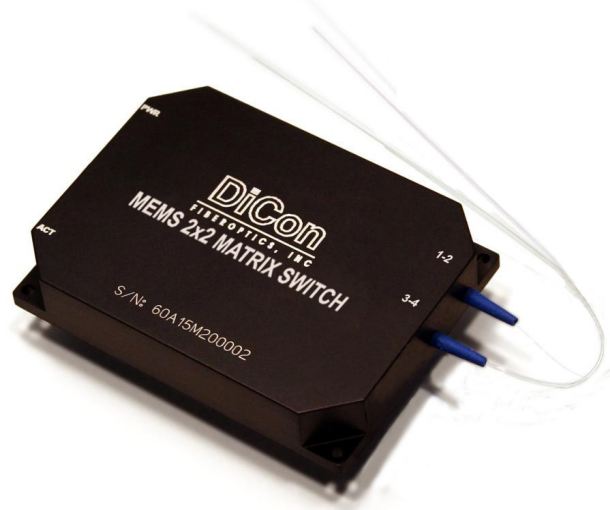


MEMS MULTI-MODE 2X2 MATRIX SWITCH

DiCon's MEMS Multi-Mode 2x2 Optical Matrix Switch is a true 2x2 optical switch. It has two fiber inputs and two fiber outputs and can be switched to one of two configurations, shown below. This optical switch utilizes DiCon's proprietary MEMS technology to achieve reliable optical performance and excellent durability; DiCon's Optical Switches have been shown to last for over 1 billion switch cycles and are qualified to Telcordia GR-1221 environmental standards.



FEATURES

- Reliable Optical Performance
- Excellent Durability
- Compact Form Factor
- Low Power Consumption

APPLICATIONS

- Optical Communications
- Bio-medical Instrumentation
- Test Applications
- Add/Drop Applications



MEMS MULTI-MODE 2X2 OPTICAL MATRIX SWITCH

OPTICAL SPECIFICATIONS^{1,2}

PARAMETER		RATING
Insertion Loss ^{3,4}		1.8 dB max.
Crosstalk	50 um	-25 dB max.
	62.5 um	-20 dB max.
Back Reflection		-20 dB max.
Switching Time		30 ms max.
TDL		0.40 dB max.
Repeatability ⁵		0.04 dB max.
Durability		10 ⁹ cycles min.
Optical Power		500 mW max.
Operating Temp		-5 to 70°C
Storage Temp		-40 to 85°C
Fiber Type		Multi-Mode

- Specifications are without connectors.
- Specifications only guaranteed in defined switch states.
- IL is measured at CWL, 23°C.
- IL is for single-band. Dual-band adds 0.2 dB.
- Repeatability is defined after 100 cycles.

ORDERING INFORMATION

MS2 - - - - - -

Product Code

MS2 MEMS Switch

Switch Configuration

2X2 2x2 Matrix Switch

Control Interface

I²C I²C
RS2 RS232
TTL TTL

Wavelength Range

8 850 nm only
9 980 nm only
13 1310 nm only
8/13 850 & 1310 nm

Fiber and Jacket Type

50/BF 50 um core, Bare fiber
62/BF 62.5 um core, Bare Fiber
50/LT 50 um core, Loose-tube
62/LT 62.5 um core, Loose-tube

Connector Type

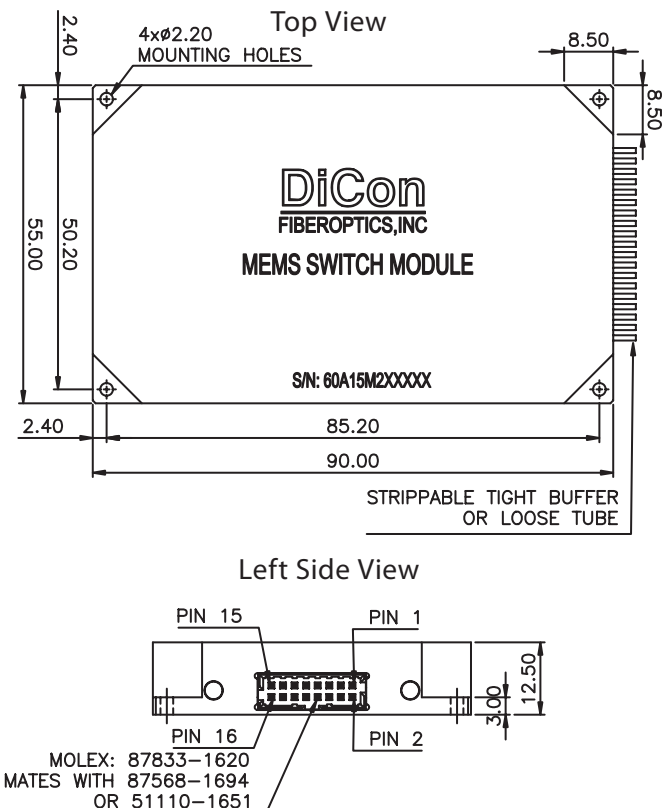
FC FC/PC
LC LC/PC
SC SC/PC
ST ST/PC
N NONE

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, RS232 or TTL
Vcc	I ² C, RS232	12 VDC
Voltage	TTL	5 VDC
Power	I ² C, RS232	700 mW max.
Consumption	TTL	1.5 W max.
Connector Type		Molex 87833-1620