Mini 1×1 MagLight™ Optical Switch

M-O Tech® for Optical Network

Features

- Ultra Compact Size
- No moving parts, best reliability
- Fast switching speed
- Extremely stable latching mode
- Low power consumption
- Easy to route -all fiber on one end
- Exceptional reliability and stability

Applications

- Optical switching
- High speed protection
- System monitoring
- Test and measurements
- Fiber Sensor System

Product Description

Primanex MagLight 1x1 switch is an all solid-state switch without any moving parts. The switching of the optical light is realized by utilizing Faraday Effect.

The patent-pending non-mechanical configuration with solid-state all-crystal design eliminates the need for mechanical movement, and realizes the smallest and fastest switch in the industry. The microsecond fiber optic switch is designed to meet the most demanding switching requirements of reliability, response, and continuous switching operation.

Specifications

Item	Unit	Parameter	Note
Wavelength Range	nm	1525～1565	Other band optional
Insertion Loss	dB	0.40 (Typical); 0.6 (Max)	
PDL	dB	0.10 (Typical), 0.20 (Max)	
Return Loss	dB	≥ 50	
Crosstalk	dB	≥ 38	>45dB at 23^0C
PMD	ps	≤ 0.2	
Repeatability	dB	± 0.01	
Durability	cycles	> 10 Billions	
Switching Speed	μs	10 ~ 400	The switching speed is customizable
Maximum Optical Power	mW	500	
Storage Temperature	℃	-40 ~ 85	
Operating Temperature	℃	-5 ～ 70	
Dimension(L×W×H)	mm	Φ5.5X30	
Fiber Type		SMF-28e	
Fiber Length	m	1.0 ± 0.1	

*. All the specifications are based on the devices without connector.

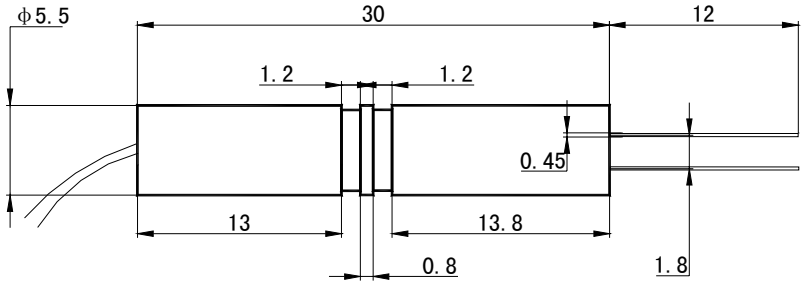
** Specifications are subject to change without notice

U.S. Add: 39420 Liberty Street, Suite 163, Fremont, California, Zip 94538, U.S.A Tel: +1-510-828-3991
China Add: 34 Shanghai Road, Free-Trade Zone of Qingdao, Zip266555, P. R. China Tel: +86-532-8676-8580 Fax: +86-532-8676-8589
Website: www.primanex.com Email: bosse.zhang@primanex.cn

Mini 1×1 MagLight™ Optical Switch

M-O Tech® for Optical Network

Dimensions drawing (mm)



Electrical Specifications

Parameter	Specification		Unit
Switching Speed	200~400	10~20	μs
Switching Voltage（VCC）	4.5~5.5	6.5~7.5	V
Switching Current	< 100	< 350	mA
Pulse Width	< 500	< 15	μs
Claim Frequency	< 1000	< 5000	Hz

* for electrical specifications related to other switching speed, please contact Primanex.

Pin Control Signal Correspond to Switching Status Table*

Pin1	Pin2	The Optical Output Port
1(Voltage = VCC)	0(Voltage = GND)	ON
0(Voltage = GND)	1(Voltage = VCC)	OFF

Ordering information （Sample：PFMS－11M0111210）

PFMS-11M □□ □ □ □ □ □

Switch Speed
0、0.2～0.4ms
1、20μs~200μs
2、10μs～20μs
3、Others

Operating Wavelength
1、C band 1525~1565 nm
2、L Band 1565-1615 nm
3、Custom

Latching Type
1、Latching
2、Non-Latching

Dimension
1、Standard
2、Others

Fiber Length
1、0.5 m
2、1.0 m
3、Custom

Fiber Type
1、250μm fiber
2、900μm Loose
3、900μm Tight
4、Others

Connector Type
0、No connector
1、FC/UPC
2、FC/APC
3、SC/UPC
4、SC/APC
5、LC/PC
6、MU/PC
7、Others

U.S. Add: 39420 Liberty Street, Suite 163, Fremont, California, Zip 94538, U.S.A Tel: +1-510-828-3991
China Add: 34 Shanghai Road, Free-Trade Zone of Qingdao, Zip266555, P. R. China Tel: +86-532-8676-8580 Fax: +86-532-8676-8589
Website: www.primanex.com Email: bosse.zhang@primanex.cn