Satellite Receiver RF Input
Surge Protection

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

**Solution Products**

- 2051-09-SM-RPLF
- SMCJ20A/SMJL20A
- CC453232-1R0KL

**Objective**

This solution is designed to offer surge protection to the RF input port from a set-top box to a satellite dish. Lightning strikes or near strikes to the building can damage the delicate RF port and the power supply which is fed to the dish.

**Solution**

**Option 1**
1 TVS Diode: SMCJ20A

**Option 2**
1 TVS Diode: SMLJ20A

**Option 3**
1 TVS Diode: SMCJ20A
1 GDT: 2051-09-SM-RPLF
1 Wirewound Chip Inductor: CC453232-1R0KL

**Compliance**

IEC 61000-4-5:
- SMCJ20A alone: 8/20 µs surge 150 A
- SMLJ20A alone: 8/20 µs surge 400 A
- SMCJ20A & 2051-09-SM & CC453232: 8/20 µs surge 2 kA

**Benefit**

This solution provides a low height, high current solution to exposed set-top box applications.

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.

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

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