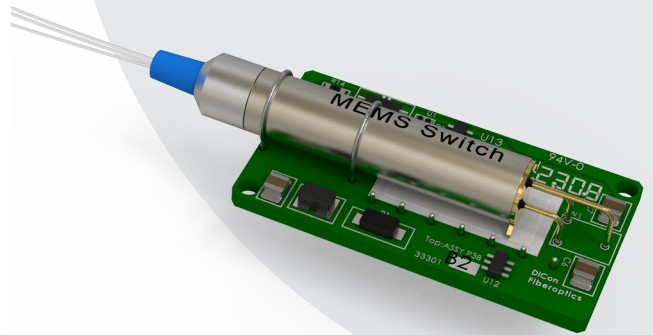


MEMS 1xN OPTICAL SWITCH WITH EXTERNAL PCB

DiCon's MEMS 1xN Optical Switch allows channel selection between an input fiber and up to N output fibers. The switch is bi-directional and can also be used as a Nx1 selector switch. Built using DiCon's industry proven MEMS fiber optic switch technology, this optical switch offers highly reliable, durable, long-life operation in a compact, OEM package.

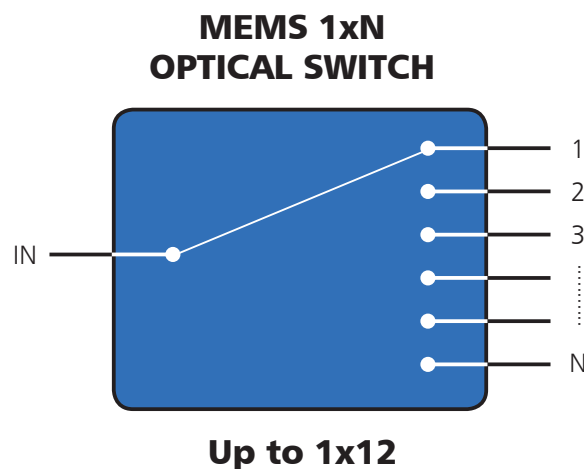


FEATURES

- Drop-in Replacement for DIP Option
- Proven MEMS Durability and Reliability
- Compact Form Factor
- Fast Switching Time
- TTL Parallel or I2C Serial Control Interface
- Qualified to GR-1221

APPLICATIONS

- Optical Communications
- Fiber Sensing
- Bio-medical Instrumentation
- Video Distribution



MEMS 1XN OPTICAL SWITCH WITH EXTERNAL PCB

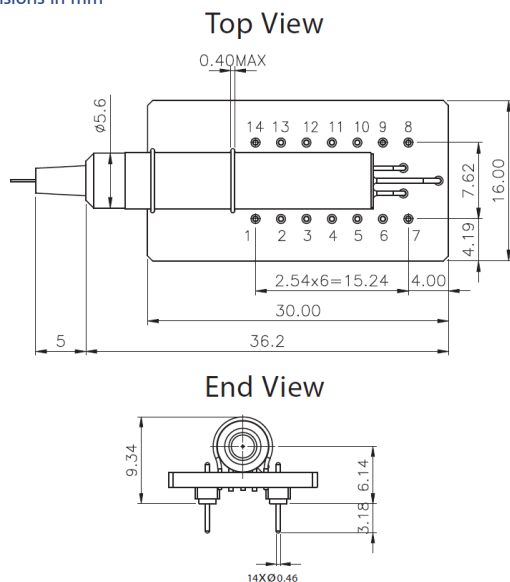
OPTICAL SPECIFICATIONS ¹

PARAMETER		RATING
Insertion Loss ^{2,3,4}	1x2, 1x4	0.4 dB typ. / 0.6 dB max.
	1x8	0.4 dB typ. / 0.7 dB max.
	1x12	0.4 dB typ. / 0.8 dB max.
Crosstalk ⁵		-50 dB max.
Back Reflection		-50 dB max.
TDL		0.30 dB max.
WDL ⁶	1x2, 1x4, 1x8	0.20 dB max.
	1x12	0.30 dB max.
PDL		0.10 dB max.
Repeatability ⁷		0.02 dB max.
Optical Power		500 mW max.
Durability		10 ⁹ cycles min.
Switching Time	1x2	10 ms max.
	1x4, 1x8	15 ms max.
	1x12	20 ms max.
Operating Temperature		-5 to 70 °C
Storage Temperature		-40 to 85°C
Fiber Type		9/125 um Singlemode

- Specifications are without connectors.
- IL is measured at CWL, 23°C.
- IL is for standard opaque model.
- IL is for single-band. Dual-band adds 0.1 dB.
- Power off isolation is same as crosstalk.
- WDL is measured in a +/- 20nm range at 23°C.
- Repeatability is defined after 100 cycles.

MECHANICAL SPECIFICATIONS

Dimensions in mm



ORDERING INFORMATION

MSP - - - - **9/BF** - -

Product Code

MSP MEMS Switch with PCB

Switch Configuration

1xN 1xN Switch

Specify N, where N ≤ 12

Control Interface

TTL TTL

I²C I²C

Wavelength Range

13 1290 - 1330 nm

15 1530 - 1570 nm

16 1570 - 1610 nm

13/15 1290 - 1330 & 1530 - 1570 nm

15/16 1530 - 1570 & 1570 - 1610 nm

Fiber and Jacket Type

9/BF 9/125 um Singlemode, Bare Fiber

Or other equivalent 9 um Singlemode fiber

Connector Type

FC FC/UPC

FC/APC FC/APC

N None

Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

Pigtail Length

1 1 Meter

X Specify X Meter

Tolerance is +/- 0.05 m

ELECTRICAL SPECIFICATIONS

PARAMETER	RATING
Latching Type	non-latching
Control Type	I ² C and TTL
Vcc Voltage	12 VDC
Power Consumption	170 mW max.
Vcc Damage Threshold	15 VDC