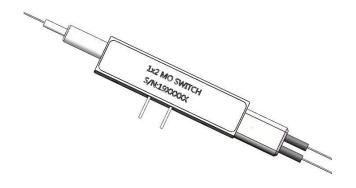


#### **Features**

- 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-optics sensing system



### **Product Description**

The µs-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.

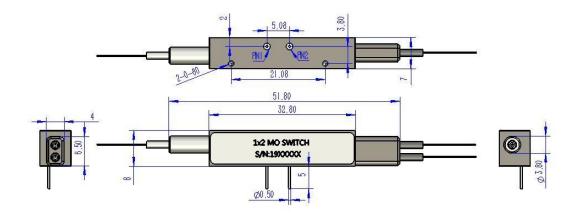
This is achieved using a patent protected non-mechanical configuration with solid-state all-crystal design which eliminates the need for mechanical movement. The ps-series fiber optic switch is designed to meet the most demanding switching requirements of reliability, durability, response, and continuous high frequency switching operation.

Item	Unit	Parameters		Neter
		Unidirectional	Bidirectional	Notes
Wavelength Range	nm	1525~1565		Other band optional
Insertion Loss	dB	0.7 (Typ.);1.0(Max.)	0.8(Typ.);1.1(Max.)	
PDL	dB	0.1 (Typ.); 0.2 (Max.)	0.1 (Typ.); 0.3(Max.)	
Return Loss	dB	≥40 (Typ 50)	≥40	
Cross-talk	dB	≥40 (Typ 50)	≥40	
PMD	ps	0.2		
Repeatability	dB	+/- 0.01		
Durability	cycles	Regular (>100Billions), Ultra-fast (>1000Billions)		
Switching Speed	μs	Regular (50~200); Ultra-fast (5~20)		Other speed optional
Operating Temperature	P0PC	-5~70		
Storage Temperature	P0PC	-40~85		
Maximum Optical Power	mW	500		High power optional
Dimension( L×W×H )	mm	32.8x8× 7		(含端帽 51.8x8x7)

#### Note:

- All the specifications are based on the devices without connectors, and guaranteed over wavelength, polarization and temperature.
- 2. Specifications are subject to change without notice.

## **Dimensions Drawing (mm)**



## **Electrical Specifications**

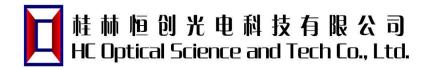
Parameters	Specificati	Unit		
rarameters	Regular	Ultra-fast		
Switching Speed	50~200	5~20	μs	
Switching Voltage (VCC)	3(+/-5%)	5~7.5	V	
Switching Current	< 100	< 350	mA	
Driving Mode	Voltage or Pulse Driving	Pulse Driving	NA	
Pulse Width (typical)	1000	20	μs	
Claim Frequency	<800	< 3000	Hz	

# **UnidirectionalPin Definition**

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

## **BidirectionalPin Definition**

Pin1	Pin2	The Optical OutputPort
1(Voltage = VCC)	0(Voltage = GND)	IN <b>←→</b> OUT1
0(Voltage = GND)	1(Voltage = VCC)	IN <b>↔</b> OUT2



Ordering Information (Example: HC-MOS1x2-A-B-C-D-E-F)

MOS1x2	А	В	С	D	Е	F
	Working Mode	Switching Speed	Operating Wavelength	Fiber Tuber	Fiber Length	Connector Type
	1.Regular	1.50~200us	1.1525~1565 nm	1.250µm fiber	1.0.5 +/- 0.1 m	0. No Connector
	2. Bidirectional	2.5~20us	2.1565-1615 nm	2.900µm fiber	2. 1.0 +/- 0.1 m	1. FC/UPC
		3. Others	3. C & L Band	3.Others	3. Others	2. FC/APC
			4. Others			3. SC/UPC
						4. SC/APC
						5. LC/PC
						6. MU/PC
						7. Others