

Secondary protection for DSL lines

Data Brief

Features

- Low capacitance devices:
 - Delta $C_{typ} = 3.5 \text{ pF}$ for 8 V, 10 V, 16 V, and 24 V
- High surge capability: 30 A - 8/20 μs
- Voltage: 8 V, 10 V, 16 V, and 24 V
- RoHS package

Benefits

- Transil mode will clamp ESD and low energy surges without disturbing line drivers during transmission while high energy surges will be short circuited to avoid line driver damage.
- The low capacitance makes it suitable for ADSL2+ and VDSL signals

Complies with the following standards

- IEC 61000-4-2, Level 4:
 - 15 kV (air discharge)
 - 8 kV (contact discharge)
- MIL STD 883G-Method 3015-7: Class 3
 - 25 kV (human body model)
- IEC 61000-4-5, Level 2:
 - 24 A, 8/20 μs

Applications

- Secondary protection to be located after the transformer of ADSL and VDSL modem either on central office or subscriber side.
- Replaces crowbar protection located on primary side.

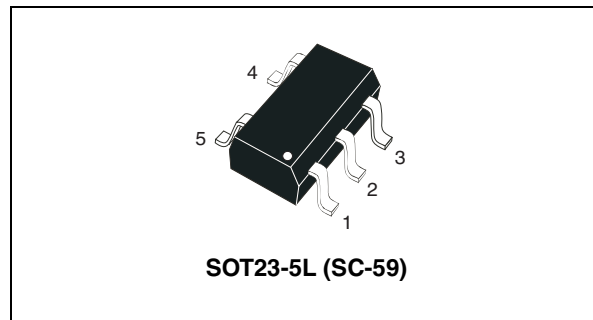
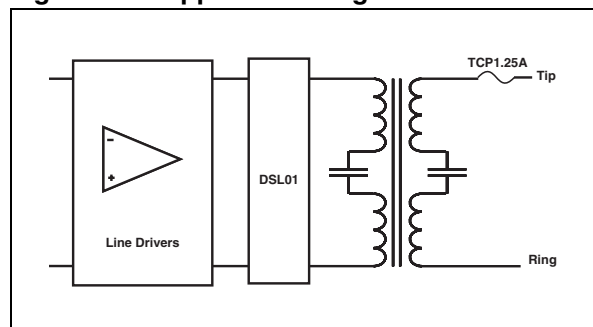


Figure 1. Application diagram



Description

This device combines a Transil™ used for low energy surges and a Trisil™ for high energy surges. This combination provides a surge / capacitance trade-off compatible with high debit rates such as ADSL2+ and VDSL. The combination on the same die makes it compatible with SOT23-5L package.

TM: Transil and Trisil are trademarks of STMicroelectronics

1 Ordering information

Table 1. Ordering information

Order code	Marking	Package	Weight	Base qty	Delivery mode
DSL01-008SC5	XT08	SOT23-5L	16 mg	3000	Tape and reel
DSL01-010SC5	XT12	SOT23-5L	16 mg	3000	Tape and reel
DSL01-016SC5	WT16	SOT23-5L	16 mg	3000	Tape and reel
DSL01-024SC5	WT24	SOT23-5L	16 mg	3000	Tape and reel

2 Revision history

Table 2. Revision history

Date	Revision	Changes
28-Aug-2007	1	Initial release.
10-Apr-2008	2	Replaced order code DSL01-012SC, with DSL01-010SC.

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