

1x1, 1x2 Optical Switch

Features

- Compact Size
- High crosstalk
- Low Insertion Loss

Applications

- Optical Cross and Connection System
- Network Monitor
- Optical Fiber Ring Protection

Specifications

Parameters	Unit	1x1, 1x2		
Operation Wavelength	nm	1310, 1550	850, 1310	980, 1053, 1064
Operation Bandwidth	nm	±30	±30	±30
Insertion Loss	dB	≤0.5 (Typ 0.4)	≤0.8 (Typ 0.6)	≤1.0 (Typ 0.7)
Return Loss	dB	≥50	≥30	≥50
Cross Talk	dB	≥55	≥30	≥55
Fiber Type		SMF-28e	MMF50/125,62.5/125	HI 1060
PDL	dB	≤0.10		
Repeatability	dB	≤±0.05		
Switch Time	ms	≤10		
Lifetime	Cycle	≥10 ⁹		
Switch Mode ^[1]		Latching or Non-Latching		
Operation Direction ^[2]		Bidirectional		
Optical Power Handling (CW)	mW	≤500		
Operating Temperature	°C	-15 ~ +70		
Storage Temperature	°C	-40 ~ +85		
Drive Voltage	V	5±0.5 DC or 5V Pulse		
Work Current	mA	≤50		
Power Consumption	mW	≤140		
Dimensions (LxWxH)	mm	27x12x8.2		

[1] Latching: switch will keep its routing while electric power off;

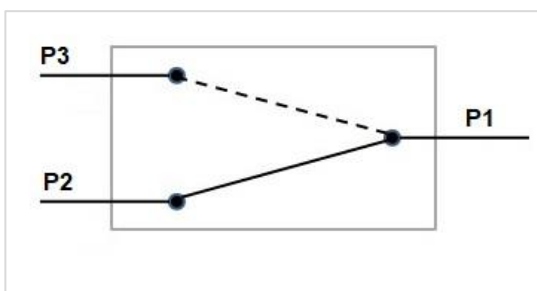
Non-Latching: switch will be reset to P1 to P2 while electric power off.

[2] The switch is bidirectional, the P1 port can be used as input or output.

Pins

Control Model	Optical Path	Electric Drive				Status Sensor			
		1	5	6	10	2-3	3-4	7-8	8-9
1x2	Light Pin	1	5	6	10	2-3	3-4	7-8	8-9
Latching	P1-P3	V+	GND	--	--	Open	Close	Close	Open
	P1-P2	--	--	GND	V+	Close	Open	Open	Close
Non-latching	P1-P2	--	--	--	--	Close	Open	Open	Close
	P1-P3	V+	--	--	GND	Open	Close	Close	Open

Optical Path

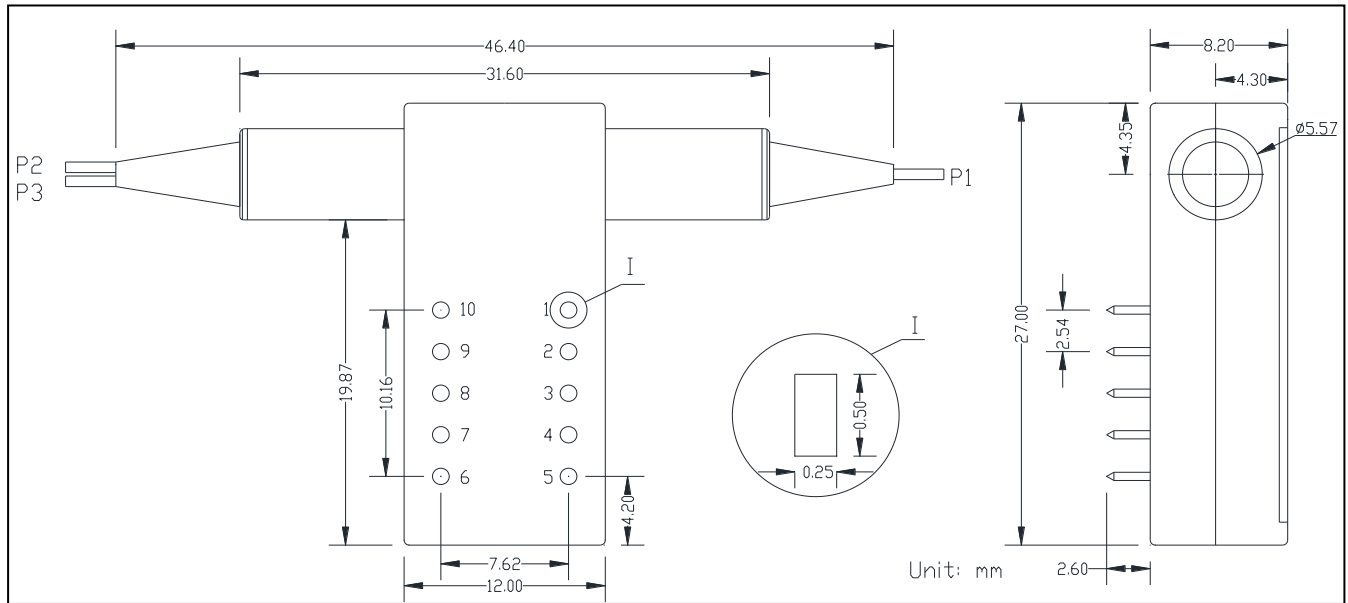


-for 1x1 switch, no port P3 for bright type, no port P2 for dark type.

-Bright type, optical path is connected while electric power off.

-Dark type, optical path is disconnected while electric power off.

Package Dimension



Ordering Information

OSW ①①①-②②②②-③-④④④-⑤-⑥-⑦⑦

①	Port Type	1x1; 1x2;
②	Wavelength	1310=1310nm; 1550=1550nm; 850=850nm; 980=980nm; 1053=1053nm; 1064=1064nm;
③	Mode	L=Latching; N=Non-Latching;
④	Pigtail Type	250=250um Fiber; 900=900um Loose Tube;
⑤	Fiber Type	1=SMF-28; 2=MMF 50/125; 3=MMF 62.5/125; 4=HI 1060;
⑥	Fiber Length	1= 1m;
⑦	Connector	NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others;
⑧	Type for (1x1)	B=Bright type; D=Dark type;