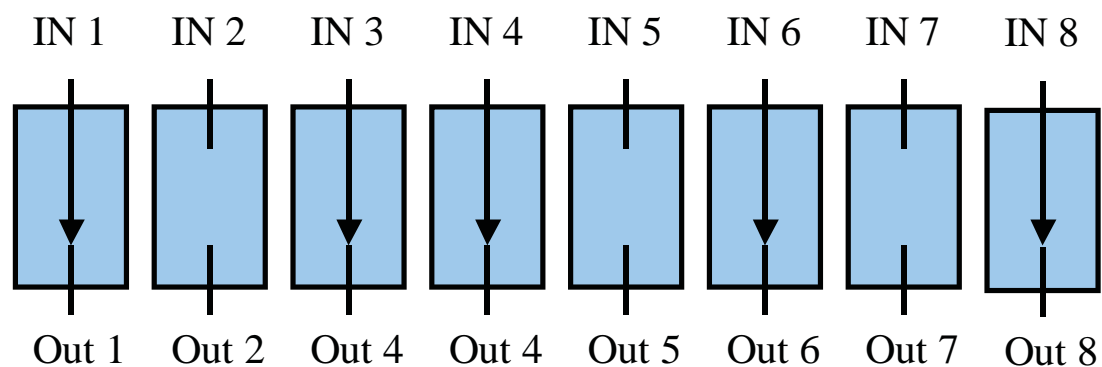


MEMS ON-OFF OPTICAL ARRAY SWITCH

DiCon's MEMS 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 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 ON-OFF OPTICAL ARRAY SWITCH

OPTICAL SPECIFICATIONS¹

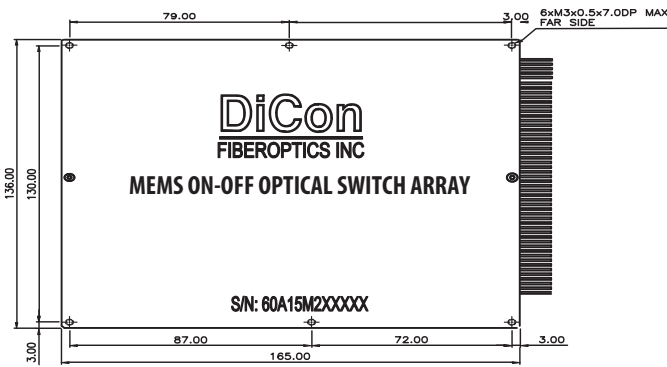
PARAMETER	RATING
Insertion Loss ²	0.8 dB max.
Back Reflection	-50 dB max.
Switching Time	30 ms max.
TDL	0.30 dB max.
WDL ³	0.20 dB max.
PDL	0.10 dB max.
Repeatability ⁴	0.05 dB max.
Durability	10 ⁹ cycles min.
Optical Power	500 mW max.
Operating Temp	-5 to 70°C
Storage Temp	-40 to 85°C
Fiber Type	9/125 μm single mode

- Specifications are without connectors.
- IL is measured at CWL, 23°C. In "ON" State.
- WDL is measured in a +/- 20nm range at 23°C.
- Repeatability is defined after 100 cycles.

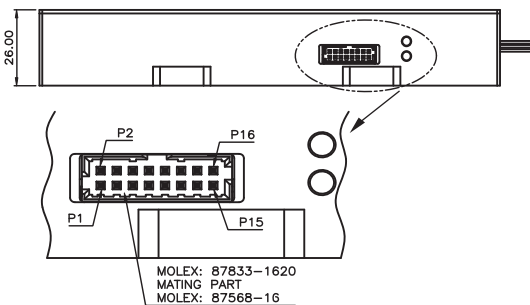
MECHANICAL DIMENSIONS

(Units: mm)

Top View



Side View



ORDERING INFORMATION

MQ5 - □ - □ - □ - □ - 50 - □ - □ - □

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

13 1290 - 1330 nm
15 1530 - 1570 nm
16 1570 - 1610 nm

Off State Isolation

50 50 dB min.

Fiber and Jacket Type

9/BF Corning SMF-28, bare fiber
9/LT Corning SMF-28, 900um loose tube

Connector Type

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

Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

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