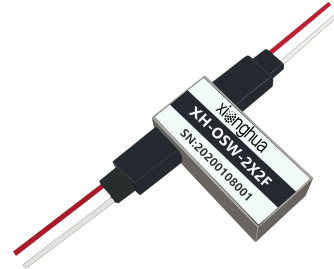


### Description

XH-OSW-2X2F full-switching mechanical optical switch is a kind of optical path control device, which has the function of controlling the optical path and converting the optical path; it can realize the two-way direct and cross function of the optical path. It plays an important role in optical communication applications. Optical switches are mainly used in multi-channel optical monitoring in optical transmission systems, LAN multi-light source/detector automatic switching, and optical sensing multi-point dynamic monitoring system optical test systems for optical fibers, optical devices, networks and field engineering optical cables Test; optical device installation and adjustment.

### Features

- Low insertion loss, wide wavelength range
- Low channel crosstalk, high stability, high reliability
- Simple control, small size, easy to embed in the circuit board
- Locking and non-locking control types can be selected

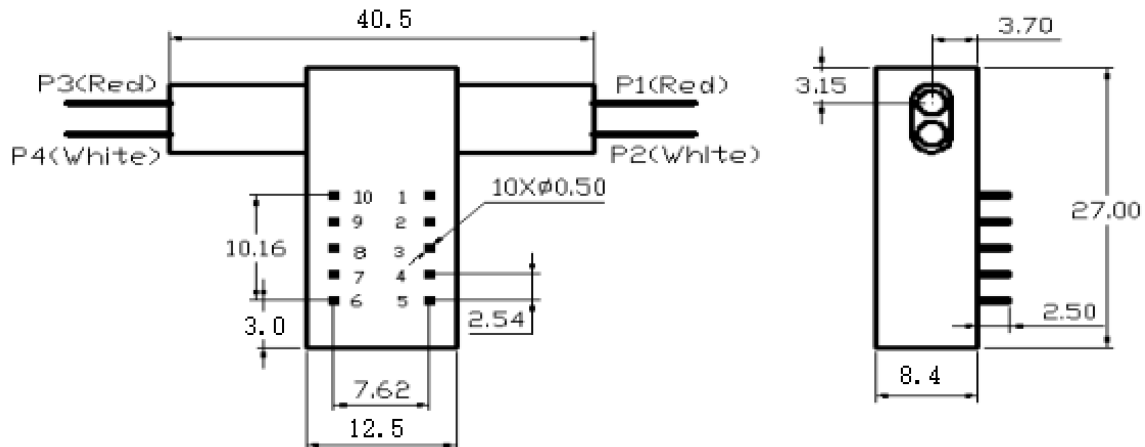


### Performance

Parameter	Parameter Value	
Model	XH-OSW-2x2F	
Insertion Loss (dB)	Typical value : 0.5    Max : 1.0	
Wavelength Range (nm)	850~1310	1260~1650
Working Wavelength (nm)	850/980/1310	1310/1550/1625
Return Loss (dB)	MM ≥ 30	SM ≥ 50
Channel Crosstalk (dB)	MM ≥ 35	SM ≥ 55
PDL (dB)	≤ 0.05	
WDL (dB)	≤ 0.25	
TDL (dB)	≤ 0.25	
Repeatability (dB)	≤ ± 0.02	
Lifetime (Times)	≥ 10 <sup>7</sup>	
Switching Time (ms)	≤ 8	
Transmission power (mW)	≤ 500	
Operating Voltage (V)	3 or 5	
Operating temperature ( )	-20~+70	
Storage temperature ( )	-40~+85	
Weight (g)	16	
Dimension (mm)	(L)27.0×(W)12.5×(H)8.4±0.2	

**Tip:** The above are commonly used optical switch parameters, if you have other requirements, please consult and customize.

### Dimensions

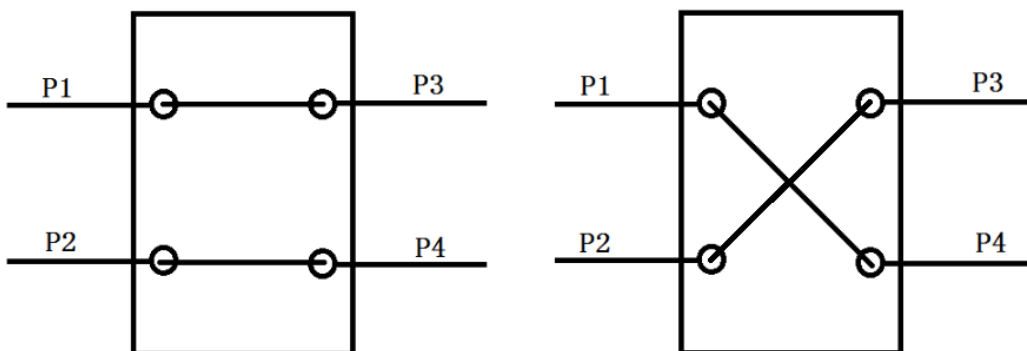


### Pins

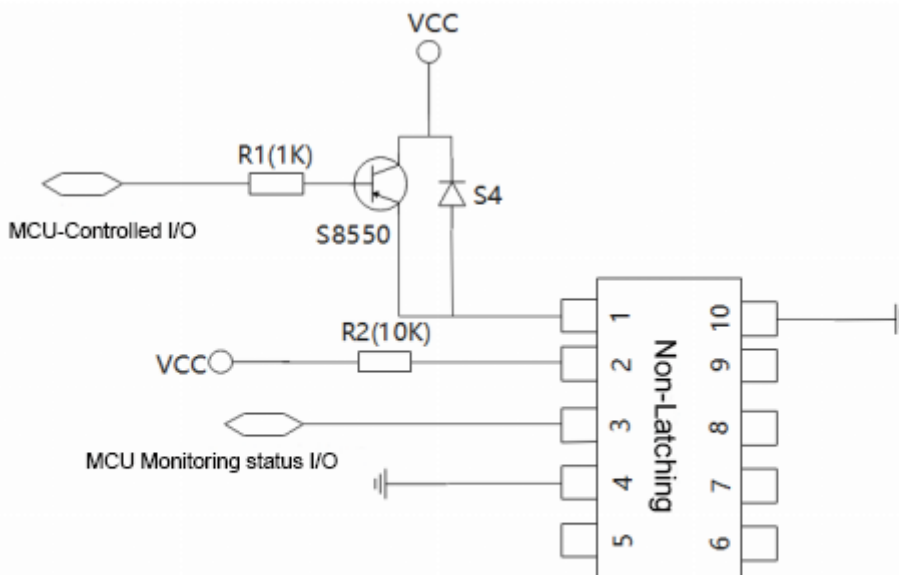
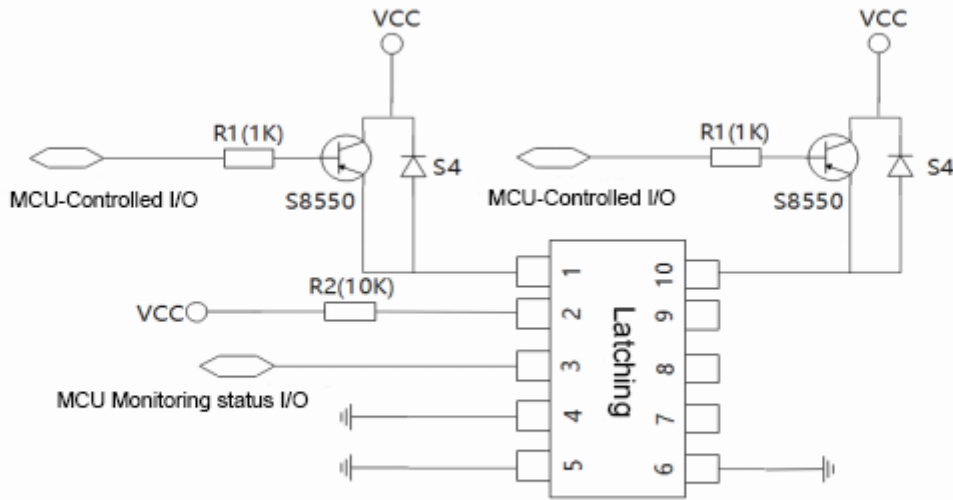
Type	Pin	Electric drive				Condition Monitoring			
2x2F	Channel	1	5	6	10	2-3	3-4	7-8	8-9
Latching	P1-P4 P2-P3	--	--	GND	V+	CLOSE	OPEN	OPEN	CLOSE
	P1-P3 P2-P4	V+	GND	--	--	OPEN	CLOSE	CLOSE	OPEN
Non-Latching	P1-P4 P2-P3	--	--	--	--	CLOSE	OPEN	OPEN	CLOSE
	P1-P3 P2-P4	V+	--	--	GND	OPEN	CLOSE	CLOSE	OPEN

Note: The locking optical switch only needs to be powered on to control the switch and then the power is turned off. The power-off optical path will remain in the state after the switch; the non-locking optical switch needs to be energized or powered off to achieve the optical path switching. The state before power supply.

### Optical Route



## Control circuit design reference



## Ordering Information : XH-OSW-1X2-A-B-C-D-E-F-G

Wavelength(A)	Fiber type(B)	Voltage Type(C)	Control Model(D)	Fiber Diameter (E)	Fiber Length(F)	Connector(G)
850:850nm 1310:1310nm 1550:1550nm 1310/1550:1310nm/1550nm X:other	SM:SM,9/125 M5:MM,50/125 M6:MM,62.5/125	3:3V 5:5V	L:locking N:Non-locking	25::250um 90:900um	05:0.5m 10:1.0m 15:1.5m X:other	NO:- FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC X:other