

Features

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



Applications

- Optical switching
- High speed protection
- System monitoring
- Test & measurement
- 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.

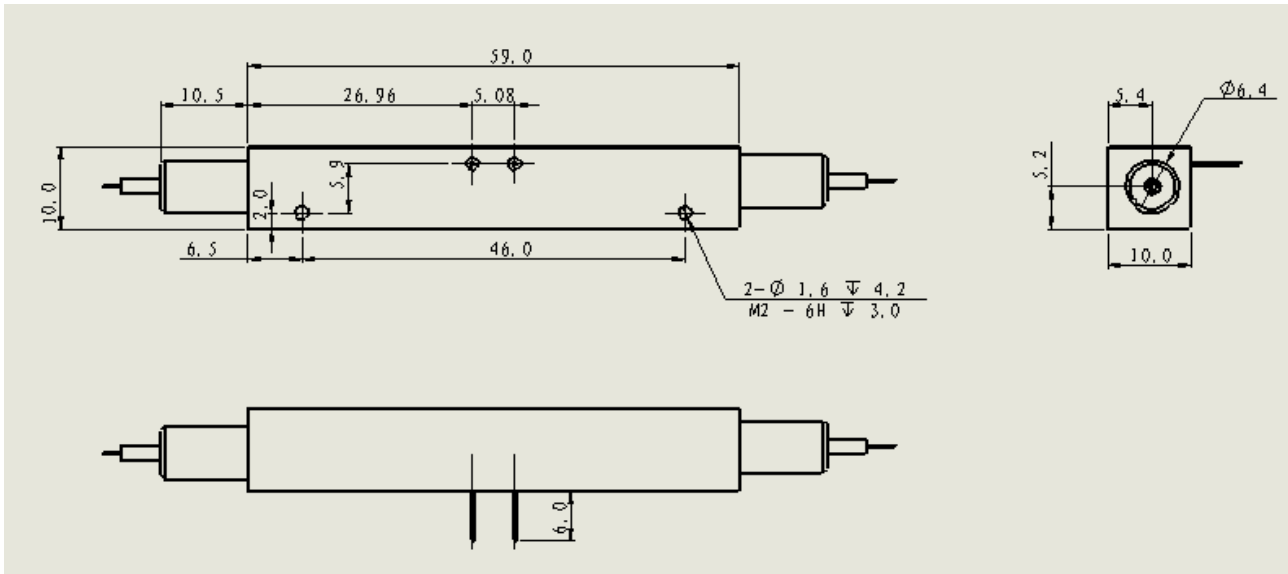
Specifications

Item	Unit	Parameters		Notes
		Unidirectional	Bidirectional	
Wavelength Range	nm	1525~1565		Other band optional
Insertion Loss	dB	<1.1	<1.3	
PDL	dB	<0.2		
Return Loss	dB	40	30	
Cross-talk	dB	40	35	Typical >50dB
PMD	ps	0.2		
Repeatability	dB	+/- 0.01		
Durability	cycles	> 30 Billions		
Switching Speed	μs	Regular (200~400); Ultra-fast (20~40)		Time period between controlling signal and optical response
Light Switching time	μs	Ultra-fast (<5)		Optical rising edge and falling edge
Storage Temperature	°C	-40~85		
Operating Temperature	°C	-5~70		
Maximum Optical Power	mW	500		
Dimension(L×W×H)	mm	59×10× 10		

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

**. Specifications are subject to change without notice.

Dimensions Drawing (mm)



Electrical Specifications

Parameters	Specifications		Unit
	Regular	Ultra-fast	
Switching Speed	200~400	20~40	µs
Switching Voltage (VCC)	5 (+/-5%)	5 (+/-5%)	V
Driving Mode	Voltage or Pulse Driving	Pulse Driving	NA
Pulse Width (typical)	1000	30	µs
Claim Frequency	<800	< 10000	Hz

Notes:

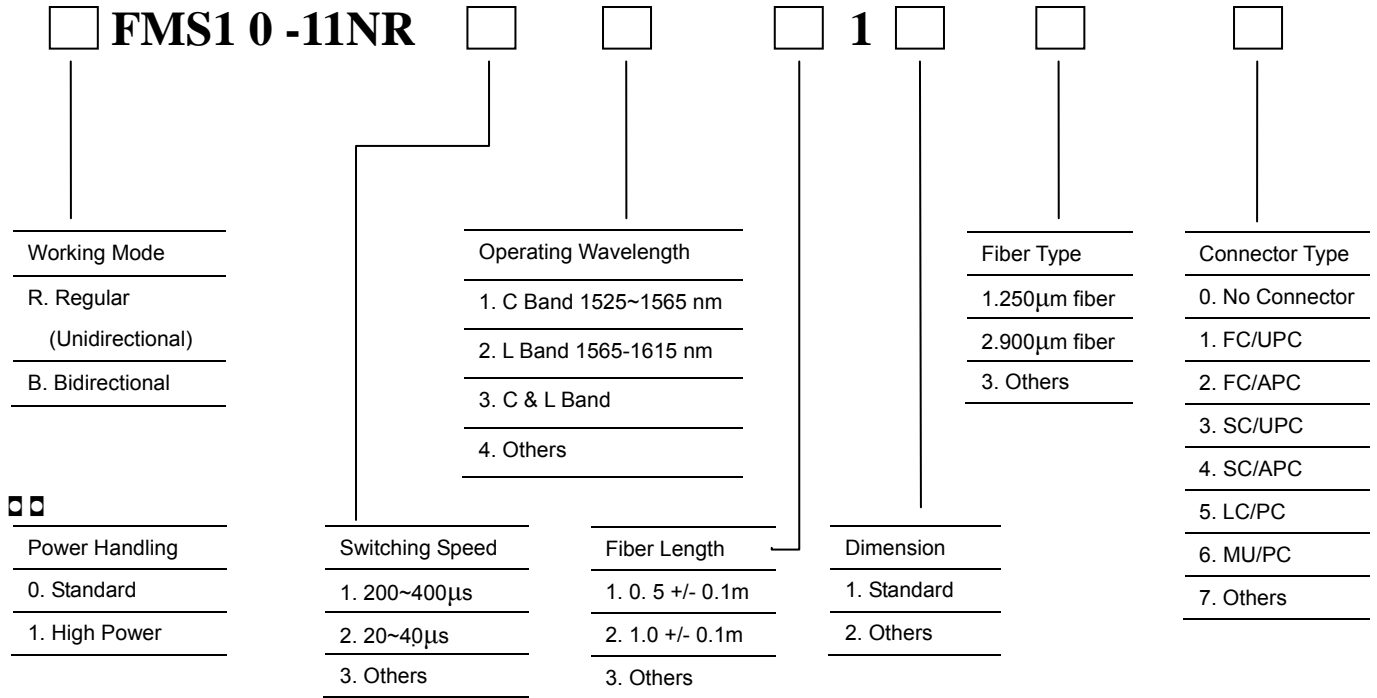
- Primanex provides optional switch driving board at additional charge;
- It is recommended to use Primanex switch driving board for the Ultra-fast switch;

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:RFMS10-11NR121110)



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