

# 1×2 MagLight<sup>TM</sup> Optical Switch

-Transmission

M-O Tech® for Optical Network

## Features

- No moving parts, best reliability
- Ultra fast switching speed
- Extremely stable latching mode
- Low power consumption
- Exceptional reliability and stability



## **Product Description**

The microsecond Series 1x2 solid-state fiber optical switch connects optical channels by redirecting an incoming optical signal into a selected output optical fiber. The switching of the optical light is realized by utilizing Faraday Effect. This is achieved using a patent protected non-mechanical configuration with solid-state all-crystal design which eliminates the need for mechanical movement and organic materials. The microsecond fiber optic switch is designed to meet the most demanding switching requirement of reliability, response, and continuous switching operation.

## Applications

**Specifications** 

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

Item	unit	Parameter	Note
Wavelength Range	nm	1525~1565	Other band optional
Insertion Loss	dB	0.70(Typical); 1.00(Max)	
PDL	dB	0.10(Typical); 0.25(Max)	
Return Loss	dB	≥50	
Crosstalk	dB	≥40	≥45dB @ 25℃
Repeatability	dB	$\pm 0.01$	
Durability	Cycles	>10 Billions	
Switching Speed	μs	10~400	
Maximum Optical Power	mW	500	
Storage Temperature	°C	-40 ~ 85	
Operating Temperature	°C	-5 $\sim$ 70	
Dimension( $L \times W \times H$ )	mm	69 ×8.2 × 8.2	
Fiber Type		SMF-28e	
Fiber length	m	$1.0 \pm 0.1$	

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

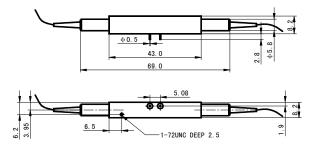
\*\*. Specifications are subject to change without notice



## 1×2 MagLight<sup>TM</sup> Optical Switch -Transmission

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	< 200	< 500	mA
Pulse Width	< 500	< 15	μs
Claim Frequency	< 1000	< 3000	Hz

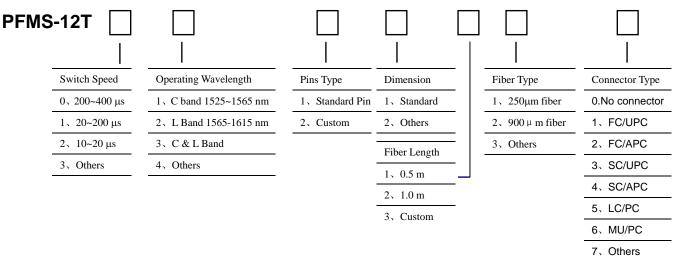
\* for electrical specifications related to other switching speed, please contact Primanex.

#### Pin Control Signal Correspond to Switching Status Table

Pin1	Pin2	The Optical Output Port
1(Voltage = VCC)	0(Voltage = GND)	OUT 1
O(Voltage = GND)	1(Voltage = VCC)	OUT 2

### **Ordering information**

## (Sample: PFMS-12T0111210)



All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. Primanex reserves the right to change at any time without notices the design, specifications, function, fit or form of its products described herein, including withdrawal at any time of a product offered for sale herein. Primanex makes no representations that the products herein are free from any intellectual property claims of others. Please contact Primanex for more information. Primanex and the Primanex logo are trademarks of Primanex Corporation. Other trademarks are the property of their respective holders.

#### Tel: +1-510-828-3991 Tel: +86-532-8676-8580 Fax: +86-532-8676-8589