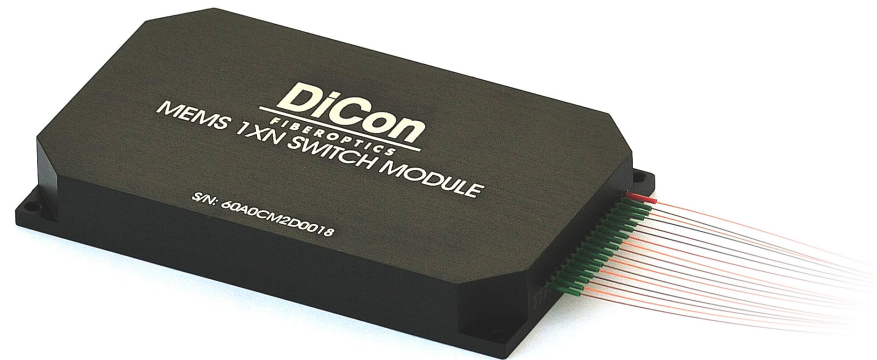


MEMS MULTI-MODE 1xN OPTICAL SWITCH

DiCon's Multi-Mode MEMS 1xN Optical Switch is an industry proven fiber optic switch with excellent durability and reliability. It allows channel selection between a single input fiber and N output fibers, and can be specified for any 1xN size from 1x2 up to 1x24. In addition, this optical switch is bi-directional and can be used in either a 1xN or Nx1 direction.



FEATURES

- Proven MEMS Durability and Reliability
- Compact Form Factor
- Fast Switching Time
- GR-1221 Qualified Optical Component

APPLICATIONS

- Secure Communications
- Bio-medical Instrumentation
- Fiber Sensing
- Video Distribution



MEMS MULTI-MODE 1XN OPTICAL SWITCH

OPTICAL SPECIFICATIONS¹

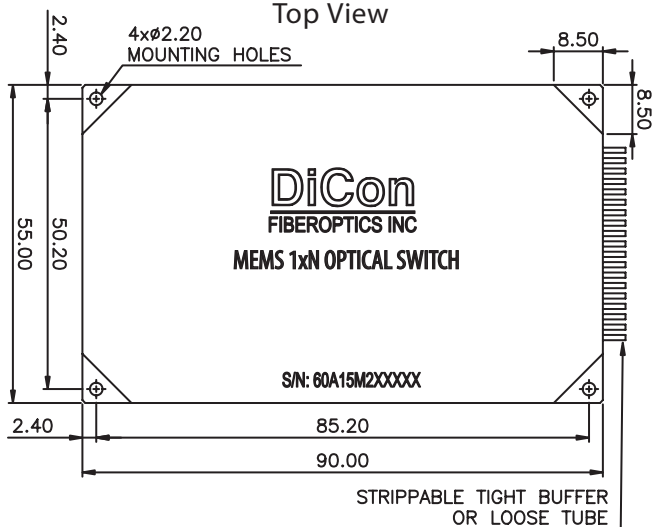
PARAMETER		RATING
Insertion Loss ^{2,3}	1x2, 1x4	1.0 dB max.
	1x8	1.4 dB max.
	1x12, 1x16	1.6 dB max.
	1x24	2.0 dB max.
Crosstalk ⁴	50 μ m	-25 dB max.
	62.5 μ m	-20 dB max.
Back Reflection		-20 dB max.
Switching Time		30 ms max.
TDL		0.4 dB max.
Repeatability ⁵		0.04 dB max.
Durability		10 ⁹ cycles min.
Optical Power		500 mW max.
Operating Temp		-5 to 70°C
Storage Temp		-40 to 85°C
Fiber Type		Multi-mode, Bare Fiber

- Specifications are without connectors.
- IL is measured at specified wavelength, 23°C.
- IL is for single-band. Dual-band add 0.4 dB.
- Power off isolation is same as crosstalk.
- Repeatability is defined after 100 cycles.

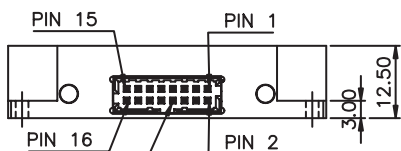
MECHANICAL DIMENSIONS

(Units: mm)

Top View



Left Side View



MOLEX: 87833-1620
MATES WITH 87568-1694
OR 51110-1651

ORDERING INFORMATION

MS2 - - - - - -

Product Code

MS2 MEMS Switch

Switch Configuration

1xN 1xN Switch

Specify N≤24 for 50 μ m or N≤16 for 62.5 μ m

Control Interface

I2C I²C
RS2 RS232
TTL TTL

Wavelength Range

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

Other wavelengths available upon special request

Fiber and Jacket Type

50/BF 50 μ m core, bare fiber
62/BF 62.5 μ m core, bare fiber
50/TB 50 μ m core, tight buffer
62/TB 62.5 μ m core, tight buffer
50/LT 50 μ m core, loose tube
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 +/- 0.05 m

ELECTRICAL SPECIFICATIONS

PARAMETER		RATING
Latching Type		non-latching
Control Type		I ² C, RS232 or TTL
Vcc	I2C, RS232	12 VDC
Voltage	TTL	5 VDC
Power	I2C, RS232	700 mW max.
Consumption	TTL	1.5 W max.
Connector Type		Molex 87833-1620