

ESDL2012

Extremely Low Voltage, Bidirectional ESD Protection Device in 0201 form factor featuring ultra low insertion loss for Thunderbolt, USB 3.x and PCIe

Product Overview

For complete documentation, see the data sheet.

The ESDL2012 is designed to protect voltage sensitive components that require low capacitance from ESD and transient voltage events. Excellent clamping capability, low capacitance, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its low capacitance, the part is well suited for use in high speed data line applications.

Features

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- Low Clamping Voltage
- X4DFN (0201 - 0.6 x 0.3 mm) package
- Standoff Voltage: 1.0 V
- IEC6100042 Level 4 ESD Protection
- These Devices are PbFree, Halogen Free/BFR Free and are RoHS Compliant

Applications

- USB 3.x & 4.0 Tx/Rx Data Line Pairs
- Thunderbolt 3.0 Data Line Pairs
- PCIe 3.x & 4.0 Data Lines

End Products

- Laptops
- Tablets
- Desktops
- Smartphones
- Wearables

Part Electrical Specifications

Product	Status	Compliance	Interface	Number of Lines	Direction	C Max (pF)	V _{(BR) Min} (V)	V _{RWM Max} (V)	I _{R Max} (μA)	P _{PK Max} (W)	Package Type	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
ESDL2012MX4T5G	Active		USB 3.0	1	Bidirectional	0.23	1.4	1	0.5	0.313	DFN -2	152 AX.PDF	1	260	REEL	1000
SZESDL2012MX2WT5G	Active		USB 3.0	1	Bidirectional	0.35	1.4	1	0.5	0.312	X2DFNW2 1.60x0.80	717A B.PDF	1	260	REEL	800