

D6037

SIL2 Switch/Proximity Transistor-Out Repeater

The Switch/Proximity Detector Repeater D6037 is a module suitable for applications requiring SIL 2 level in safety related systems for high risk industries. The unit can be configured for switches or proximity detectors and repeats the input state to an open-collector transistor. The selectable fault detection circuit is available for proximity sensors or switches equipped with end of line resistors. If needed, the output can also be inverted.

FEATURES

- SIL 2 / SC 3
- High frequency transistor output
- Field open and short circuit detection
- In-field programmability by DIP Switch
- Three port isolation, Input/Output/Supply
- High Density, two channels per unit

ORDERING INFORMATION

Ordering codes

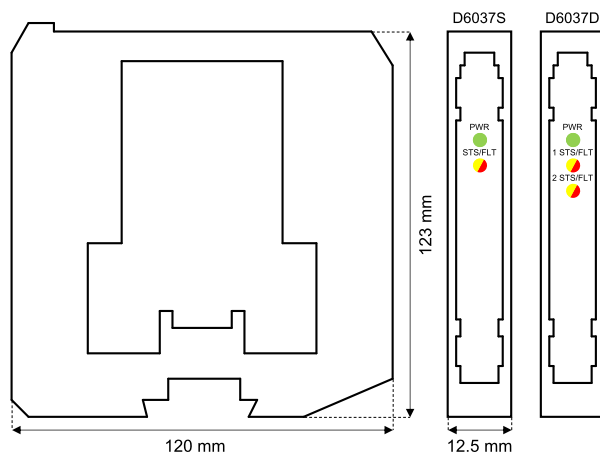
D6037S: 1 channel

D6037D: 2 channels

Accessories

Bus Connector JDFT049, Bus Mounting Kit OPT5096.

OVERALL DIMENSIONS



TECHNICAL DATA

Supply

24 Vdc nom (18 to 30 Vdc), reverse polarity protected.

Current consumption: 22 mA (D6037D), 12 mA (D6037S), @ 24 Vdc with short circuit input and transistor closed, typical.

Power dissipation: 0.53 W (D6037D), 0.30 W (D6037S), @ 24 Vdc with short circuit input and transistor closed, typical.

Input

Input switching current levels: ON ≥ 2.1 mA, OFF ≤ 1.2 mA.

Fault current levels: open fault ≤ 0.2 mA, short fault ≥ 6.8 mA.

Input equivalent source: 8 V 1 k Ω typical (8 V no load, 8 mA short).

Output

Voltage free SPST optocoupled open-collector transistor.

Open-collector/drain rating: 100 mA @ 35 Vdc (≤ 1.5 V voltage drop).

Leakage current: ≤ 50 μ A @ 35 Vdc.

Response time: ≤ 100 μ s.

Frequency response: 5 kHz maximum.

Isolation

In/Out 1.5 kV; In/Supply 1.5 kV; In/In 500 V; Out/Supply 500 V; Out/Out 500 V.

Environmental conditions

Operating temperature: temperature limits -40 to $+70$ $^{\circ}$ C.

Storage temperature: temperature limits -45 to $+80$ $^{\circ}$ C.

Mounting

DIN-Rail 35 mm, with or without Power Bus or on custom Term. Board.

Weight: about 125 g (D6037D), 110 g (D6037S).

Connection: by polarized plug-in disconnect screw terminal blocks to accommodate terminations up to 2.5 mm² (13 AWG).

Dimensions: Width 12.5 mm, Depth 123 mm, Height 120 mm.

FUNCTION DIAGRAM

Additional installation diagrams may be found in Instruction Manual.

