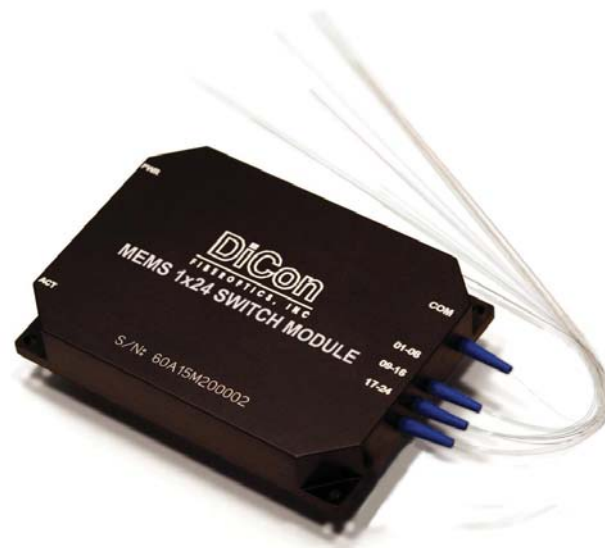


# MEMS 1xN OPTICAL SWITCH

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 SPECIFICATIONS<sup>1</sup>

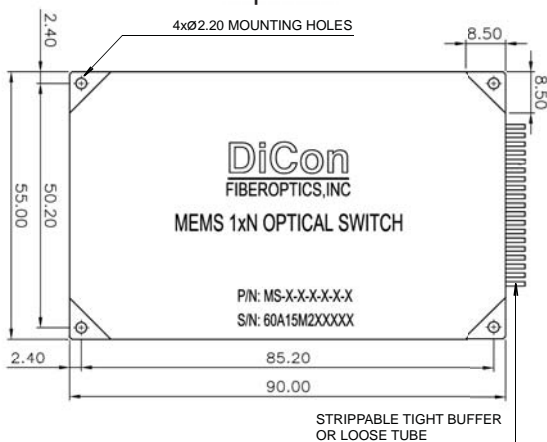
PARAMETER		RATING
Insertion Loss <sup>2,3</sup>	1x2, 1x4, 1x8	0.8 dB max.
	1x12	1.2 dB max.
	1x16, 1x24	1.5 dB max.
Crosstalk <sup>4</sup>		-50 dB max.
Back Reflection		-50 dB max.
Switching Time		30 ms max.
TDL		0.40 dB max.
WDL <sup>5</sup>		0.30 dB max.
PDL		0.15 dB max.
Repeatability <sup>6</sup>		0.04 dB max.
Durability		10 <sup>9</sup> 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.
- Repeatability is defined after 100 cycles.

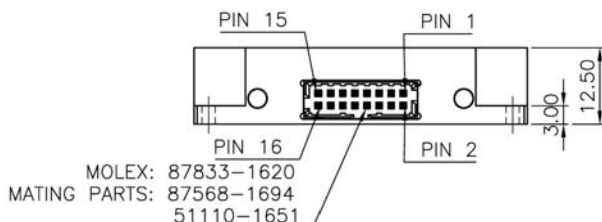
## MECHANICAL DIMENSIONS

(Units: mm)

Top View



Left Side View



## ORDERING INFORMATION

MS2 -  -  -  -  -  -

Product Code	
MS2	MEMS Switch
Switch Configuration	
1xN	1xN, Specify N≤24
Control Interface	
I2C	I <sup>2</sup> C
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/TB	Corning SMF-28, Tight Buffer
9/LT	Corning SMF-28, Loose-tube
<i>Or other equivalent 9 μm Singlemode</i>	
Connector Type	
FC/SPC	FC/SPC
FC/APC	FC/APC
N	NONE
<i>Also Available: SC, SC/U/PC, SC/APC, ST, ST/U/PC, LC</i>	
Pigtail Length	
1	1 Meter
X	Specify X Meters
<i>Tolerance is +/- 0.05 m</i>	

## ELECTRICAL SPECIFICATIONS

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