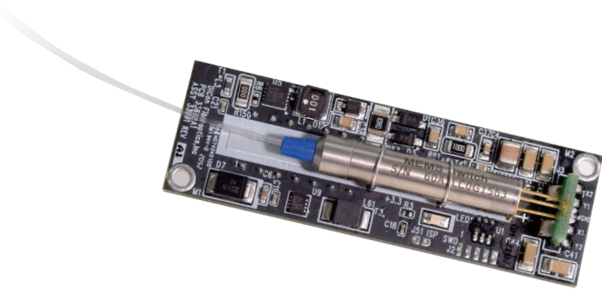


# PM MEMS 1xN OPTICAL SWITCH

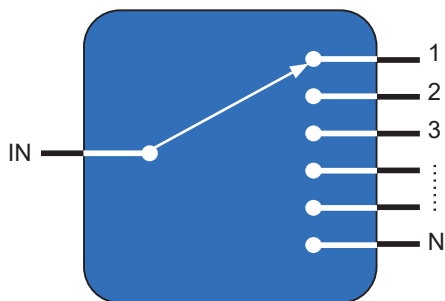
## With External PCB



DiCon's PM MEMS 1xN Optical Switch provides channel selection between a single input fiber and N output fibers. At the core of the switch is DiCon's proprietary MEMS chip; an electrostatically driven mirror implemented using single-crystalline silicon and a stiction-free design. The mirror is capable of rotating on two axes, allowing the input light to be redirected back to any desired output. The switch is bi-directional and can be used as a Nx1 selector switch.

- Proven MEMS Durability and Reliability
- Compact Form Factor
- High Extinction Ratio
- Lifetime > 1 Billion Switch Cycles

### MEMS 1xN OPTICAL SWITCH



Up to 1x8

## ORDERING INFORMATION

MLC -  -  -  -  - 2B -  -

### Switch Configuration

**1xN** 1xN  
Specify N≤8

### Control Interface

**I2C** I<sup>2</sup>C  
**TTL** TTL

### Wavelength Range

**13** 1290 - 1330 nm  
**15** 1530 - 1570 nm  
**16** 1570 - 1610 nm

### Connector Key Orientation

**PMF** Fast axis  
**PMS** Slow Axis  
**PMN** No Connectors

### Fiber and Jacket Type

**2B** 9/125 mm Panda fiber with 250 mm buffer

### Connector Type

**FC/SPC** FC/SPC  
**FC/APC** FC/APC  
**N** None

*Other connector types available upon request*

### Pigtail Length

**1** 1 Meter  
**X** Specify X Meters

*Tolerance is +/- 0.1 m*

# PM MEMS 1XN OPTICAL SWITCH

## With External PCB

### OPTICAL SPECIFICATIONS<sup>1</sup>

Insertion Loss <sup>2</sup>	Up to 1x2	1.0 dB max.
	Up to 1x4	1.1 dB max.
	Up to 1x8	1.2 dB max.
Crosstalk <sup>3</sup>		-50 dB max.
Back Reflection		-50 dB max.
TDL		0.25 dB max.
WDL <sup>4</sup>		0.30 dB max.
Extinction Ratio <sup>5</sup>		18 dB min.
Switching Time		30 ms max.
Repeatability <sup>6</sup>		+/- 0.05 dB max.
Durability		10 <sup>9</sup> cycles min.
Optical Power		500 mW max.
Fiber Type		Panda Fiber

1. Specifications are without connectors.
2. IL is measured at CWL at room temperature.
3. Power off isolation is same as crosstalk.
4. Wavelength Dependent Loss (WDL) is measured in a +/- 20 nm range.
5. Extinction Ratio ratio with connectors is 15 dB min.
6. Repeatability is defined over 100 cycles.

### ELECTRICAL SPECIFICATIONS

Latching Type	non-latching
Control Type	I <sup>2</sup> C and TTL
Vcc Voltage	12 VDC
Power Consumption	700 mW max.
Vcc Damage Threshold	15 VDC

Dimensions in mm

