# PORTNOTE® SOLUTIONS

## **Offline Flyback Converter**

### **Short Circuit Protection**

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

#### **Solution Products**



MF-RHT070-0



#### **Objective**

The objective of this PortNote® Solution is the low-cost overload protection of offline power supplies, by using high temperature Bourns® Multifuse® PPTC Resettable Fuses. Transient overload testing on low-power offline converters can be stressful on the output diode and the transformer. The high turns ratio converts relatively low-peak currents in the primary side into peak currents of several amps on the secondary side, which can destroy the diode and overheat the transformer.

#### **Solution**

1 Multifuse® PPTC Resettable Fuse: MF-USHT075KX or MF-RHT070-0

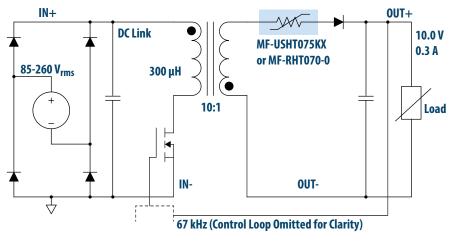
#### **Compliance**

EN 60335, IEC 60730 (low-power circuit test)

The PPTC resettable fuse protects the diode and the transformer during transient overloading by going high ohmic and then resets back to a low ohmic value once the overload is removed. High temperature Bourns® Multifuse® PPTC resettable fuses have temperature coefficients which are half the amount of standard Multifuse® PPTCs, giving them more consistent hold and trip characteristics.

#### **Benefit**

The Bourns® Model MF-USHT075KX or MF-RHT070-0 resettable fuse reduces the need for larger, more expensive diodes. It also reduces the need for larger cores in the transformer.



Request Sample 🎺

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

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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