

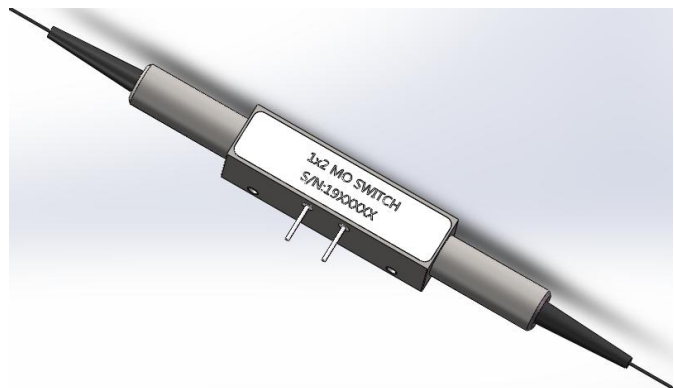


## Product description

- 1x2 or 2x1 optical switch is a kind of solid state light switch, the internal no moving components, is based on Faraday effect. This series of products use the principle of electromagnetic induction and Faraday optical rotation effect to change the polarization state of the incident beam, combined with the use of birefringent polarization splitting crystal, so as to change the beam propagation path, so as to achieve the function of optical path switching.

## Feature

- Non-moving component
- Fast switching speed
- Extremely stable latch mode
- Low power consumption
- Excellent stability and reliability

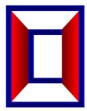


## Application

- High speed protection
- System monitoring
- Test and measurement
- Fiber optic sensing system

## Specifications

Item	Unit	Parameters		Notes
		Unidirectional	Bidirectional	
Wavelength Range	nm	1525~1565		Other band optional
Insertion Loss	dB	0.8(Typ.);1.1(Max.)	0.8(Typ.);1.1(Max.)	
Return Loss	dB	≥40 (Typ 50)	≥40	
Cross-talk	dB	≥40 (Typ 50)	≥40	
ER	dB	≥18		
WDL	dB	≤0.3		
TDL	dB	≤0.3		
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	POPC	-5~70	
Storage Temperature	POPC	-40~85	
Maximum Optical Power	mW	500	High power optional
Dimension( L×W×H )	mm	32.8x8×7	(Cap with end 51.8x8x7)

Note:

1. 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.

## Pin Configurations

Parameters	Specifications		Unit
	Regular	Ultra-fast	
Switching Speed	50~200	5~20	μs
Switching Voltage (VCC)	3(+/-5%)	5~6	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

## Control pin definition

**Irreversible:**

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

**Reversible:**

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

