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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Satellite Receiver RF Input Surge Protection

## Solution Products



2051-09-SM-RPLF



SMCJ20A/SMLJ20A



CC453232-1R0KL

## Design Kit



PN-DESIGNKIT-46

## 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  $\mu$ s surge 150 A

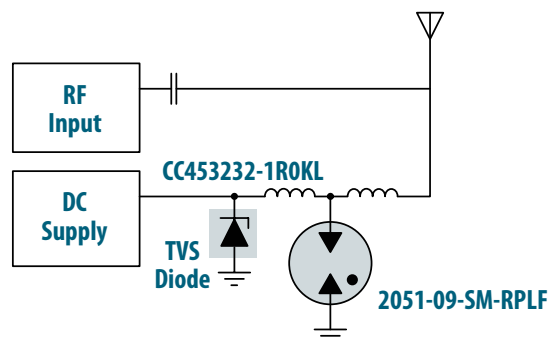
SMLJ20A alone: 8/20  $\mu$ s surge 400 A

SMCJ20A & 2051-09-SM & CC453232:

8/20  $\mu$ s 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.