# PORTNOTE<sup>®</sup>

# HDMI<sup>®</sup> Port

# HDMI 2.0 - ESD & Overcurrent Protection

Bourns® PortNote® solutions provide protection recommendations for typical port threats.

### **Solution Products**





CDSOT236-0504C



#### Request Sample 🏾 🌠

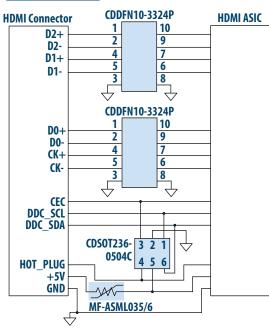
To order samples, click on the "Request Sample" button online.

#### **Objective**

HDMI 2.0 offers an enhanced throughput of 18 Gbps for video, audio and Ethernet in applications such as Ultra High Definition Television (UHDTV), set-top boxes, DVD players, PCs, gaming stations, etc. Robust ESD protection that does not affect the impedance of the differential transmission lines is required. Overcurrent and surge protection of the 5 V supply from spikes caused by hot plugging of the connector is also required.

## Solution

2 TVS Diode Arrays: CDDFN10-3324P 1 TVS Diode Array: CDSOT236-0504C 1 Multifuse® PTC Resettable Fuse: MF-ASML035/6



#### Compliance

IEC 61000-4-2 Level 4 (8 kV / 15 kV)

### **Alternate Recommendations**

Two TVS Diode Arrays: <u>CDDFN10-0506N</u> with one Multifuse® PTC Resettable Fuse: <u>MF-PSHT020KX</u>.

Other PortNote® Solutions:

- <u>HDMI: HDMI 1.4 ESD &</u>
- Overcurrent Protection

#### Benefit

This solution provides IEC 61000 Level 4 ESD protection without impairing the HDMI signal.

The schematic shown here illustrates the application protection and does not constitute the complete circuit design. Customers should verify actual device performance in their specific applications.

#### www.bourns.com

# BOURNS

Americas: Tel +1-951 781-5500 Email americus@bourns.com EMEA: *Tel* +36 88 885 877 *Email* eurocus@bourns.com Asia-Pacific: Tel +886-2 256 241 17 Email asiacus@bourns.com

COPYRIGHT© 2022 • BOURNS, INC. • 8/22 • e/K2251 • "PortNote" is a registered service mark of Bourns, Inc. "Bourns" and "Multifuse" are registered trademarks of Bourns, Inc. in the U.S. and other countries. "HDMI" is a registered trademark of its owner.