB2-013		6		9			
	4	LXES2SBAA4-016	0.55	6	9	2.9 x 2.8	1.45	
		LXES2SBBB4-026	1.00	6	9			
		LXES2SBAA4-114	12	6	9			
		LXES2TBCC4-028	0.50	6	10			
	6	LXES4XBAA6-027	0.25	6	10	4.9 x 3.0	1.1	MSOP-8 
		LXESEABAA6-046	0.27	6		4.1 x 2.0	0.4	DFN4120-P10 
				**at 1mA				

### Application Examples

**USB2.0 Single Port Protection**



**Antenna Port Protection**

