

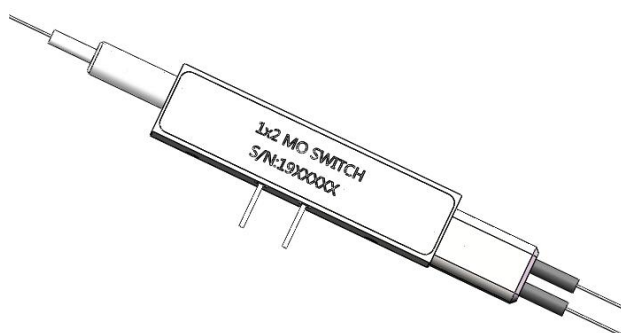


## Product Description

- The  $\mu$ s-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. The  $\mu$ s-series fiber optic switch is designed to meet the most demanding switching requirements of reliability, durability, response, and continuous high frequency switching operation.

## Features

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



## Applications

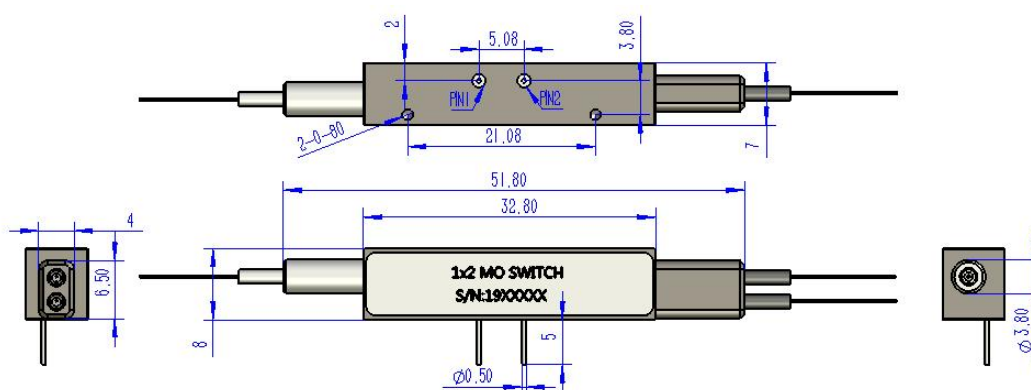
- Optical switching
- High speed protection
- System monitoring
- Test & measurement
- Fiber-optic sensing system

## Specifications

Item	Unit	Parameters		Notes
		Unidirectional	Bidirectional	
Wavelength Range	nm	1310 or 1550		Other band optional
Insertion Loss	dB	0.8 (Typ.); 1.2 (Max.)	0.9 (Typ.); 1.4 (Max.)	
PDL	dB	0.1 (Typ.); 0.2 (Max.)	0.1 (Typ.); 0.3 (Max.)	
Return Loss	dB	$\geq 40$ (Typ 50)	$\geq 30$	
Cross-talk	dB	$\geq 40$ (Typ 50)	$\geq 30$	
PMD	ps	0.2		
Repeatability	dB	$\pm 0.01$		
Durability	cycles	Regular (>100 Billions), Ultra-fast (>1000 Billions)		
Switching Speed	$\mu$ s	Regular (50~200); Ultra-fast (2~10)		Other speed optional
Operating Temperature	$^{\circ}\text{C}$	-45~85		

Storage Temperature	°C	-40~85	
Maximum Optical Power	mW	500	High power optional
Dimension( L×W×H )	mm	32.8x8× 7(±0.2)	(含端帽 51.8x8x7)

## Dimensions Drawing (mm)



## Electrical Specifications

Parameters	Specifications		Unit
	Regular	Ultra-fast	
Switching Speed	50~200	2~10	μs
Switching Voltage (VCC)	3(+/-5%)	5~7.5	V
Switching Current	< 100	< 350	mA
Driving Mode	Voltage or Pulse Driving	Pulse Driving	NA
Pulse Width (typical)	1000	50	μs
Claim Frequency	<800	< 3000	Hz

Notes:

- Puobao provides optional switch driving board at additional charge;
- It is recommended to use Puobao's switch driving board for the Ultra-fast switch;
- To avoid damaging the Ultra-fast switch, Puobao recommends to set the current limit below 800mA when the power supply voltage is set at 6.0V~7.0V.
- The switching speed measured by Puobao company is between 2-5US at working voltage of 7.5V and current of 350MA

## UnidirectionalPin Definition

Pin1	Pin2	The Optical OutputPort
1(Voltage = VCC)	0(Voltage = GND)	IN → OUT1



0(Voltage = GND)	1(Voltage = VCC)	IN → OUT2
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### Bidirectional Pin Definition

Pin1	Pin2	The Optical OutputPort
1(Voltage = VCC)	0(Voltage = GND)	IN ↔ OUT1
0(Voltage = GND)	1(Voltage = VCC)	IN ↔ OUT2

### Ordering Information: HC-ZMS- A-B-C-D-E-F-G(Example: HC-ZMS-1112110)

ZMS-	A	B	C	D	E	F	G
	Working Mode	Switching Speed	Operating Wavelength	Fiber Tuber	Fiber Length	Fiber Type	Connector Type
	1.Regular 2.Bidirectional	1.50~200us 2.5~20us 3. Others	1.1310nm (±20) 2.1550nm (±20) 3.1585nm (±20) 4. C & L Band 5. Others	1.250μm fiber 2. 900μm fiber 3. Others	1.0.5 +/- 0.1 m 2. 1.0 +/- 0.1 m 3. Others	1.SMF-28 2.50/125MM 3.62.5/125MM 4.80um 细径 5.Others	0.No Connector 1. FC/UPC 2. FC/APC 3. SC/UPC 4. SC/APC 5. LC/PC 6. MU/PC 7. Others