

# PORTNOTE® SOLUTIONS

# **Vectored VDSL2 Protection for Class AB Driver with Active Termination**

## **Solution Products**



TCS-DL004-250-WH



CD143A-SR12



2036-42-SM-RPLF



2015-35-SMC-RPLF

# **Design Kit**



PN-DESIGNKIT-50

## **Objective**

VDSL2 uses frequencies of up to 30 MHz to provide data rates exceeding 100 Mbit/s simultaneously in both upstream and downstream directions. This solution protects these ports against lightning surge and AC power contact threats.

#### Solution

- 1 TCS<sup>™</sup> High-Speed Protector: TCS-DL004-250-WH
- 1 TVS Diode Array: CD143A-SR12
- 1 Gas Discharge Tube (GDT): 2036-42-SM-RPLF or
- 1 GDT with FLAT™ Technology: 2015-35-SMC-RPLF

## **Compliance**

ITU-T K.20, K.21 Basic ITU-T K.20, K.21 Enhanced

### Alternate Recommendations

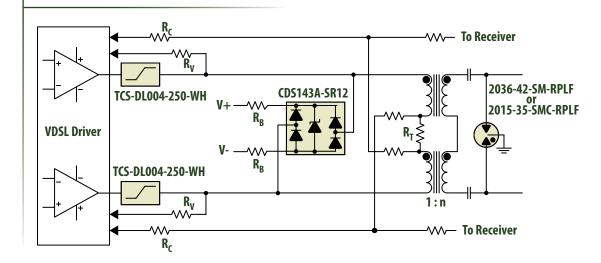
Other PortNote® Solutions:

- VDSL Line Side Protection ITU-T Solution
- VDSL: Line Side Protection
- VDSL: Driver Side Protection

Variations of this circuit are available depending on specific design constraints; contact your local Bourns technical representative for more information.

### Benefit

This solution provides protection on the driver side without impairing the VDSL2 signal.



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

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

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