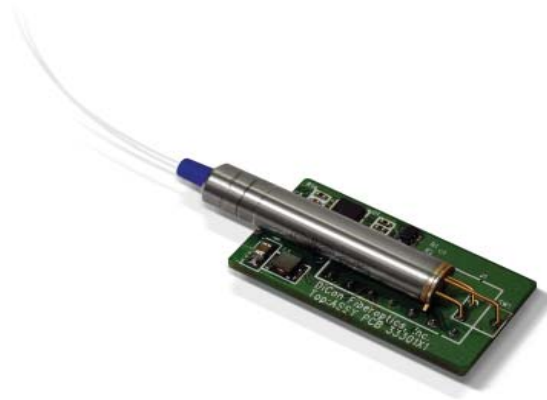


MEMS MULTIMODE ADD/DROP 2X2 SWITCH

WITH EXTERNAL PCB

DiCon's MEMS Multimode Add/Drop 2x2 Switch is based on a micro-electromechanical system (MEMS) chip. The MEMS chip consists of an electrically moveable mirror on a silicon support. A voltage applied to the MEMS chip causes the mirror to rotate, which changes the coupling of light between two input fibers and two output fibers.

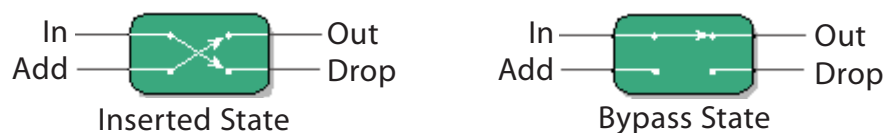


FEATURES

- Proven MEMS Durability and Reliability
- Compact Form Factor
- TTL Parallel or I²C Serial Control Interface
- Qualified to GR-1221

APPLICATIONS

MEMS multimode Add/Drop 2x2 Switches are two position devices that are commonly used in Optical Add/Drop Multiplexers. In the Bypass state, the Input and Output ports are connected to each other. In the Inserted state, the Input and Drop ports are connected to each other, while at the same time the Add and Output ports are connected to each other.



MEMS MULTIMODE ADD/DROP 2X2 SWITCH

WITH EXTERNAL PCB

OPTICAL SPECIFICATIONS¹

PARAMETER		RATING
Insertion Loss ²	Single-Band	1.0 dB max.
	Dual-Band	1.3 dB max.
Crosstalk	50 μ m	-25 dB max.
	62.5 μ m	-20 dB max.
Back Reflection		-20 dB max.
Switching Time		20 ms max.
TDL		0.30 dB max.
Repeatability ³		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		Multimode, Bare Fiber

- Specifications are without connectors.
- IL is measured at CWL, 23°C.
- Repeatability is defined after 100 cycles.

ORDERING INFORMATION

MSP - 2X2AD - - - - -

Product Code

MSP MEMS Switch with PCB

Switch Configuration

2x2AD 2x2 Add/Drop Switch
Default state is inserted

Control Interface

TTL TTL
I2C I²C

Wavelength Range

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

Fiber and Jacket Type

50/BF 50 μ m core, bare fiber
62/BF 62.5 μ m core, bare fiber

Connector Type

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

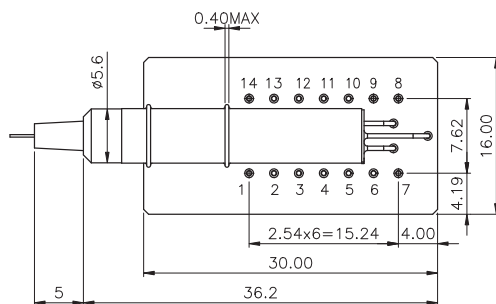
Pigtail Length

1 1 Meter
X Specify X Meters
Tolerance is +/- 0.05 m

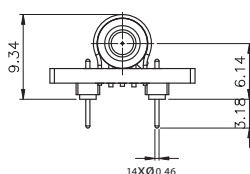
MECHANICAL DIMENSIONS

(Units: mm)

Top View



End View



ELECTRICAL SPECIFICATIONS

PARAMETER	RATING
Latching Type	non-latching
Control Type	I ² C and TTL
Vcc Voltage	12 VDC
Power Consumption	170 mW max.
Vcc Damage Threshold	15 VDC