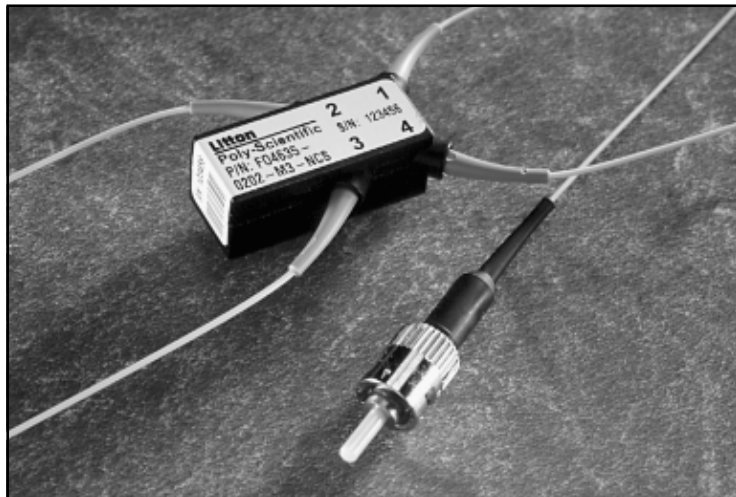


Litton Poly-Scientific



Multimode Fiber Optic Switch

FO4635

APPLICATIONS

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

FEATURES

- Small size 1.25" L X 0.54" W X 0.50" H
- Switching time <10.0 ms
- Low power consumption
- 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
- MEMS based design

The Micro ElectroMechanical System (MEMS) based 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 62.5/125µm multimode fiber pigtailed with no connectors, but a variety of fiber and connector options are available.

We speak the language of light.™

For more information about our fiber optic products, contact Litton Poly-Scientific, Fiber Optic Products, 1213 North Main Street, Blacksburg, Virginia 24060-3100.

Fiber Optic Products

800-336-2112 ext.279

SPECIFICATIONS

| | Min | Typ | Max | Unit |
|-------------------------------------|------|-----|------|---------|
| Environmental Ratings | | | | |
| Operating Temperature Range | -30 | — | 85 | °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 | — | — | 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 @ 24VDC | — | — | 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 |
|------|------------|----------------------|-----|
| M | 62.5/125µm | GRADED | .28 |
| X | SPECIAL | Identify Before Sale | |

WAVELENGTH

| CODE | λ |
|------|---------|
| 8 | 850nm |
| 3 | 1300nm |
| X | SPECIAL |

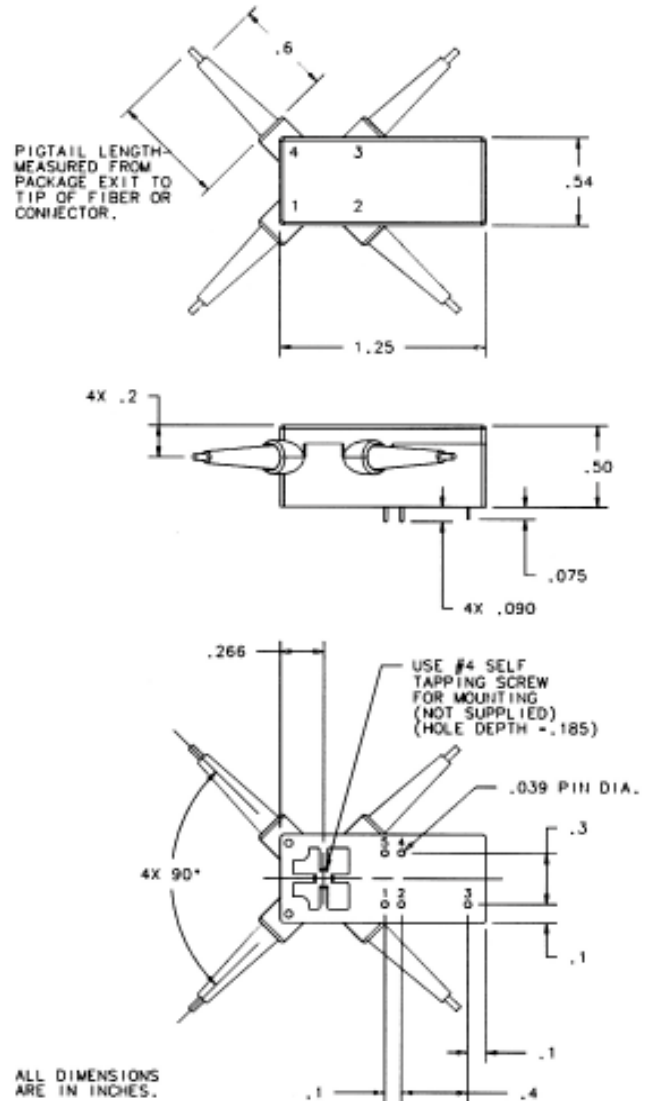
CONNECTOR

| CODE | STYLE |
|------|---------|
| NC | NONE |
| FC | FC/PC |
| SC | SC/PC |
| SM | SMA |
| ST | ST |
| XX | SPECIAL |

PIGTAIL LENGTH

| CODE | LENGTH |
|------|------------|
| S | 1.5 meters |
| X | SPECIAL |

DIMENSIONS



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 |