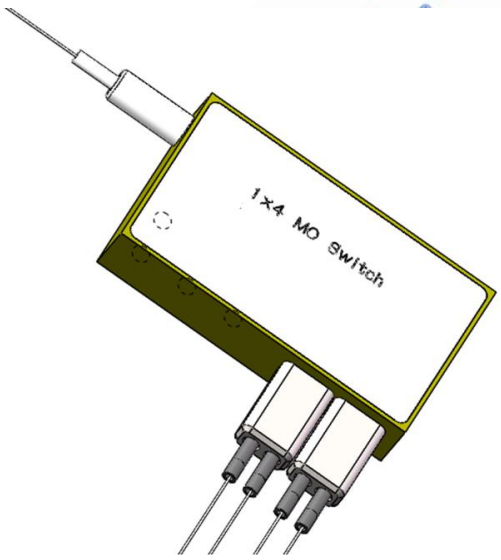
1x4 PM Maget Optical Switch

Product Description

- Theμs-series 1x4PM 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-mechanicalconfiguration with solid-state all-crystal design whicheliminates the need for mechanical movement. Theμs-series fiber optic switch is designed to meet the mostdemanding 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 sameside
- Exceptional reliability and stability



Applications

- Optical switching
- High speed protection
- System monitoring
- Test & measurement
- Fiber-opticssensingsystem

SPerformance

Item	Unit	Parameters		Notes
		Unidirectional	Bidirectional	
Wavelength Range	nm	1525~1565		
Insertion Loss	dB	1.0(Typ.); 1.5(Max.)	1.0(Typ.);1.8(Max.)	
Return Loss	dB	≥40 (Typ.50)	≥30 (Typ.40)	
Crosstalk	dB	≥30 (Typ.40)	≥30 (Typ.40)	
ER	dB	≥18		
WDL	dB	≤0.3		
TDL	dB	≤0.3		
Repeatability	dB	+/- 0.01		
Durability	cycles	Regular (>100Billions), Ultra-fast (>1000Billions)		

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Switching Speed	μs	Regular (50~200), Ultra-fast (2~20)	
Operating Temperature	°C	-5~70	
Storage Temperature	°C	-40~85	
Maximum Optical Power	mW	500	
Dimension(L×W×H)	mm	37×21x7.5	

*.All the specifications are based on the devices without connector, and guaranteed over wavelength, polarization and temperature.

**.Specifications are subject to change without notice.

Electrical Specifications

Parameters	Specifications		Unit
	Regular	Ultra-fast	
Switching Speed	50~200	2~20 (Typ.5)	μs
SwitchingVoltage (VCC)	3(+/-5%)	3-7.5	V
Switching Current	< 100	< 350	mA
Driving Mode	Voltage or Pulse Driving	Pulse Driving	NA
Pulse Width (typical)	300(Typ.);500(Max.)	20	μs
Claim Frequency	<1000	<3500	Hz

BidirectionalPin Definition

Pin No.	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8
IN ↔ OUT1	+	-	+	-	—	—	—	—
IN ↔ OUT2	-	+	-	+	—	—	—	—
IN ↔ OUT3	+	-	-	+	—	—	—	—
IN ↔ OUT4	-	+	+	-	—	—	—	—

UnidirectionalPin Definition

Pin No.	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8
IN→OUT1	+	-	+	-	—	—	—	—
IN→OUT2	-	+	-	+	—	—	—	—
IN→OUT3	+	-	-	+	—	—	—	—
IN→OUT4	-	+	+	-	—	—	—	—

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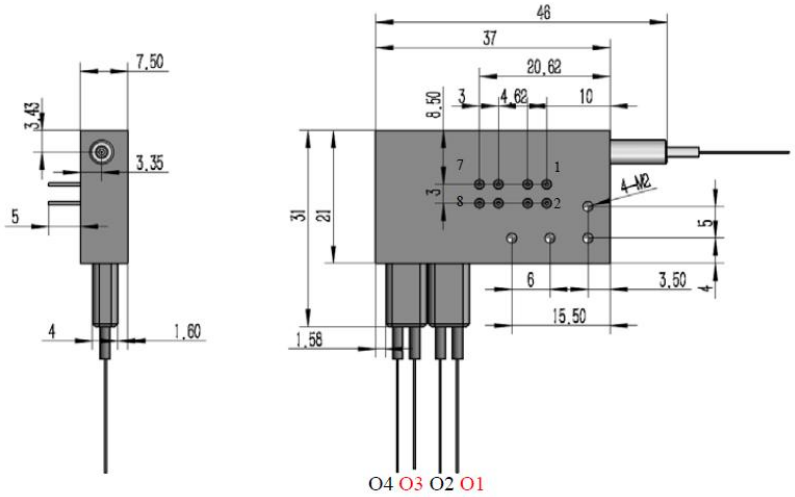
Dimensions Drawing (mm)



Ordering Information: Example: 14PMMN-1112110

14PM MN-	□	□	□	□	□	□	□	□
	Working Mode	Switching Speed	Operating Wavelength	Axis Type	Fiber Type	Fiber Tuber	Fiber Length	Connector Type
	1.Regular 2.Bidirectional	1.50~200us 2.2~20us 3. Others	1.CBand 2. L Band 3. C & L Band 4. Others	1.B(Both of axis working) 2.F (Fast axis blocked)	1.PM15 2.PM98 3.PM13 4.Others	1.250μm fiber 2. 900μm fiber 3. Others	1.0.5 +/- 0.1 m 2. 1.0 +/- 0.1 m 3. Others	0.None 1. FC/UPC 2. FC/APC 3. SC/UPC 4. SC/APC 5. LC/PC 6. MU/PC 7. Others

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