

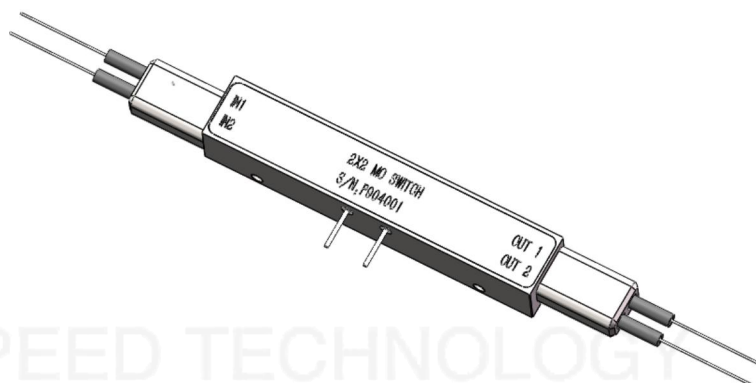
## 2x2 MO-Switch

### 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

2x2 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 fiberopticswitch is designed to meet the most demanding switching requirements of reliability, durability, response, and continuous high frequency switching.

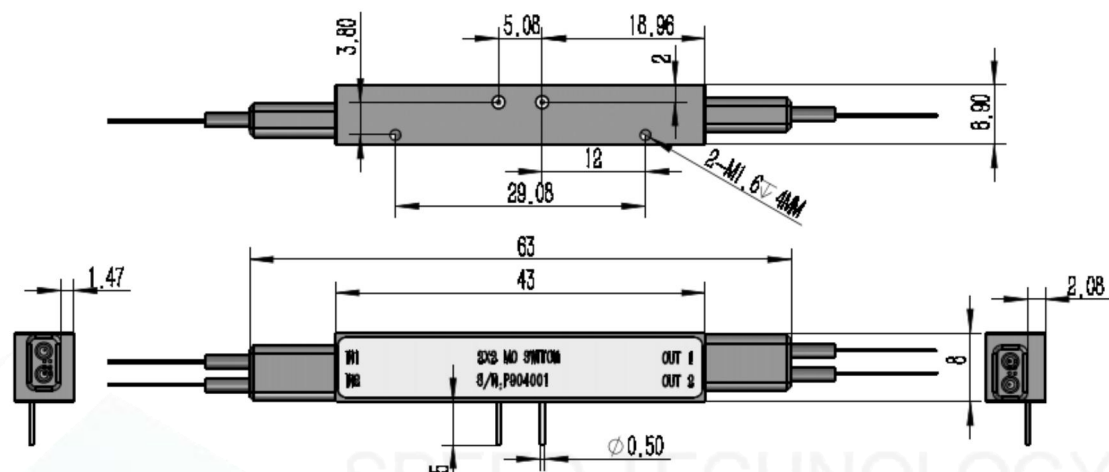
### Specifications

Item	Unit	Parameters		Notes
		Unidirectional	Bidirectional	
Wavelength Range	nm	1525~1565		Other band optional
Insertion Loss	dB	0.7(Typ.); 1.1(Max)	0.8(Typ.); 1.2(Max)	
PDL	dB	0.10(Typ.);0.20(Max)	0.10(Typ.), 0.30(Max)	
Return Loss	dB	45	30	Typical >50dB
Cross-talk	dB	40	30	Typical >50dB
PMD	ps	0.2		
Repeatability	dB	+/- 0.01		
Durability	cycles	Regular (>100Billions) ; Ultra-fast (>100Billions)		
Switching Speed	μs	Regular (50~200); Ultra-fast (5~20)		Other speed optional
Storage Temperature	°C	-40~85		
Operating Temperature	°C	-5~70		
Maximum Optical Power	mW	500		
Dimension( L×W×H )	mm	63 × 8 × 7		

#### 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.

### Dimensions Drawing (mm)



### Electrical Specifications

Parameter	Specification		Unit
	Regular	Ultra-fast	
Switching Speed	50~200	5~20	μs
Switching Voltage(VCC)	3(+/-5%)	5.0~6.0	V
Switching Current	< 200	< 500	mA
Pulse Width(typical)	1000	20	μs
Claim Frequency	< 800	< 3000	Hz

### Pin control signal corresponding to switching status table

Switching State	Pin1	Pin2	The Optical Output Port
State "0"	1(Voltage = VCC)	0(Voltage = GND)	IN1 <sup>++</sup> OUT 1; IN2 <sup>++</sup> OUT 2
State "1"	0(Voltage = GND)	1(Voltage = VCC)	IN1 <sup>++</sup> OUT 2; IN2 <sup>++</sup> OUT 1

### Ordering Information (Example: UMS-22C11210)

UMS-22 C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Working Mode	Switching Speed	Operating Wavelength	Fiber Tuber	Fiber Length	Connector Type
	1.Regular 2. Bidirectional	1.500~200us 2.5~20us 3. Others	1.1310±20 nm 2.1550±20nm 3. 1565-1615 nm 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	0.No Connector 1. FC/UPC 2. FC/APC 3. SC/UPC 4. SC/APC 5. LC/PC 6. MU/PC 7. Others