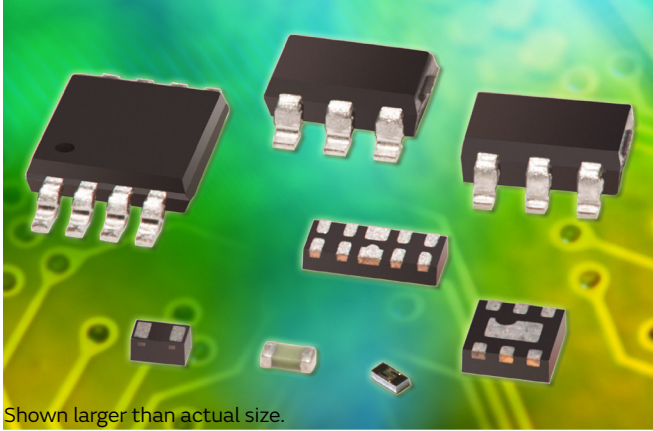
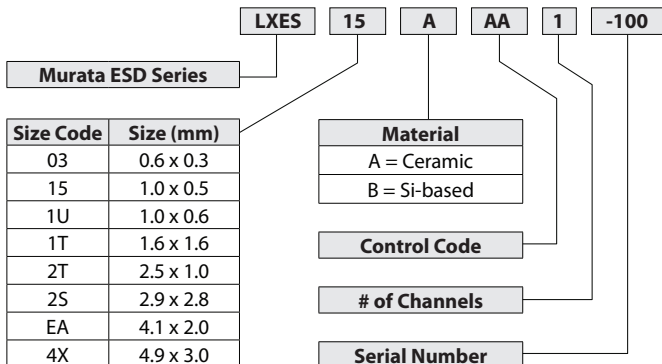


LXES Series

ESD Protection Devices



Part Numbering System



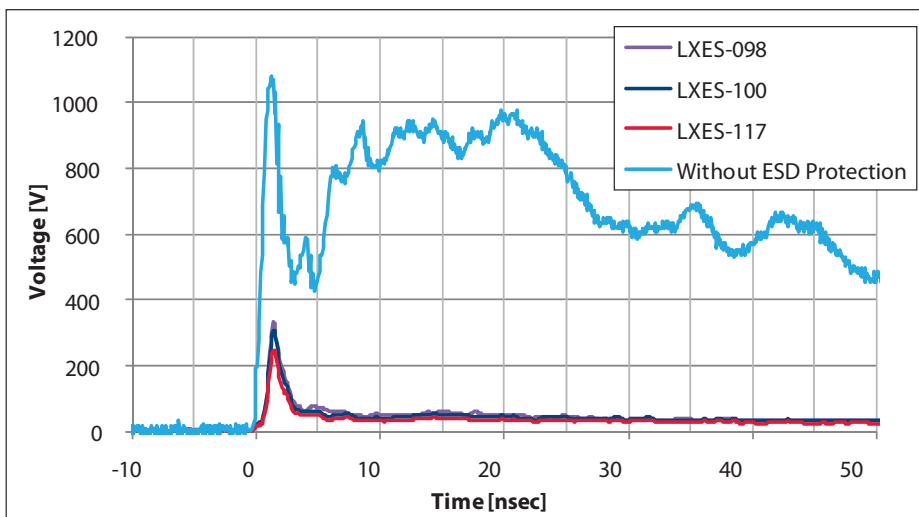
Features

- 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)

Applications

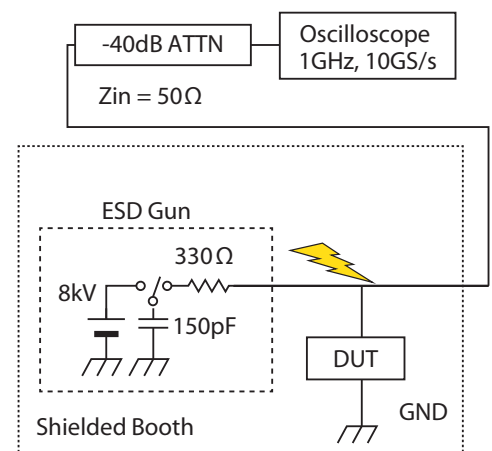
- HDMI 1.3, USB 2.0, USB 3.0, IEEE 1394b
- Cell Phones, Computers, and Peripherals
- A/V Equipment, STB, DVD, HDTV, etc.
- Antenna Ports

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



LXES Series

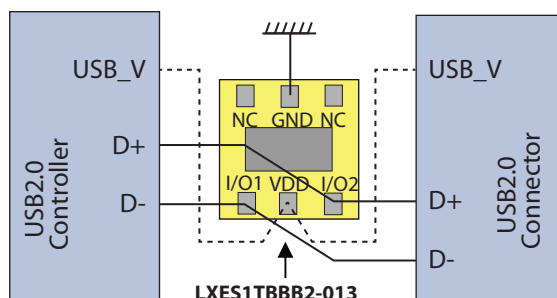
ESD Protection Devices

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	1	LXES15AAA1-117	0.05			1.0 × 0.5	0.33	0402 	
		LXES03AAA1-098	0.05			0.6 × 0.3	0.33	0201 	
LXES1UBBB1-008		0.50	7	10	1.0 × 0.6	0.6			
LXES1UBAB1-007			18		1.0 × 0.6	0.6			
LXES1UBAA1-096		7.50	5.8		1.0 × 0.6	0.55		FBP1006P2	
LXES03BAA1-131		0.50	6		0.6 × 0.3	0.32			
LXES03BAA1-110		5	5.6		0.6 × 0.3	0.32		DFN0603-P2	
LXES03TBB1-141		0.45	7		0.6 × 0.3	0.2	0201 		
Silicon	2	LXES1TBCC2-004	0.55	6	9	1.6 × 1.6	0.55		
		LXES1TBBS2-013		6	9				
	4	LXES2SBAA4-016	0.55	6	9	2.9 × 2.8	1.45		
		LXES2SBBB4-026	1.00	6	9				SOT23-5 
		LXES2SBAA4-114	12	6	9			DFN2510-P10 	
		LXES2TBCC4-028	0.50	6	10			2.5 × 1.0	0.6
	6	LXES4XBAA6-027	0.25	6	10	4.9 × 3.0	1.1	DFN4120-P10 	
		LXESEABAA6-046	0.27	6		4.1 × 2.0	0.4		
					**at 1mA				

Application Examples

USB2.0 Single Port Protection



Antenna Port Protection

