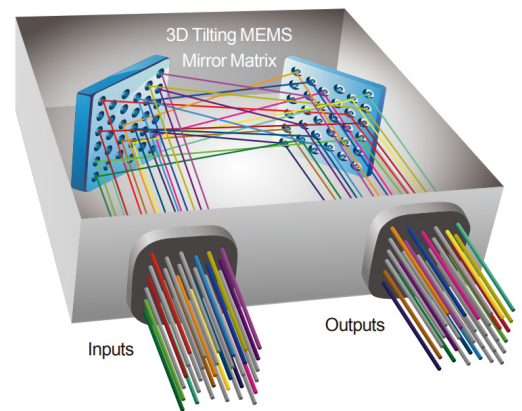
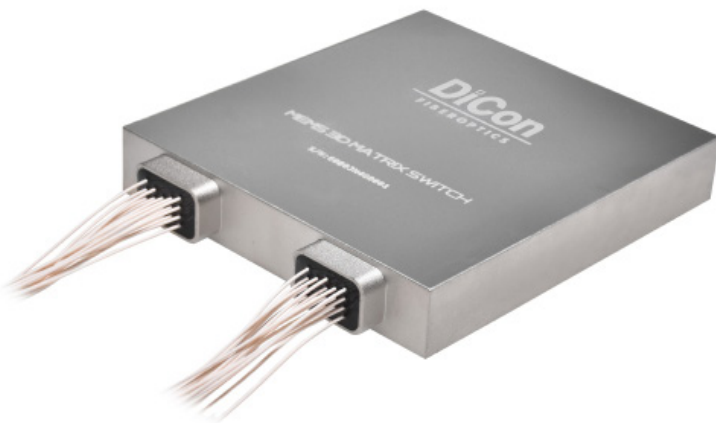


PM MEMS 3D MATRIX OPTICAL SWITCH

DiCon's PM 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 12x12

APPLICATIONS

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



PM MEMS 3D MATRIX OPTICAL SWITCH

OPTICAL SPECIFICATIONS¹

PARAMETER		RATING
Insertion Loss ²	6x6	0.8 dB typ. 1.4 dB max.
	12x12	0.8 dB typ. 1.4 dB max.
Crosstalk		-70 dB typ. -55 dB max.
Back Reflection		-55 dB typ. -45 dB max.
Extinction Ratio		18 dB min
Switching Time		15 ms typ. 20 ms max.
TDL		0.1 dB typ. 0.4 dB max.
WDL ³		0.1 dB typ. 0.4 dB max.
Repeatability ⁴		0.01 dB typ. 0.06 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		Panda Fiber

- All specifications are without connectors at room temp.
- IL is measured at CWL.
- WDL is measured from CWL in a +/- 20nm range.
- Repeatability is defined within 100 cycles.

ORDERING INFORMATION

MN4 - □ - □ - □ - □ - □ - □ - □

Product Code

MN4 MEMS 3D Matrix

Switch Configuration

MxN MxN Non-Blocking
(Specify M,N≤12)

Control Interface

I2C I²C
RS2 RS232

Wavelength Range

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

Other wavelengths available upon special request

Connector Key Orientation

PMF Fast axis
PMS Slow axis
PMN No connector

Fiber and Jacket Type

PM13/LT Corning PM 1300 Fiber, 900 um loose tube over 250 um barefiber
PM15/LT Corning PM 1550 Fiber, 900 um loose tube over 250 um barefiber

Other fiber types are also available

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

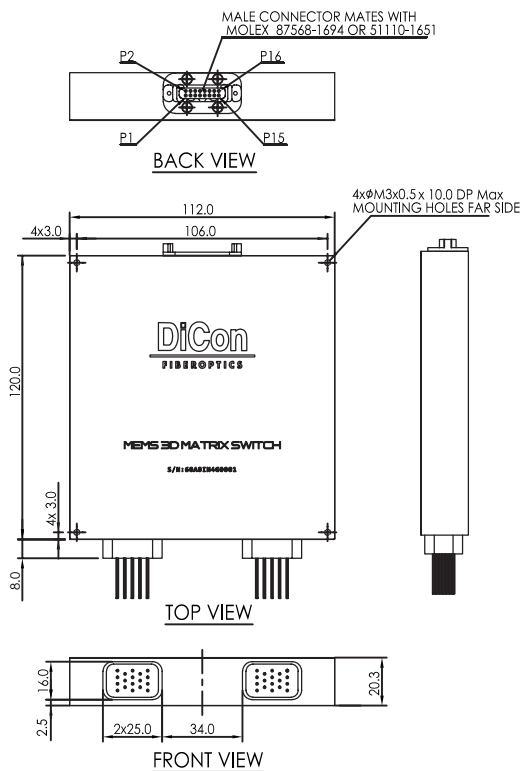
Pigtail Length

1 1 Meter
X Specify X Meters

Tolerance is +/- 0.05 m

MECHANICAL DIMENSIONS

(Units: mm)



ELECTRICAL SPECIFICATIONS

PARAMETER		RATING
Latching Type		Non-latching
Control Type		I ² C or RS232
Vcc Voltage		12 VDC
Power	Start Up	7.5 W max.
Consumption	Operating	1.0 W max.
Connector Type		Molex 87833-1620