

## 1310, 1550nm 1x2 PM Magneto Optical Switch

1310nm, 1550nm 1x2 PM Magneto Optical Switch is designed for high speed optical switching application, it based on Faraday Effect with Bi-refringent crystal and micro-optical component, the Magneto Optical Switch features low insertion loss, high speed and high reliability, it's widely used in LIDAR System, Aerospace and Deep Sea application, the switch driver is also available upon request.

### Applicatio

LIDAR System  
Fiber Optic Sensor  
Signal Monitoring  
Lab & Research

### Features:

High Speed  
Non-Mechanical  
RoHs Compliant  
High Reliability



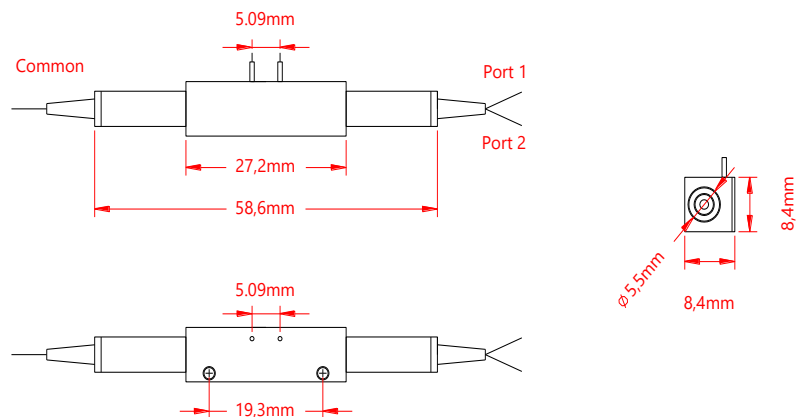
### Specification:

Parameter	Symbol	Value	Unit		
Center Wavelength	$\lambda$	1310	1550	nm	
Bandwidth	BW	1295-1325	1520-1580	nm	
Typ. Insertion Loss	IL	0.5		dB	
Max. Insertion Loss	IL	0.8		dB	
Min. Extinction Ratio	ER	18		dB	
Max. Polarization Mode Dispersion	PMD	0.2		ps	
Min. Return Loss	RL	50		dB	
Min. Cross Talk	Bidirectional	CT	50		dB
	Unidirectional		50		dB
Max. Switch Speeds (Rise/Fall)		50		us	
Repetition Rate		200		Hz	
Min. Life Time		$10^{10}$		Cycle	
Max. Optical Power (CW)	P	500		mW	
Switch Type		Latching		-	
Max. Tensile Load		5		N	
Fiber Type		PM Panda Fiber		-	
Operating Temperature	T	-5~65		°C	
Storage Temperature	T	-40~85		°C	
Package Dimension		L58.6xW8.4xH8.4		mm	

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

### Drawing:



**Pin Information:****1. Bidirectional 1x2 and 2x1 Dual Stage type:**

Switch Type	Optical Path	Pin 1	Pin 2
1x2 & 2x1	Com ↔ Port 1	GND	5V Pulse
	Com ↔ Port 2	5V Pulse	GND

**2. Unidirectional 1x2 or 2x1 Dual Stage type:**

Switch Type	Optical Path	Pin 1	Pin 2
1x2	Com → Port 1	GND	5V Pulse
	Com → Port 2	5V Pulse	GND
2x1	Port 1 → Com	5V Pulse	GND
	Port 2 → Com	GND	5V Pulse

**Electrical Driving Information:**

Parameter	Min.	Typ.	Max.	Unit
Driving Voltage	4.5	5	5.5	V
Driving Current	110	140	195	mA
Pulse Duration	0.2	0.3	0.5	ms

Tips: The unit switches via adding voltage pulse on the PINs. Driving the unit under diagram above, the optical signal will change to a certain channel.

**Ordering Information (Part Number):**PMOS-**WWW**-**CC**-**L**-**S**-**J**-**LL**-**CC**

<b>WWW</b>	<b>CC</b>	<b>L</b>	<b>S</b>	<b>J</b>	<b>LL</b>	<b>CC</b>
Wavelength	Configuration	Light Path	Stage	Fiber Jacket	Fiber Length	Connector
1310 - 1310nm 1550 - 1550nm SSSS - Specify	12 - 1x2/2x1	B - Bidirectional U - Unidirectional	D - Dual Stage	B - 250um Bare Fiber 9 - 900um Loose Tube	05 - 0.5m 10 - 1.0m 15 - 1.5m 20 - 2.0m SS - Specify	NE - None FA - FC/APC FU - FC/UPC SA - SC/APC SU - SU/APC LA - LC/APC LU - LC/UPC SS - Specify