

April, 2017

## Bourns Releases New PortNote® Solution

### *RF Port - Broadband Equipment Protection*

Bourns is pleased to announce the release of the [RF Port - Broadband Equipment Protection PortNote® Solution](#).

Broadband equipment, for example, cable modem, STB, or wireless modules connected to an external antenna, can utilize RF ports to transmit and receive data and signals. In the outdoor environment, the exposed RF port is susceptible to lightning damage and, hence, requires a high level of surge protection.

This solution consisting of Bourns® Model [2031-23T-SM-RPLF](#) Fast-Acting Gas Discharge Tube (GDT), TBU® HSP Model [TBU-CA050-500-WH](#) and Model [CDSOD323-T05LC](#) TVS Diode Array helps to ensure the 6 kV, 10/700 surge protection. The components were chosen so as to minimize the insertion loss (IL). Different TVS voltage can be selected to accommodate various applications.

There is no design kit associated with this PortNote® Solution. Please contact your local [Bourns Representative](#) or [Bourns Customer Service](#) for further information on ordering the product(s) associated with the solution.

**PORTNOTE® SOLUTIONS**

### RF Port Broadband Equipment Protection

<b>Solution Products</b>  2031-23T-SM-RPLF  TBU-CA050-500-WH  CDSOD323-T05LC	<b>Objective</b> Exposed RF ports require a high level of surge protection and a low insertion loss. This solution offers protection capability of 6 kV, 10/700 (µs wavefront) with minimal insertion loss.	<b>Compliance*</b> 6 kV, 10/700 surge
<b>Solution</b> 1 Fast-Acting Gas Discharge Tube (GDT): 2031-23T-SM-RPLF 1 TBU® High-Speed Protector (HSP): TBU-CA050-500-WH 1 TVS Diode Array: CDSOD323-T05LC	<b>Alternate Recommendations</b> CDSOD323-T05LC for surge systems.	<b>Benefit</b> Provides both overcurrent and overvoltage protection, high-speed performance and low bit-through energy.

**Schematic Diagram:** RF input → GDT (2031-23T-SM) → TVS Diode Array (CDSOD323-T05LC) → Coupler → Transceiver

\*The Bourns Model 2031-23T-SM-RPLF Fast-Acting Gas Discharge Tube (GDT), TBU-CA050-500-WH HSP Model TBU-CA050-500-WH and Model CDSOD323-T05LC TVS Diode Array help to ensure application compliance to a 6 kV, 10/700 surge recommendation. The schematic above illustrates the application protection and does not constitute the complete circuit design. Customer should refer to the data sheet performance for their specific application.

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

For more information, go to [www.bourns.com](http://www.bourns.com) or email: [portnote@bourns.com](mailto:portnote@bourns.com)