



# DSL70

## Superior ESD & Transient protection on ADSL, VDSL and other broadband applications

### Best in market protection solution supporting efficient BOM optimization.

DSL70 is the protection diode selected to be integrated into the newest ADSL/VDSL schematics from leading design groups.

Customers rate DSL70 as preferred solution because of its very low forward voltage at high peak currents, lowest capacitance and overall superior surge absorption performance than any other comparable device in the market. This benchmark performance in combination with a very competitive price makes the DSL70 the device of choice in the protection arena, well ahead of others.

### Applications

Low capacitance DSL 70 diode is designed to protect sensitive equipment in applications like:

- xDSL (ADSL, VDSL) interfaces (on secondary side of transformer)
- ISDN
- WLAN
- LAN,
- I2C Bus
- Microcontroller inputs
- Video

Ordering Code: SP000362209

Application Board: SP000417036

### Product Summary

Parameter	Ratings	Conditions
$V_{ESD}$ (Electrostatic Discharge)	±15kV	IEC61000-4-2 (contact)
$V_{EFT}$ (Electro Fast Transients)	4 kV / 80A	IEC61000-4-4 (5/50ns)
Surge	27A	IEC61000-4-5 (8/20µs)
Forward Clamping Voltage (Vfc)	6V	At surge 27A (8/20µs)
Capacitance (typical)	2.5pF	1MHz, 0V

### Customer Values

- Highly reliable protection against transients and ESD events exceeding IEC standard
- Lowest forward-clamping voltage while handling the highest surge currents
- Lowest capacitance to fulfill quality requirements of DSL high-speed signal
- Optimized to enable compliance with telecommunication regulatory requirements like:
  - ITU K20/21 Surge: 10/700us, 4000V (with gas discharge tube, GDT) 10/700us, 1500V (without GDT)
  - ITU K20/21 Power Induction: 1sec, 600V, 600 Ohm (with GDT) 0.2sec, 600V, 600Ohm (without GDT)
  - ITU K20/21 Power Contact: 15min, 230V, 160 Ohm (without GDT)
- Designed in SOT143 (SC-61A) market standard package for two-line protection

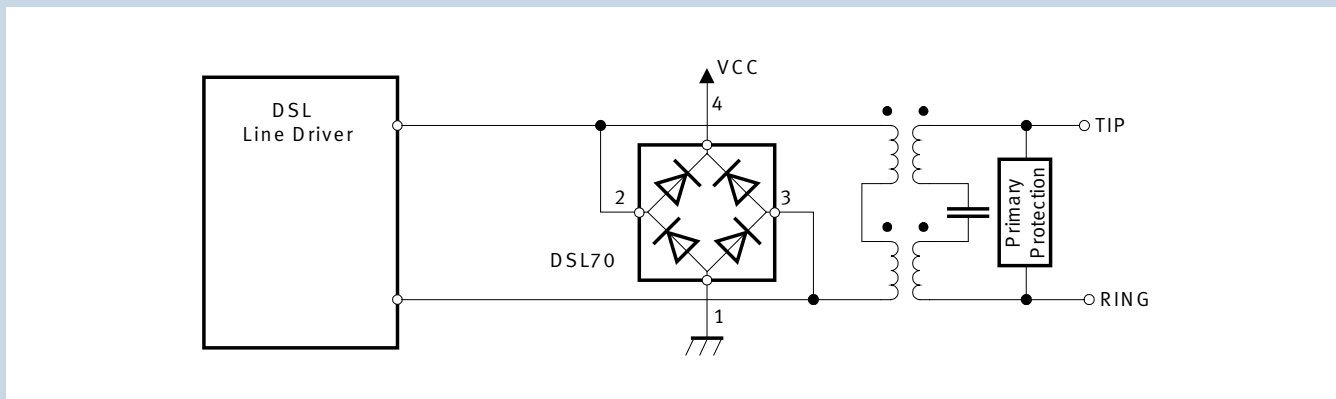
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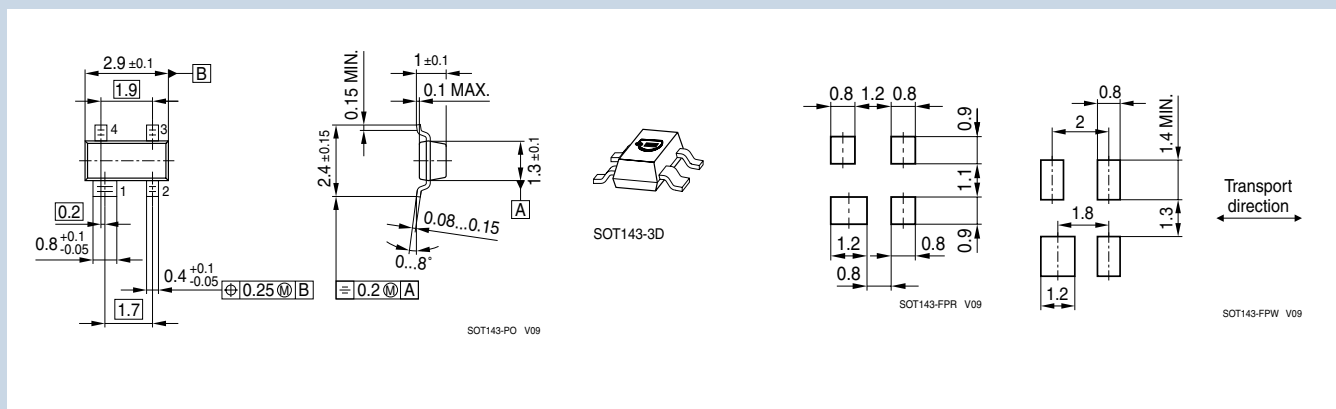
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Application Example: Efficient protection on xDSL with DSL70 diode



Package Outline and Footprint



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