

PM Fiber Optical Switch (1x1, 1x2)

Features

- Compact Size
- High crosstalk
- Low Insertion Loss
- High PER

Applications

- Protection Switching
- Reconfiguration
- Optical Subsystems
- Array Integration

Specifications

Parameters	Unit	1x1, 1x2			
Operation Wavelength	nm	1310 and 1550	980, 1053, 1064	760, 850	467, 433, 411
Operation Bandwidth	nm	±30	±20	±10	±5
Insertion Loss	dB	≤1.1 (Typ. 0.7)	≤1.2 (Typ. 0.8)	≤1.5 (Typ. 0.9)	≤3.5 (Typ 3.0)
Return Loss	dB	≥50	≥50	≥45	≥30
Cross Talk	dB	≥55	≥55	≥45	≥35
Fiber Type		PM1550	PM980	PM850	PM460-HP
Extinction Ratio	dB	≥20	≥18	≥16	≥12
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;

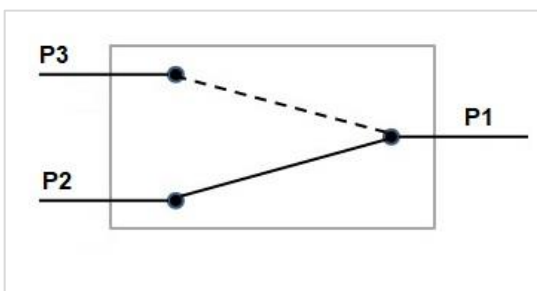
Non-Latching: switch will be reset to P1 to P2 while electric power off.

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

Pins

Control Model	Optical Path	Electric Drive				Status Sensor			
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

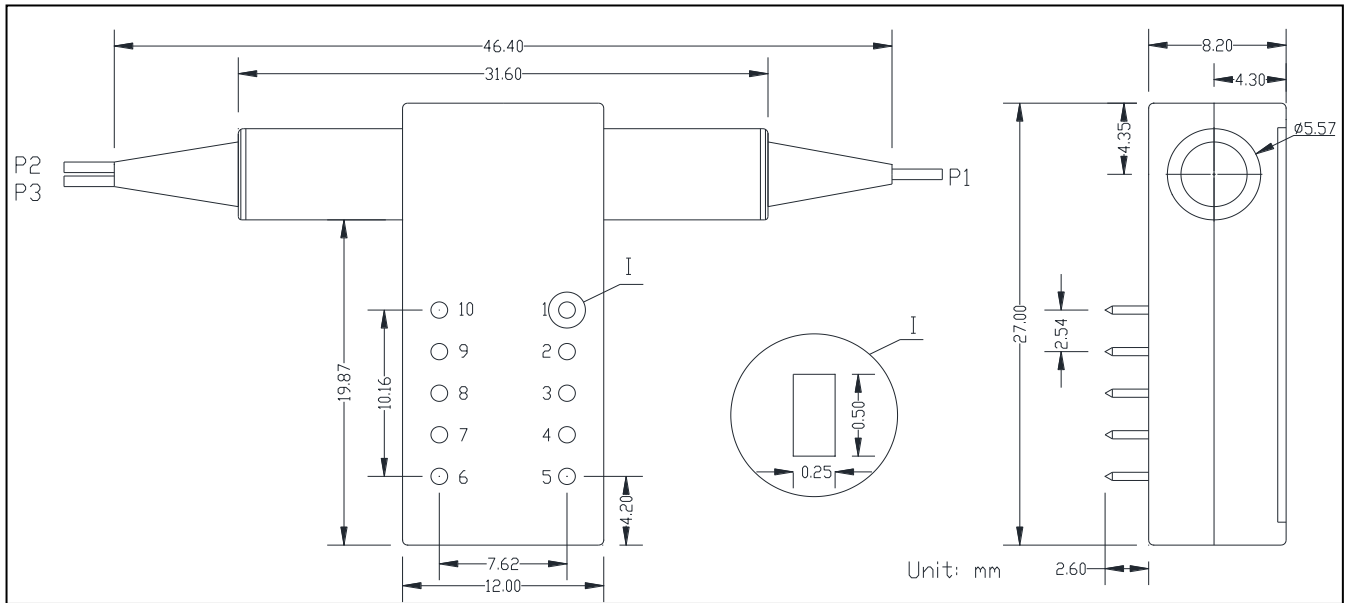


-for 1x1 switch, no port P3 for bright type, no port P2 for dark type.

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

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

Package Dimension



Ordering Information

PMOSW ①①①-②②②-③-④④④-⑤-⑥-⑦⑦

①	Port Type	1x1; 1x2;
②	Wavelength	1310; 1550; 980; 1053; 1064; 780; 850; 467; 433; 411;
③	Mode	L=Latching; N=Non-Latching;
④	Pigtail Type	250=250µm Fiber; 900=900µm Loose Tube;
⑤	Fiber Type	5=PM Fiber;
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;