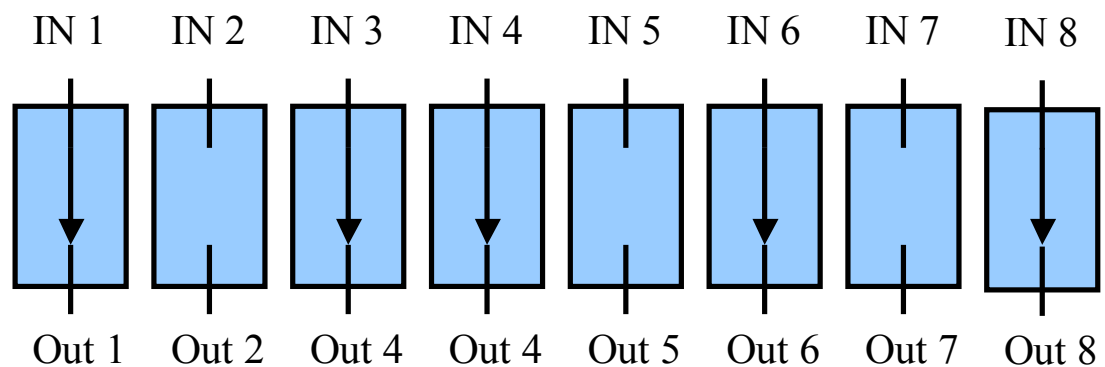


MEMS ON-OFF OPTICAL ARRAY SWITCH

DiCon's MEMS Multimode On-Off Array Optical Switch allows precise control of up to 16 On-Off optical switches all through a single control interface, and housed in a compact housing. The On-Off switches can be controlled individually or synchronously. DiCon's MEMS Multimode On-Off Optical switch has one input and one output fiber and provides the ability to turn on or off the optical signal passing through it.



FEATURES

- High Reliability
- Proven MEMS Technology
- Lifetime > 1 Billion Switch Cycles
- Controls up to 16 MEMS On/Off Optical Switches

APPLICATIONS

- Simulate Cutting of Fiber Optic Cables
- Secure Optical Communication
- Test & Measurement



MEMS MULTIMODE ON-OFF OPTICAL ARRAY

OPTICAL SPECIFICATIONS¹

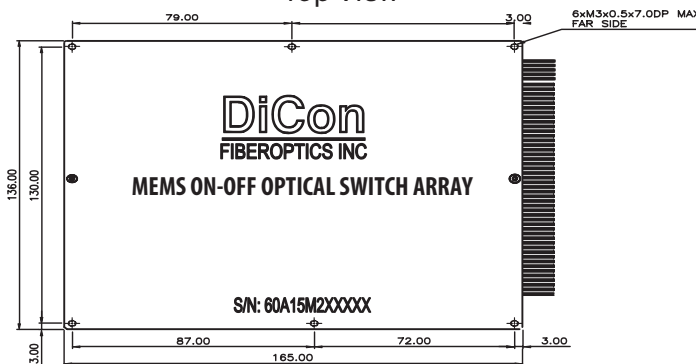
PARAMETER		RATING
Insertion Loss ^{2,3}		0.8 dB max.
Crosstalk	50 um	-25 dB max.
	62.5 um	-20 dB max.
Back Reflection		-20 dB max.
Switching Time		30 ms max.
TDL		0.30 dB max.
Repeatability ⁴		0.05 dB max.
Durability		10 ⁹ cycles min.
Optical Power		500 mW max.
Operating Temp		-5 to 70°C
Storage Temp		-40 to 85°C
Fiber Type		Multimode, Bare fiber

- Specifications are without connectors.
- IL is measured at CWL, 23°C. In "ON" State.
- IL is for single-band. Dual-band adds 0.2 dB.
- Repeatability is defined after 100 cycles.

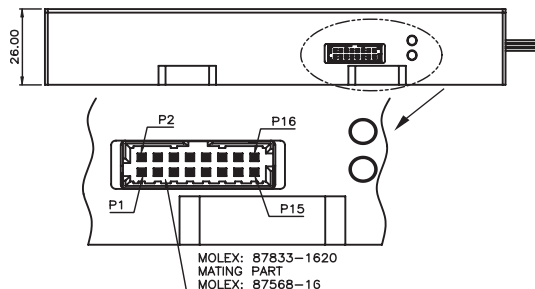
MECHANICAL DIMENSIONS

(Units: mm)

Top View



Side View



ORDERING INFORMATION

MQ5- □-□-□-□-20-□-□-□

Product Code

MQ5 MEMS Switch

Switch Configuration

M/1X1 M On-Off Switches (M≤16)

Control Interface

I2C I²C
RS2 RS232

Switch Type

T Transparent¹
O Opaque²

Wavelength Range

8 850 nm only
9 980 nm only
13 1290-1330 nm
8/13 850 nm & 1290-1330 nm

Off State Isolation

20 20 dB min.

Fiber and Jacket Type

50/BF 50um core, bare fiber
50/LT 50um core, 900um loose tube
62/BF 62.5um core, bare fiber
62/LT 62.5um core, 900um loose tube

Connector Type

FC FC/SPC
FC/APC FC/APC
SC SC/SPC
SC/APC SC/APC
N NONE

Other connectors available upon request

Pigtail Length

1 1 Meter
X Specify X Meters

Tolerance is +/- 10 cm

- Minimum IL with no power.
- Off state isolation with no power.

ELECTRICAL SPECIFICATIONS

PARAMETER	RATING
Latching Type	non-latching
Control Type	I ² C or RS232
Vcc Voltage	12 VDC
Power Consumption	1 W max.
Connector Type	Molex 87833-1620