

1 X4 PM Magnet-Optic Switch

Product features

-  Low insertion loss
-  The structure is compact
-  Us-level switching speed
-  Ultra-low power consumption

Application

-  Passive Optical Network
-  Light protection system
-  Measurement system
-  Network monitoring



Technical parameters

Item	Unit	Parameters		Notes
		One-way	Two-way	
Wavelength range	nm	1525 ~ 1565		
Insertion loss	dB	1.0(Typ.); 1.8(Max.)	1.5 (Typ.); 2.0(Max.)	
Return loss	dB	≥40 (Typ.50)	≥30 (Typ.40)	
Crosstalk	dB	≥30 (Typ.40)	≥30 (Typ.40)	
Extinction ratio	dB	≥18	≥18	Device specifications
Polarization mode dispersion	ps	0.2	0.2	
Repeatability	dB	+/- 0.01		
Continuity	cycles	>1000Billions		
Switching speed	μs	Regular (50~200); Ultra-fast (2~20)		
Operating temperature	°C	-5 ~ 70		
Storage temperature	°C	-40 ~ 85		
Optical power	mW	5000		
Dimensions (L × W × H)	mm	37×21×7.5		
Fiber type		PM1550		

*. The loss of all specifications does not include the loss of connectors, and does not include the loss under special circumstances.

Drive pin definition

One-way

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

Two-way

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

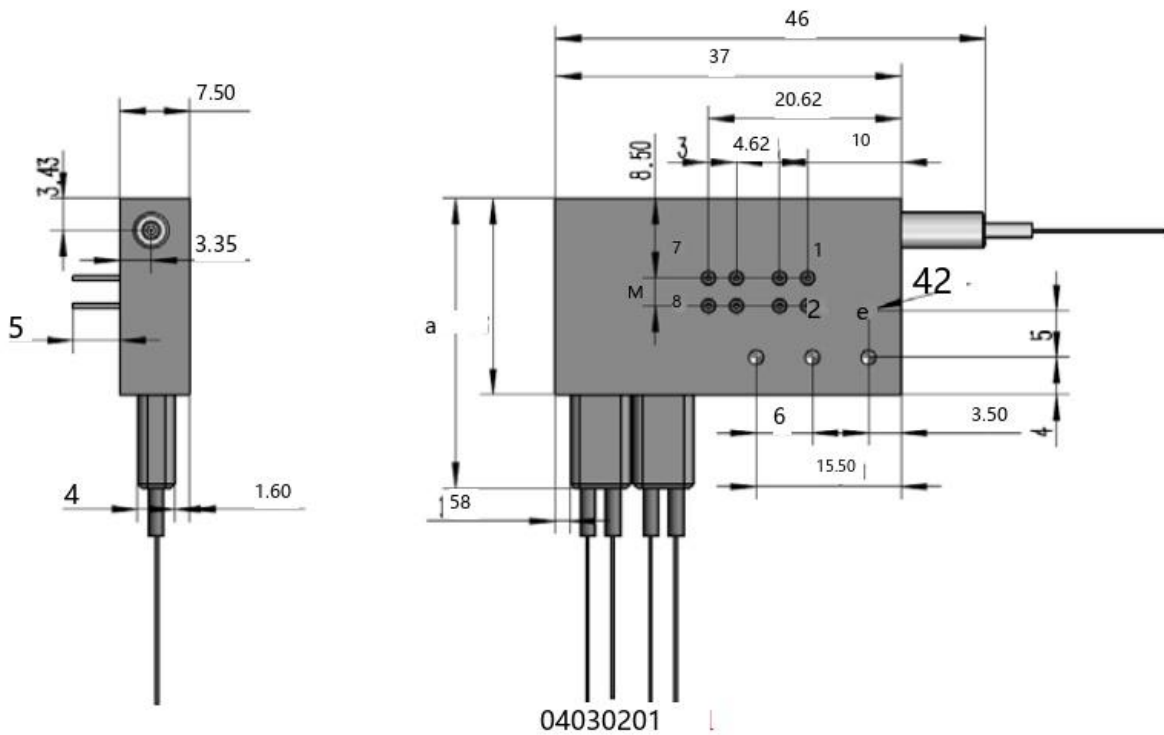
Electric control parameters

Parameters	Specifications		Unit
	Regular	Ultra-fast	
Switching Speed	50~200	2~20 (Typ.5)	μs
Switching Voltage (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

Note: 1. The recommended pulse width is < 200 us. If the pulse width is 20 us, it is recommended to adjust the voltage to 7 V.

2. When the switch is used for high frequency switching, it is not recommended to use it for a long time. If high frequency switching is needed for a long time, it is recommended to use a heat sink.

Dimension (mm) Bottom view



Ordering Information HC-PMMOS-1 × 4ZT-A-B-C-D-E-F

A	B	C	D	E	F
Working mode	Switching speed	Operating wavelength	Fiber type	Fiber length	Connector type
1. One-way 2. Two-way	1. 50~200us 2. 2~20us 3. Others	1.CBand 1525~1565 nm 2. 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