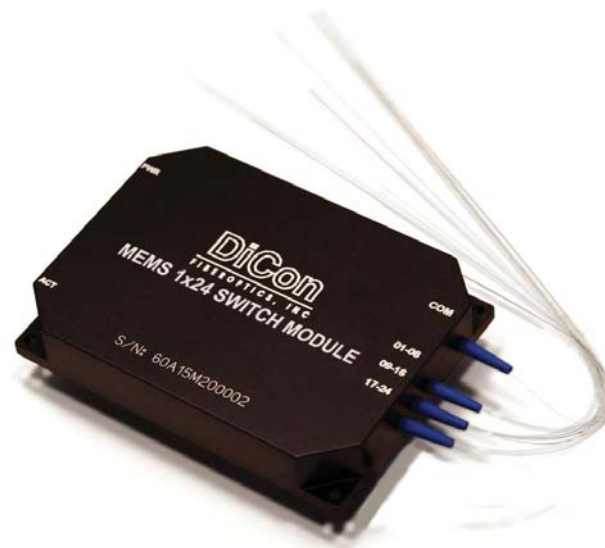


MEMS 1xN OPTICAL SWITCH

DiCon's MEMS 1xN Optical Switch is an industry proven fiber optic switch with excellent durability and reliability. It allows channel selection between a single input fiber and N output fibers, and can be specified for any 1xN size from 1x2 up to 1x24. In addition, this optical switch is bi-directional and can be used in either a 1xN or Nx1 direction.



FEATURES

- Proven MEMS Durability and Reliability
- Compact Form Factor
- Fast Switching Time

APPLICATIONS

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



MEMS 1xN OPTICAL SWITCH

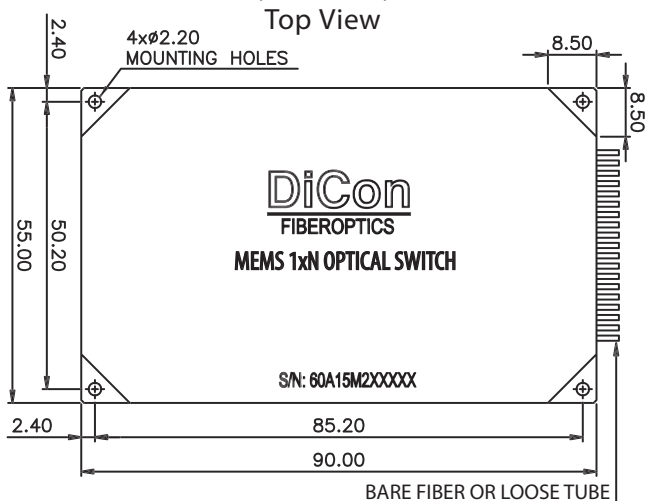
OPTICAL SPECIFICATIONS¹

PARAMETER		RATING
Insertion Loss ^{2,3}	1x2, 1x4, 1x8	0.8 dB max.
	1x12	1.2 dB max.
	1x16, 1x24	1.5 dB max.
Crosstalk ⁴		-50 dB max.
Back Reflection		-50 dB max.
Switching Time		30 ms max.
TDL		0.40 dB max.
WDL ⁵		0.30 dB max.
PDL ⁶		0.10 dB max.
Repeatability ⁷		0.04 dB max.
Durability		10 ⁹ cycles min.
Optical Power		500 mW max.
Operating Temp		-5 to 70°C
Storage Temp		-40 to 85°C
Fiber Type		9/125 μm single mode

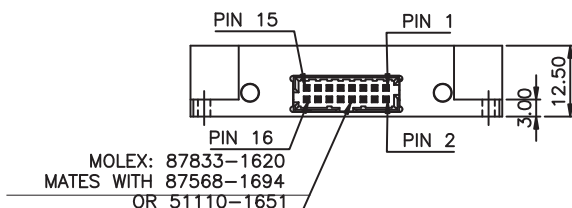
- Specifications are without connectors.
- IL is measured at CWL, 23°C.
- IL is for single-band. Dual-band adds 0.2 dB.
- Power off isolation is same as crosstalk.
- WDL is measured in a +/- 20nm range at 23°C.
- PDL is for single-band. Dual-band adds 0.05 dB.
- Repeatability is defined after 100 cycles.

MECHANICAL DIMENSIONS

(Units: mm)



Left Side View



ORDERING INFORMATION

MS2 - □ - □ - □ - □ - □ - □

Product Code

MS2 MEMS Switch

Switch Configuration

1xN 1xN, Specify N≤24

Control Interface

I²C I²C
RS2 RS232
TTL TTL

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 Corning SMF-28, Bare fiber
9/LT Corning SMF-28, Loose-tube

Or other equivalent 9 μm Singlemode

Connector Type

FC/SPC FC/SPC
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 Meters

Tolerance is +/- 0.05 m

ELECTRICAL SPECIFICATIONS

PARAMETER		RATING
Latching Type		non-latching
Control Type		I ² C, RS232 or TTL
Vcc Voltage	I ² C, RS232	12 VDC
	TTL	5 VDC
Power Consumption	I ² C, RS232	700 mW max.
	TTL	1.5 W max.
Connector Type		Molex 87833-1620