



## Polarization Maintaining Isolator WDM Hybrid

I&Optics' polarization maintaining isolator WDM can multiplex two different wavelengths into one same output port with very low loss and block the backward light with the integrated isolator. It features low insertion loss, high extinction ratio, high wavelength isolation and flat band property. It can be used in lasers, telecom, EDFA, sensors, instruments, testing systems and R&D.

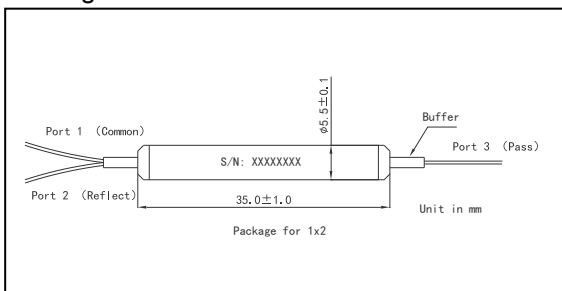
### Specification

Parameter	Test Condition	Unit	Value	
Isolator Stage Number	-	-	Single	Dual
Pass Band Wavelength(PW)	Port 1 to 3 or Port 3 to 1	nm	1550+/-20 or 1590+/-20 or Specify	
Reflect Band Wavelength(RW)	Port 2 to Port 1	nm	1480+/-20	
Max. Pass Band IL	Port 1 to 3 or Port 3 to 1	dB	0.65, Typ. 0.5	0.75, Typ. 0.6
Max. Reflect Band IL	Port 1 to Port 2, Port 3 to Port 4	dB	0.45, Typ. 0.3	0.45, Typ. 0.3
Min. Extinction Ratio	at 23°C, only for PM Fiber Port, at Slow or Fast Axis	dB	21, Typ. 23 (Both Axes Working), 25, Typ. 28 (Fast Axis Blocked)	
Min. Pass Isolation	Port 1 to Port 3, RW	dB	30	
Min. Reflect Isolation	Port 1 to 2, PW	dB	13	
Min. Reversed Isolation	Port 1 to 3 or Port 3 to 1, PW	dB	25 over +/-20nm, 30 over +/-10nm	48
Max. Thermal Stability	-	dB/°C	0.005	
Min. Directivity	Port 3 to Port 2	dB	50	
Min. Return Loss	-	dB	50	
Max. Power Handling Rate	Continuous Wave, Total Power	mW	500 or Specify	
Fiber Type	-	-	PM 1550 Panda Fiber on Port 3 or Specify	
Max. Fiber Tensile Load	-	N	5	
Operating Temperature	-	°C	-5 to 70	
Storage Temperature	-	°C	-40 to 85	

Above values are for device without connectors. For device with connectors, IL will be 0.3dB higher, ER will be 2dB lower, and return loss will 5dB lower.

The default alignment of working polarization and connector key is to slow axis of fiber. Special requirement please call.

### Package Dimensions



The optical path of forward pump type for pass wavelength is from port 3 to port 1, same direction as reflect wavelength (pump light).

The optical path of backward pump type for pass wavelength is from port 1 to port 3, opposite direction against reflect wavelength (pump light)

### Ordering Informations

PMIWDM-①-②-③-④-⑤-⑥-⑦-⑧

① - Pass / Reflect Wavelength

5548 - 1550nm Pass/1480nm Reflect

5948 - 1590nm Pass/1480nm Reflect

② - Isolator Type

S - Single Stage

D - Dual Stages

③ - Pump Type

F - Forward Pump

B - Backward Pump

④ - Working Axis of PM Fiber

F - Fast Axis Blocked

B - Both Axes Working

⑤ - Fiber on Port 1/2 (MFD Match)

3 - SMF-28e Fiber

4 - PM 1550 Panda Fiber

⑥ - Connector on port 1/2/3

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

⑦ - Fiber Jacket on Port 1/2/3

B - Bare Fiber

L - 900um Loose Tube

⑧ - Fiber Length

0.8 - 0.8m