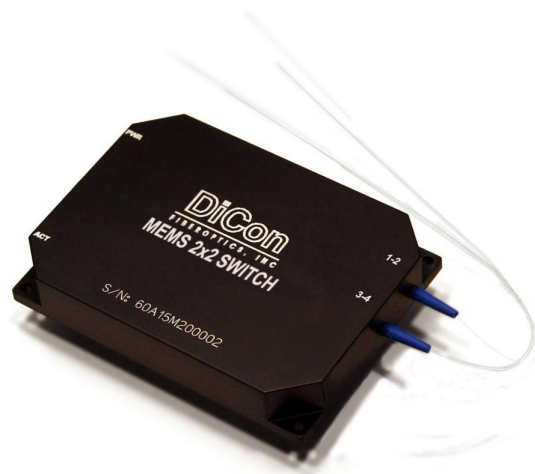


MEMS MULTI-MODE 2X2 SWITCH

DiCon's MEMS Multi-Mode 2x2 Optical 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.

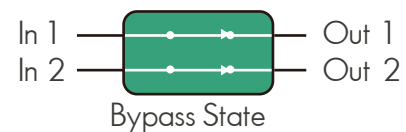
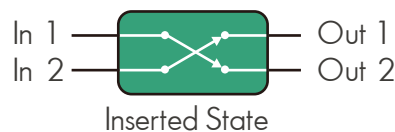


FEATURES

- 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 SWITCH

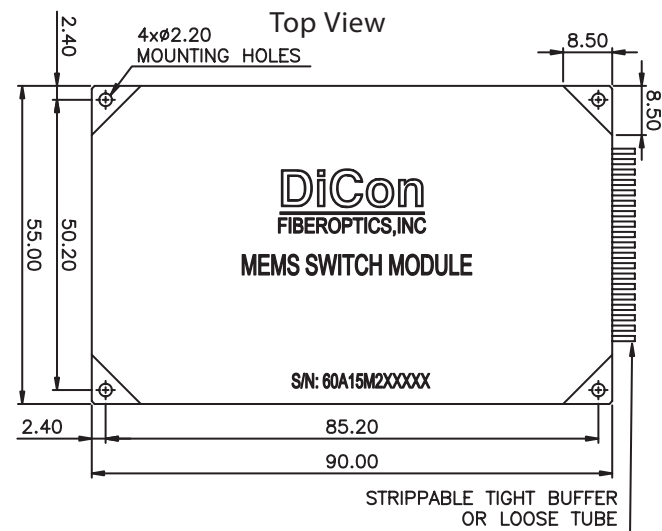
OPTICAL SPECIFICATIONS^{1,2}

PARAMETER	RATING	
Insertion Loss ^{3,4,5}	1.0 dB max.	
Crosstalk	50 μ m	-25 dB max.
	62.5 μ m	-20 dB max.
Back Reflection	-20 dB max.	
Switching Time	30 ms max.	
TDL ⁶	0.30 dB max.	
Repeatability ⁷	0.02 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	

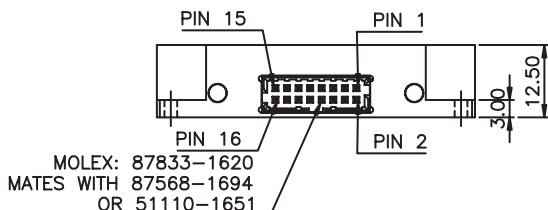
- Specifications are without connectors
- Specifications are for a single pass through the switch. The optical path from In 2 to Out 2 uses an internal double pass through the switch.
- IL is measured at CWL, 23°C \pm 5°C.
- IL is for single-band. Dual-band adds 0.3 dB.
- In 2 to Out 2 path adds 0.8 dB
- In 2 to Out 2 path adds 0.1 dB
- Repeatability is defined within 100 cycles. In 2 to Out 2 adds 0.02 dB

MECHANICAL DIMENSIONS

(Units: mm)



Left Side View



ORDERING INFORMATION

MS2 - - - - - - -

Product Code

MS2 MEMS Switch

Switch Configuration

2X2 2X2 Switch
M/2X2 M 2x2 Switches
(Specify M between 2 & 5)

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 nm & 1310 nm

Fiber and Jacket Type

50/BF 50 μ m core, bare fiber
50/LT 50 μ m core, loose tube
62/BF 62.5 μ m core, bare fiber
62/LT 62.5 μ m 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 \pm 0.05 m

ELECTRICAL SPECIFICATIONS

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