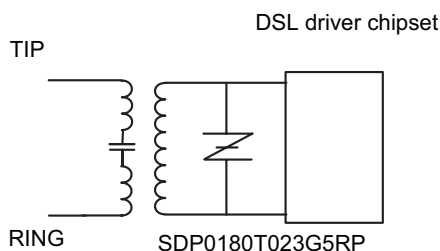




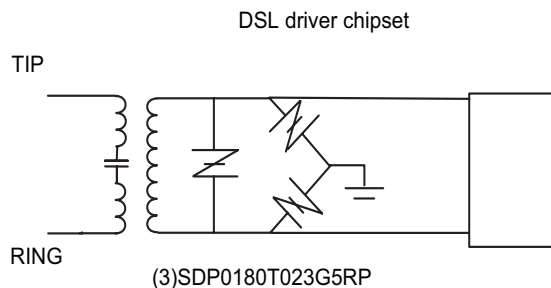
The following schematics show alternate protection solutions for a typical DSL interface that connects to outside wiring. This low profile surface mount SOT23-5 SIDACTor device provides a minimized footprint solution for chip-side protection and is well suited for high density PCB designs

The SIDACTor Device SDPxxx0T023G5RP will protect the interface from lightning induced surges on the chip-side of the coupling transformer. This tertiary protector may be preceded by line-side protection, such as the TeleLink over-current protector and the SDP3500Q38CB overvoltage protector. GDTs may also be used on the line side of the coupling transformer. The flow-through design of the SOT23-5 package is illustrated below. If the interwinding capacitance of the transformer is allowing some common mode events to get coupled across, then the SDPxxx0T023G5RP can be placed in a three-chip mode, as shown below in the differential and common mode protection diagram for additional chip-side protection.

### Differential Protection Diagram



### Differential and Common Mode Protection Diagram



### Recommended PCB Layout

#### SDP Series in the SOT23-5

