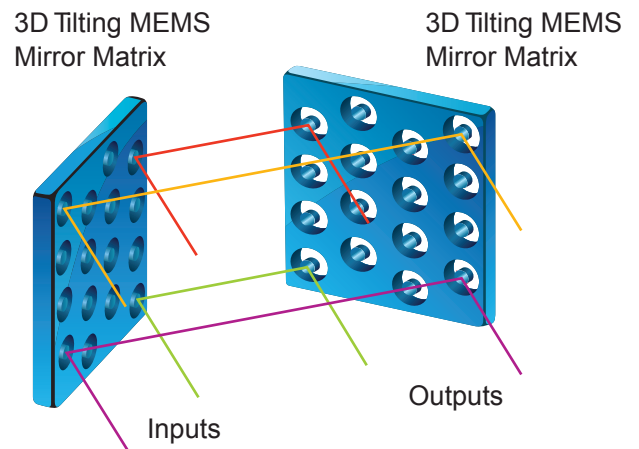
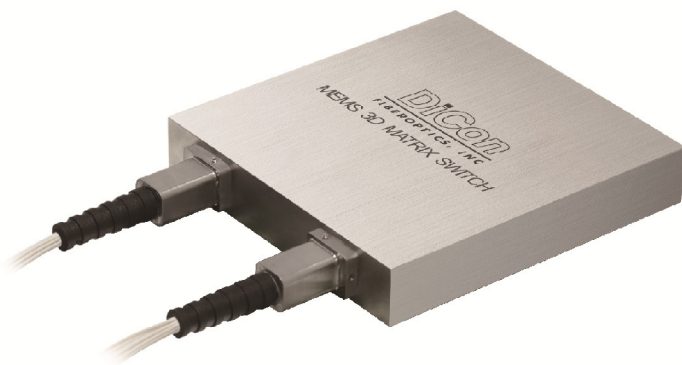


16X16 MEMS 3D MATRIX OPTICAL SWITCH

DiCon's MEMS 3D Matrix Optical Switch is a proprietary optical switch structure that allows any of the inputs to connect to any of the outputs in a fully non-blocking, all-optical cross-connect configuration. This innovative design is based on DiCon's industry proven MEMS mirror technology and offers the same level of durability and reliability that can be expected from any of the DiCon's MEMS fiber optic switch solutions.

OPERATING PRINCIPLE (ANY PORT TO ANY PORT FUNCTIONALITY)



FEATURES

- High Reliability
- Proven MEMS Technology
- Lifetime > 1 Billion Switch Cycles
- Available in any MxN configuration up to 16x16

APPLICATIONS

- Dynamic Management of Optical Networks
- Configurable Test & Measurement
- ROADM



16X16 MEMS 3D MATRIX OPTICAL SWITCH

OPTICAL SPECIFICATIONS¹

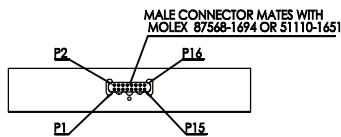
PARAMETER		RATING
Insertion Loss ²	8x8	0.8 dB typ. 1.0 dB max. ³
	16x16	0.8 dB typ. 1.3 dB max. ³
Crosstalk		-50 dB max.
Back Reflection		-45 dB max.
Switching Time		40 ms max.
TDL		0.4 dB max.
WDL ³		0.4 dB max.
PDL		0.4 dB max.
Repeatability ⁴		+/- 0.03 dB max.
Durability		10 ⁹ cycles min.
Optical Power		500 mW max.
Operating Temperature		-5 to 70°C
Storage Temperature		-40 to 85°C
Fiber Type		9/125 μm Single-mode

- All specifications are without connectors.
- IL is measured at CWL at 23°C +/- 5°C.
- IL is for single band, dual or triple band add 0.1 dB to the typical IL and add 0.2 dB to the max IL.
- WDL is measured in a +/- 20nm range at 23°C +/- 5°C.
- Repeatability is defined within 100 cycles.

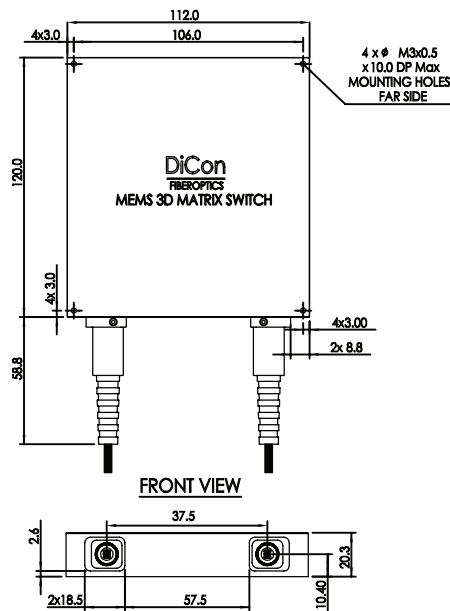
MECHANICAL DIMENSIONS

(Units: mm)

BACK VIEW



TOP VIEW



FRONT VIEW

ORDERING INFORMATION

MN4 - □ - □ - □ - □ - □ - □

Product Code

MN4 MEMS 3D Matrix

Switch Configuration

MxN MxN Non-Blocking
(Specify M,N≤16)

Control Interface

I2C I²C
RS2 RS232

Wavelength Range

13 1290 - 1330 nm
15 1530 - 1570 nm
16 1570 - 1610 nm
13/15 1290 - 1330 nm & 1530 - 1570 nm
15/16 1530 - 1570 nm & 1570 - 1610 nm
13/15/16 1290 - 1330 nm & 1530-1570 & 1570-1610 nm

Other wavelengths available upon special request

Fiber and Jacket Type

9/TB Corning SMF-28, Tight Buffer
Or other equivalent 9um Single-mode fiber

Connector Type

FC/SPC FC/SPC
FC/APC FC/APC
LC/SPC LC/SPC
LC/APC LC/APC
SC/SPC SC/SPC
SC/APC SC/APC
N NONE

Other connector types are also available

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 or RS232
Vcc Voltage		12 VDC
Power Consumption	Start Up	5.5 W max.
	Operating	1.8 W max.
Connector Type		Molex 87833-1620