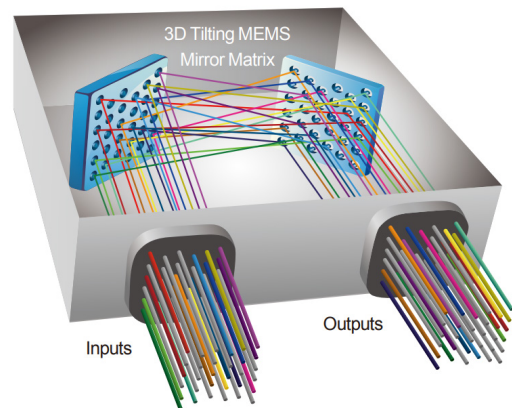


96X96 MEMS 3D MATRIX OPTICAL SWITCH

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 96x96

APPLICATIONS

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



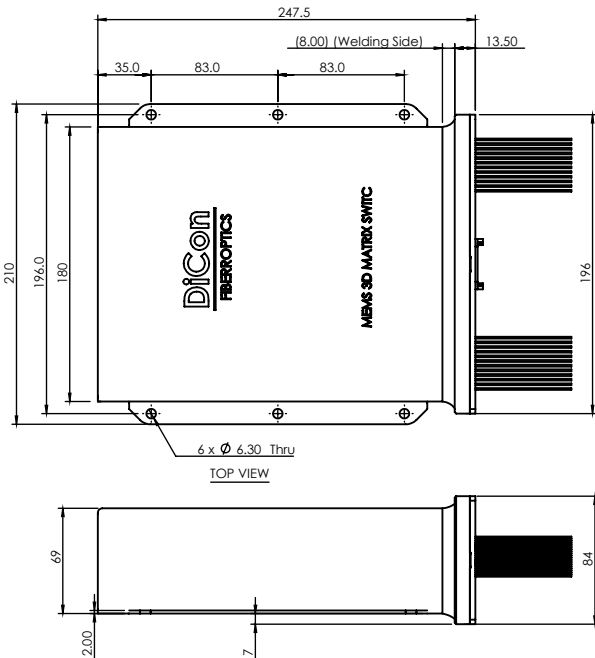
96X96 MEMS 3D MATRIX OPTICAL SWITCH

OPTICAL SPECIFICATIONS¹

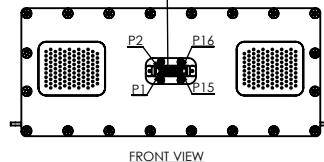
PARAMETER		RATING
Insertion Loss ²	64x64	0.8 dB typ. 1.4 dB max.
	96x96	0.8 dB typ. 1.4 dB max.
Crosstalk		-70 dB typ. -55 dB max.
Back Reflection		-55 dB typ. -45 dB max.
Switching Time		30 ms typ. 35 ms max.
TDL		0.1 dB typ. 0.4 dB max.
WDL ³		0.1 dB typ. 0.4 dB max.
PDL		0.08 dB typ. 0.25 dB max.
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		9/125 μm Single-mode

- All specifications are without connectors for the set wavelength band index.
Note: Each wavelength band has its own wavelength index, which can be set to optimized the optical performance for that band. Only one wavelength index band can be selected at a time and it applies to all the ports on the module.
- IL is measured at CWL for the set wavelength index at 23°C +/- 5°C.
Operation in 1290-1330nm or 1570-1610 nm bands add 0.1 dB to the typical IL and add 0.2 dB to the maximum insertion loss.
- WDL is measured from CWL in a +/- 20nm range at 23°C +/- 5°C.
- Repeatability is defined within 100 cycles.

MECHANICAL DIMENSIONS (Units: mm)



MALE CONNECTOR MATES WITH MOLEX 87568-1697 OR 51110-1651



ORDERING INFORMATION

MN8 - □ - □ - □ - □ - □ - □

Product Code

MN8 MEMS 3D Matrix

Switch Configuration

MxN MxN Non-Blocking (Specify M,N≤96)

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, 900 μm 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	Start Up	24 W max.
Consumption	Operating	19 W max.
Connector Type		Molex 87833-1620