



# Mini 1X1 1X2 2×2 Bypass Optical Switch

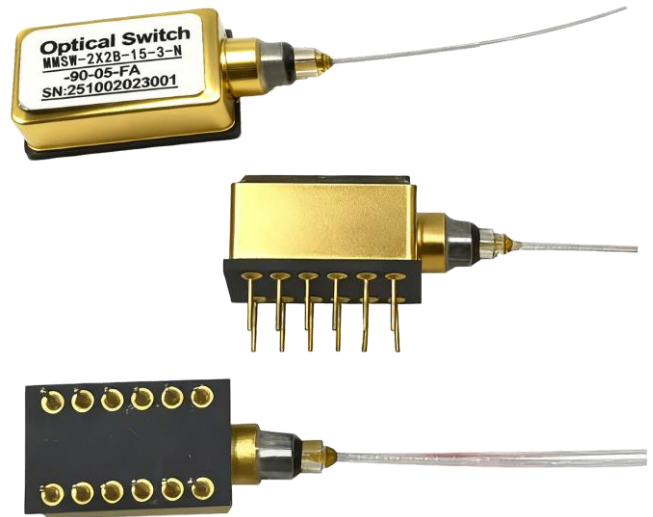
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## ◆ Features

- Low Insertion Loss
- Wide Wavelength Range
- Low Crosstalk
- High Stability, High Reliability
- Epoxy-free on Optical Path
- Latching and Non-latching

## ◆ Application

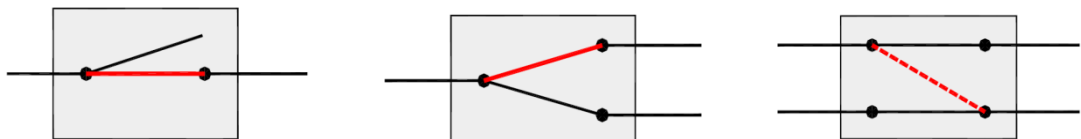
- Metropolitan Area Network
- R&D in Laboratory
- System Monitoring
- Configurable OADM



## ◆ Performance

Parameters			MMSW-1X1 1X2 2×2B	
Wavelength Range		nm	650 ~ 1310	1260 ~ 1670
Testing Wavelength		nm	650/780/850/980/1064/1310	1310/1490/1550/1625/1650
Insertion Loss	1X1	dB	Typ:0.6,Max:1.0	Typ:0.5 ,Max:0.8
	1X2		Typ:0.6,Max:1.0	Typ:0.6,Max:1.0
	2X2B		Typ:0.8,Max:1.2	Typ:0.8,Max:1.0
Return Loss		dB	≥30	≥50
Crosstalk		dB	≥35	≥50
PDL		dB	≤0.05	
WDL		dB	≤0.25	
TDL		dB	≤0.25	
Repeatability		dB	≤±0.02	
Power supply		v	3.3 or 5.0	
Lifetime		Cycle	≥10 <sup>7</sup>	
Switch Time		ms	≤8	
Transmission Power		mW	≤500	
Operation Temperature		°C	-30 ~ +85	
Storage Temperature		°C	-40 ~ +85	
Weight		g	16	
Dimension		mm	(L)17.5×(W)10.5×(H)7.9(±0.2)	

## ◆ Functional Diagram





# Mini 1X1 1X2 2×2Bypass Optical Switch

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## ◇ Pins

Optical Path		Electric Drive		Status Sensor	
1×1 / 1×2 / 2×2B		Pin3	Pin10	Pin5 - 4 / Pin8 - 9	Pin5 - 6 /Pin 8 - 7
Latching	A	GND	V+	Close	open
	B	V+	GND	open	Close
Non-Latching	A	N/A	NIA	Close	open
	B	V+	GND	open	Close
Pin 1, 2, 11, 12 For fixed purposes					
State	1X1 (D1X1)	1X2		2X2 Bypass	
A	Light Close	P1-P2		P1-P3	
B	P1-P2/1-2	P1-P3		P1-P4 / P2-P3	

State	1X1(D 1X1)	1X2	2X2 Bypass
A	Light Close	P1-P2	P1-P3
B	P1-P2	P1-P3	P1-P4/P2-P3

## ◇ Electrical parameters

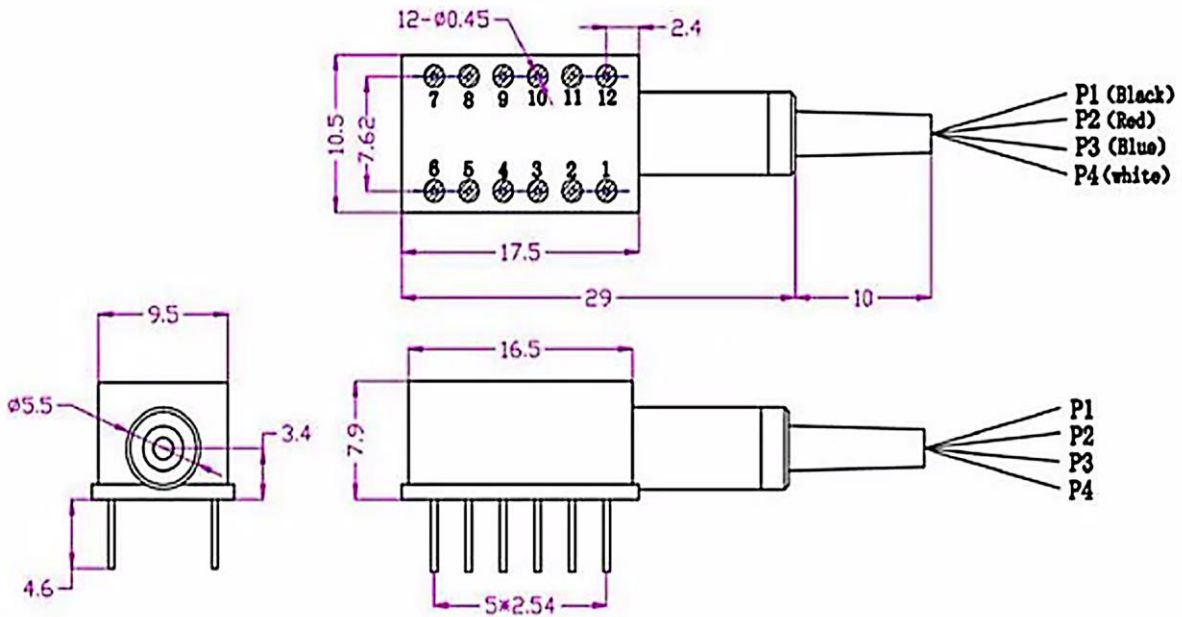
	Voltage	current	Resistor
5V Latching	4.5~5.5	36~44mA	125Ω
5V Non-Latching	4.5~5.5	26~32mA	175Ω
3V Latching	2.7~3.3	54~66mA	50Ω
3V Non-Latching	2.7~3.3	39~47mA	70Ω



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## ◇ Dimensions



## ◇ Ordering Information: MOSW - A - B - C - D - E - F - G

A	B	C	D	E	F	G
Mode	Wavelength	Voltage	Control Model	Fiber Diameter	Fiber Length	Connector
1x1:1X1 D1x1:D1 X1	SM:9/125um	3: 3V 5: 5V	L: Latching N: Non-Latching	25:250um 90:900um	05:0.5m 10:1.0m 15:1.5m	OO:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC
1x2:1X2 2x2B:2X2 Bypass	M5: M6: 62.5/125um	85: 850nm 13: 1310nm 14: 1490nm 15: 1550nm 162: 1625nm 165: 1650nm 13/15:1310/1550nm				