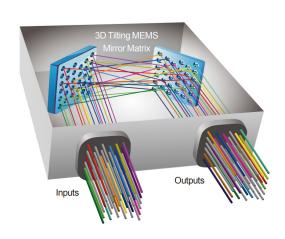
# PM MEMS 3D MATRIX OPTICAL SWITCH

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.







## **FEATURES**

- High Reliability
- Proven MEMS Technology
- Lifetime > 1 Billion Switch Cycles
- Available in any MxN configuration up to 24x24

## **APPLICATIONS**

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



# PM MEMS 3D MATRIX OPTICAL SWITCH

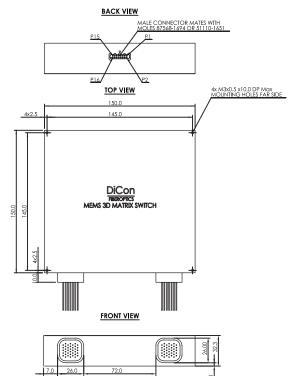
#### OPTICAL SPECIFICATIONS<sup>1</sup>

PARAMETER		RATING	
Insertion	16x16	0.8 dB typ. 1.4 dB max.	
Loss <sup>2</sup>	24x24	0.8 dB typ. 1.4 dB max.	
Crosstalk		-70 dB typ55 dB max.	
Back Reflection		-55 dB typ45 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 <sup>3</sup>		0.1 dB typ. 0.4 dB max.	
Repeatability <sup>4</sup>		0.01 dB typ. 0.06 dB max.	
Durability		10 <sup>9</sup> cycles min.	
Optical Power		500 mW max.	
Operating Temperature		-5 to 70°C	
Storage Temperature		-40 to 85°C	
Fiber Type		Panda Fiber	

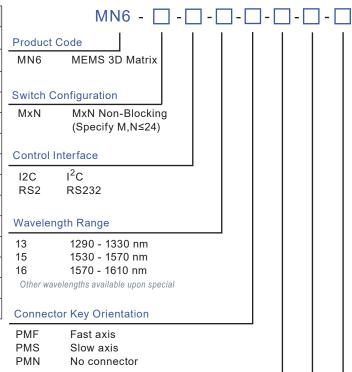
- 1. All specifications are without connectors at room temp.
- 2. IL is measured at CWL.
- 3. WDL is measured from CWL in a +/- 20nm range.
- 4. Repeatability is defined within 100 cycles.

### MECHANICAL DIMENSIONS

(Units: mm)



### ORDERING INFORMATION



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

#### **ELECTRICAL SPECIFICATIONS**

PARAMETER		RATING
Latching Type		Non-latching
Control Type		I <sup>2</sup> C or RS232
Vcc Voltage		12 VDC
Power	Start Up	9.0 W max.
Consumption	Operating	1.6 W max.
Connector Type		Molex 87833-1620