

Multimode Fiber Optic Switch

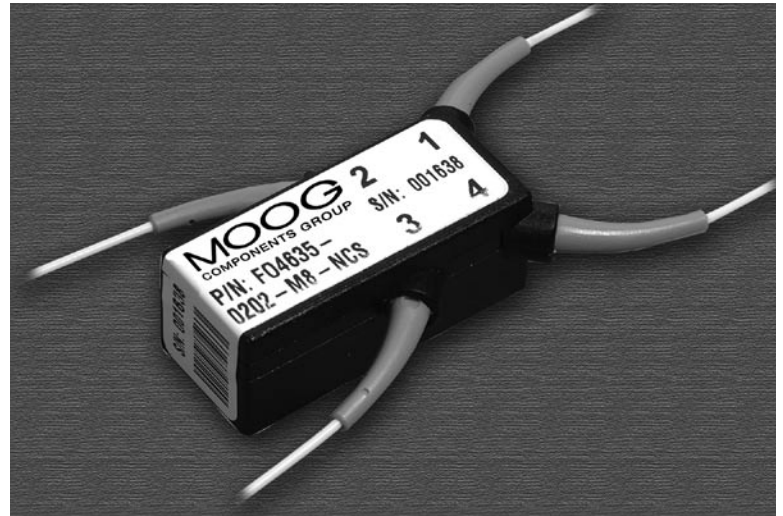
TYPICAL APPLICATIONS

- FDDI bypass
- Local area network bypass
- Optical routing
- Loopback diagnostic testing
- Ring network protection
- Test access

FEATURES

- Small size
- Switching time < 10.0 ms
- Low power consumption
- Bidirectional
- Fail-safe return to bypass mode with power-off
- Printed circuit board mountable
- Switch status, electrical contacts
- Low insertion loss
- High reliability
- High loss option for bypass & loopback testing
- Non-latching
- PCB mountable

FO4635



The silicon micromachine based electromechanical multimode switch uses a movable mirror process to allow light to pass through the switch on activation or to be blocked/diverted when the switch is deactivated. This makes the switch particularly well suited for fail-safe bypass applications.

Switches are available in On/Off, 1x2 and 2x2 configurations. There is also a high attenuation version of the 2x2 switch used for node bypass (i.e. FDDI) applications.

A standard PCB footprint allows the switch to be conveniently mounted with control electronics.

The standard switch is equipped with 62.5/125 μm multimode fiber pigtailed with no connectors, but a variety of fiber and connector options are available.

For more information about our entire line of fiber optic products, please visit our web site at www.moog.com.

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SPECIFICATIONS

	Min	Typ	Max	Unit
Environmental Ratings				
Operating Temperature Range	-20	—	70	° C
Storage Temperature Range	-40	—	85	° C
Humidity (non-condensing)	—	—	95	% RH
Mechanical Life	1.0	—	—	M CYCLE
Characteristics				
Actuation Voltage	4.75	5.0	5.5	V
Actuation Current	—	40	—	mA
Switching Time	—	5.0	10.0	ms
Loss* 1-3 port	—	0.7	0.8	dB
Loss* 2-4 port	—	0.7	0.8	dB
Loss* 3-4 port	—	0.8	1.0	dB
Loss* 1-2 port	—	0.8	1.0	dB
Loss* 1-2 port (high atten. bypass)	4.5	5.5	6.0	dB
Crosstalk	60	—	—	dB
Status Contacts @ 24 VDC	—	—	1.0	A

*Loss without connectors

PART NUMBERING

FO4635 - [] [] [] [] - [] [] [] [] [] [] [] []

BASIC PART NUMBER

INPUT PORTS	
CODE	QUANTITY
01	1
02	2

OUTPUT PORTS	
CODE	QUANTITY
01	1
02	2
B2	2HA**

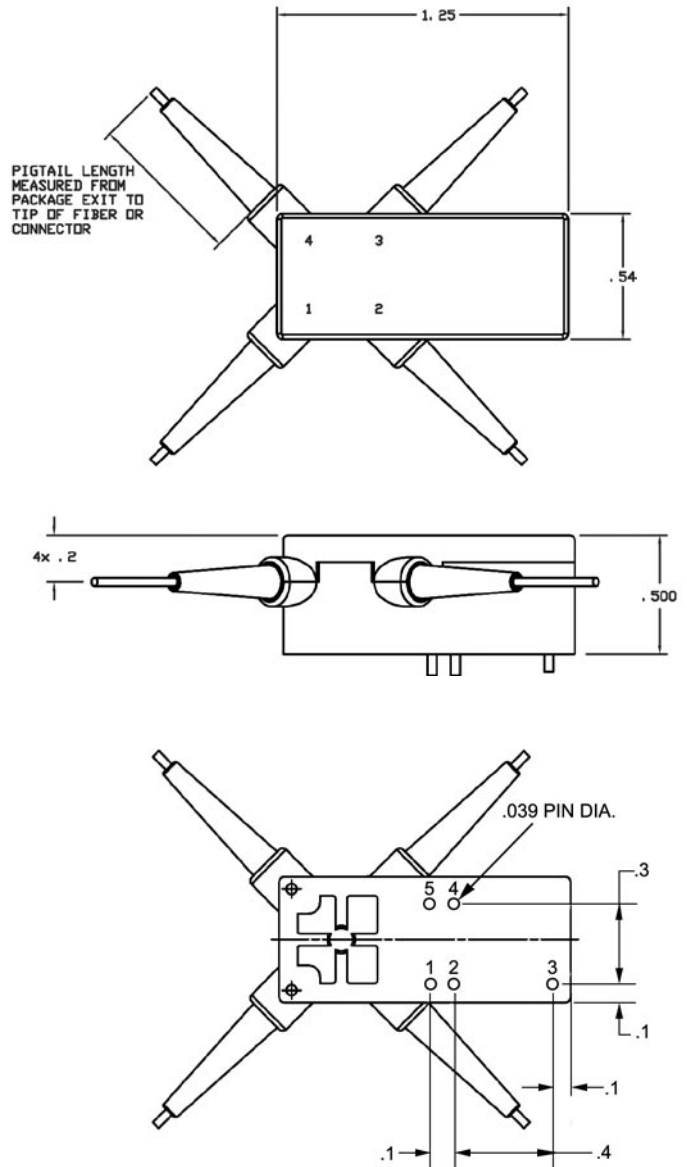
**High Attenuation Bypass

MULTIMODE FIBER			
CODE	SIZE	INDEX	NA
I	50/125	Graded	.20
M	62.5/125 μm	Graded	.28
C	100/140	Graded	.29
X	Special	Identify Before Sale	

WAVELENGTH	
CODE	λ
8	850nm
3	1300nm
X	Special

CONNECTOR	
CODE	STYLE
NC	NONE
FC	FC/PC
SC	SC/PC
SM	SMA
ST	ST/PC
XX	Special
LC	LC/PC

PIGTAIL LENGTH	
CODE	LENGTH
S	1.5 meters
X	Special



All dimensions are in inches.

TYPICAL SWITCH CONFIGURATION (2x2)		
	OPTICAL PATH	STATUS CONTACTS
Switch On	1-3, 2-4	Closed
Switch Off	1-2, 3-4	Open

SWITCH PIN CONFIGURATION	
PIN NUMBER	DESCRIPTION
1	+5 VDC
2	Common
3	N.O. Status Contact
4	N.O. Status Contact
5	Not Used

SET = Blocking, RST = Non-Blocking
NU - Not Used

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Specification and information are subject to change without prior notice.
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