DVIULC6-2x6
HDMIULC6-2x6 and SATAULC6-2x6

Ultra Low Capacitance 2 line ESD protection

Main applications
■ DVI and HDMI ports up to 1.65 Gb/s
■ SATA port up to 3.2 Gb/s
■ EEE1394a, b or c port up to 3.2 Gb/s
■ Portable electronics

Description
The DVIULC6-2x6, HDMIULC6-2x6 and SATAULC6-2x6 are a monolithic Application Specific Discrete dedicated to ESD protection of high speed interfaces. Its ultra low line capacitance secures a high level of signal integrity without compromising in protecting downstream sensitive chips against the most stringent characterized ESD strikes.

Features
■ 2 data lines ± 15kV ESD protection
■ Protect 5 V VBUS when applicable
■ Ultra low capacitance: 0.6 pF at F = 825 MHz
■ Very low leakage current: 0.5 µA max.
■ Fast response time compared with varistor
■ SOT-666 package: 1.60 x 1.60 x 0.55 mm
■ µQFN 6 leads package: 1.45 x 1.00 x 0.55 mm
■ RoHS compliant

Benefits
■ ESD protection, IEC 61000-4-2 level 4 compliant
  − > ± 15 kV Contact discharge
  − > ± 15 kV Air discharge
■ Minimized rise and fall times for maximum data integrity
■ Consistent D+ / D- signal balance:
  − Best capacitance matching tolerance I/O to GND = 0.015 pF for ultra low inter pair skew
  − Best capacitance matching tolerance I/O to I/O = 0.007 pF for ultra low intra pair skew
  − Matching high bit rate DVI, HDMI, SATA and IEEE 1394 requirements
■ Low PCB space consuming
■ Low leakage current for longer operation of battery powered devices
■ High reliability offered by monolithic integration

Complies with these standards:
■ IEC 61000-4-2 level 4
  − 15 kV air discharge
  − 8 kV (and up to 15 kV) contact discharge

Order code

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1 Revision history

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