

Features

- No moving parts, best reliability
- Ultra fast switching speed
- Extremely stable latching mode
- Low power consumption
- Easy to route -all fibers on one end
- Exceptional durability and stability



Applications

- l Optical switching
- l High speed protection
- l System monitoring
- l Test & measurement
- l Fiber-optics sensing system

Product Description

Primanex MagLight™ 1x1 optical switch is an all solid-state device without any moving parts. 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. The microsecond fiber optic switch is designed to meet the most demanding switching requirements of reliability, durability, response, and continuous high frequency switching.

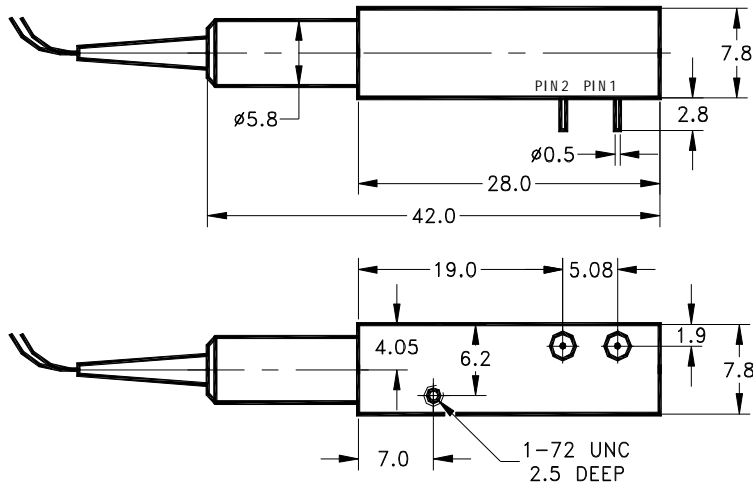
Specifications

Item	Unit	Parameter	Note
Wavelength Range	nm	1525~1565	Other band optional
Insertion Loss	dB	0.80 (Typical); 1.10 (Max)	
PDL	dB	0.10 (Typical), 0.20 (Max)	
Return Loss	dB	≥ 40	
Crosstalk	dB	≥ 40	
PMD	ps	≤ 0.2	
Repeatability	dB	± 0.01	
Durability	cycles	> 10 Billions	
Switching Speed	μs	10 ~ 400	The switching speed is optional
Maximum Optical Power	mW	500	
Storage Temperature	°C	-40 ~ 85	
Operating Temperature	°C	-5 ~ 70	
Dimension(L×W×H)	mm	42 × 7.8 × 7.8	
Fiber Type		SMF-28e	

*. All the specifications are based on the devices without connector, and guaranteed over wavelength, polarization and temperature.

** Specifications are subject to change without notice

Dimensions drawing (mm)



Electrical specifications

Parameter	Specification		Unit
Switching Speed	200~400	10~30	μs
Switching Voltage (VCC)	4.5~5.5	6.5~7.5	V
Switching Current	< 100	< 350	mA
Pulse Width(typical)	1000	15	μs
Claim Frequency	< 800	< 3000	Hz

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

Pin control signal corresponding 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 (Example: PFMS0-11R1121110)

RFMS	-11R						
RoHS Compliance	Operating Wavelength		Pins Type	Fiber Type			Connector Type
0、Non-Compliant	1、C band 1525~1565 nm		1、Standard Pins	1、250μm fiber			0、No connector
1、Compliant	2、L Band 1565-1615 nm		2、Others	2、900μm fiber			1、FC/UPC
	3、C & L Band			3、Others			2、FC/APC
	4、Others						3、SC/UPC
							4、SC/APC
							5、LC/PC
	Switch Speed	Fiber Length		Dimension			6、MU/PC
	1、200 μs~400 μs	1、0.5+/-0.1 m		1、Standard			7、Others
	2、10 μs~30 μs	2、1.0+/-0.1m		2、Others			
	3、Others	3、Others					