

Product Overview

ESD7L: ESD Protection Diode, Low Leakage, Fast Response Time, with Clamping Capability

For complete documentation, see the data sheet.

The ESD7L5.0DT5G is designed to protect voltage sensitive components from damage due to ESD in applications that require ultra low capacitance to preserve signal integrity. Excellent clamping capability, low leakage and fast response time are combined with an ultra low diode capacitance of 0.5 pF to provide best in class protection from IC damage due to ESD. The ultra small SOT-723 package is ideal for designs where board space is at a premium. The ESD7L5.0DT5G can be used to protect two uni-directional lines or one bi-directional line. When used to protect one bi-directional line, the effective capacitance is 0.25 pF. Because of its low capacitance, it is well suited for protecting high frequency signal lines such as USB2.0 high speed and antenna line applications.

Features

- Small Body Outline Dimensions: 0.047" x 0.047" (1.20 mm x 1.20 mm)
- IEC61000-4-2 Level 4 ESD Protection
- Low Capacitance 0.5 pF Typical
- Low Clamping Voltage
- Low Body Height: 0.020" (0.5 mm)
- Response Time is Typically < 1.0 ns
- Low Leakage

Benefits

- Excellent for space constraint design
- System level ESD protection

Applications

- USB 2.0

End Products

- USB 2.0

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	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
ESD7L5.0DT5G	0.276	Pb-free Halide free non AEC-Q and PPAP	Active	DVI eSATA 2.0 USB 2.0 USB 3.0	2	Unidirectional	0.9	5.4	5	1	12	SOT-723-3
SESD7L5.0DT5G	0.2667	AEC Qualified PPAP Capable Pb-free Halide free	Active	USB 2.0	2	Unidirectional	0.9	5.4	5	1	12	SOT-723-3

For more information please contact your local sales support at www.onsemi.com.

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