

G.Fast

Solution Products





2051-47-SM-RPLE

Customer Premises Equipment (CPE) Protection

Objective

The new G.Fast standard use frequencies as high as 106 MHz to provide data rates up to 1Gbps simultaneously in both the upstream and downstream directions. This solution protects these ports against lightning surge, power induction and AC power contact threats. The protection provides lowest offstate capacitance and improves G.Fast surge resistibility.

Solution

1 Thyristor Surge Protector (TISP): TISP4G024L1W 1 Gas Discharge Tube (GDT) Surge Arrestor: 2051-47-SM-RPLF

Compliance*

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

Alternate Recommendations

Other PortNote® Solutions:

- G.Fast: CO and DPU Side Protection
- 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 for CPE side of G.Fast signal without impairing the signal reliability.



The Bourns model TISP4G024L1W Thyristor Surge Protector and model 2051-47-SM-RPLF Gas Discharge Tube help to ensure an application's compliance to ITU-T K.21 Basic and K.21 Enhanced. These components can withstand 10/700 µs surges as described in ITU-T K.21 Basic and K.21 Enhanced recommendation.

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.



PN-DESIGNKIT-59

Design Kit

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

For more information, go to: **www.bourns.com**

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