

## Electro-mechanical switch 1x1 or 1x2, single mode and multi mode

### Features

- Smallest size
- Low insertion loss
- Fast switching speed
- High reliability
- Single mode / multi mode available
- Low PDL
- RoHS compliance



### Applications

- Optical network protection and restoration
- Reconfigurable add/drop multiplexers
- Wavelength router
- Optical network monitoring
- Transmission equipment protection
- Research and development

### Description

Cubo's 1x1 / 1x2 Optical Switches are based on opto-mechanical technology with proven reliability. With the state-of-the-art technology, the performance is optimized for a wide range of fiber-optic applications.

Fully complied with Telcordia GR-1073-CORE and complied with applicable items of Telcordia GR-1221-CORE standard.

### Technical Specifications

Electro-Optical Characteristics		
Parameter	single mode	multi mode
Wavelength Range (nm)	1280 - 1340 1520 - 1625	850 / 1300
Insertion Loss (dB), typ.	≤ 0.6	≤ 0.5
Insertion Loss (dB), max.	≤ 1.0	≤ 0.8
Back Reflection (dB)	≤ -45	-
PDL (dB)	≤ 0.1	-
Cross-Talk (dB)	≤ -80	
Switching Time (ms)	≤ 5.0	≤ 5.0
Repeatability (dB)	± 0.05	

Mechanical & Environmental		
Parameter	single mode	multi mode
Operating Temperature Range (°C)	- 5 - 70	- 20 -75
Humidity (%RH)	5 - 85	
Durability (cycles)	> 10 <sup>7</sup>	
Dimensions (HmmxWmmxLmm)	8.8x11x30	
Weight (g)	< 20	

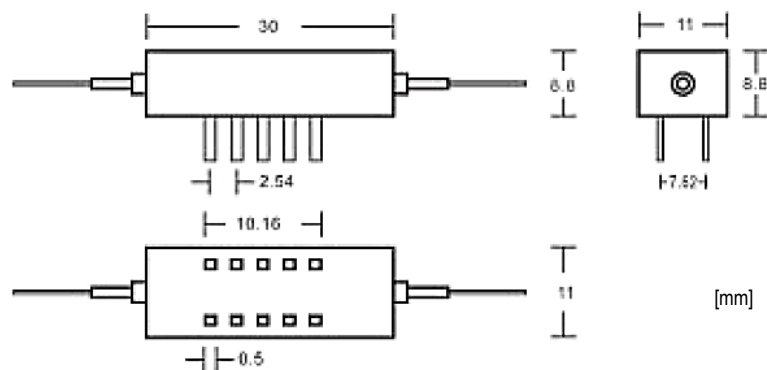
1. All Specifications referenced without connectors
2. Measured at 1550 nm
3. Add 0.2 dB for Insertion loss in 1310/1550 nm dual wavelength

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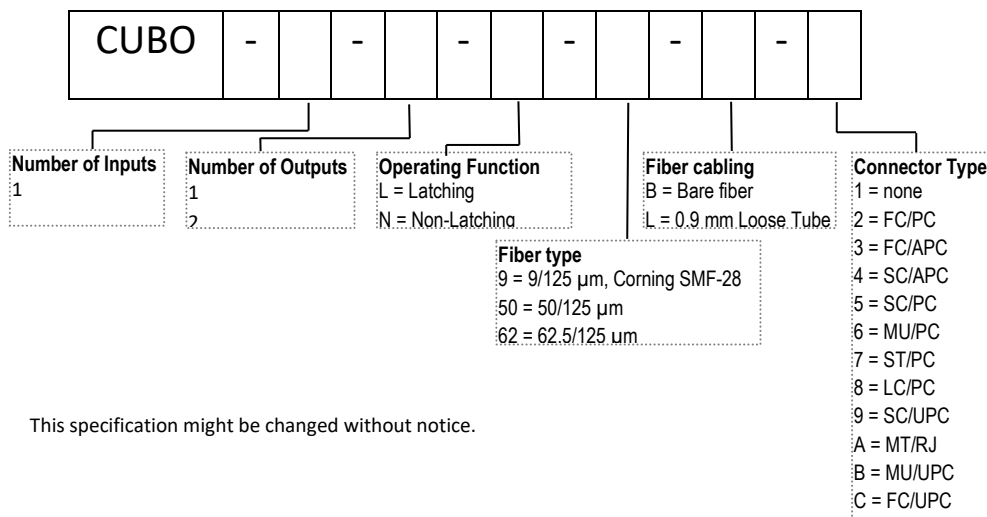
Electrical Characteristics	single mode	multi mode
Parameter		
Coil Resistance ( $\Omega$ )	125 ( $\pm 10\%$ )	
Operating Current (mA), typ	40 ( $\pm 10\%$ )	
Operating Voltage (V), typ.	5.0	
Operating Voltage (V), range	4.5 - 5.5	
Power-Consumption (W), typ *	0.2	

\* When + 5V DC signal is applied to only coil

## Outline Drawing



## Ordering Information



This specification might be changed without notice.

HUBER+SUHNER Cube Optics AG  
is certified according to ISO 9001.

### WAIVER

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.

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