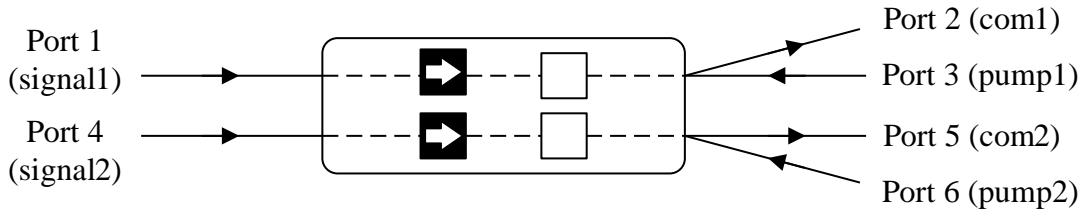


**Product: Mini Dual Isolator WDM Hybrid**

Part Number	Spec Number	Version	Date
IWDMDXXXXXXXXXX	S039	Rev 01	06/09/2023

**1 Function Diagram**



**2 Specifications**

**2.1 Environment Conditions**

Item	Parameters	Symbol	Min	Typ	Max	Units	Note
1.	Operating Temperature	Top	0		70	°C	
2.	Storage Temperature	Tstor	-40		85	°C	
3.	Operating Relative Humidity	RHop	5		95	%	[1]
4.	Storage Relative Humidity	RHstor	5		95	%	[1]

**Note:**

[1] Not to exceed industrial standard of 0.024 kg water per kg of dry air under non-condensing conditions.

**2.2 Optical Specifications**

Item	Parameters	Symbol	Min	Typ	Max	Units	Note	
5.	Signal Wavelength	$\lambda_s$	1524 ~ 1572			nm		
6.	Pump Wavelength	$\lambda_p$	965 ~ 990			nm		
7.	Signal Channel	Single Stage Insertion Loss (1→2, 4→5) @ $\lambda_s$	ILs		1.1	dB		
8.		Dual Stage Insertion Loss (1→2, 4→5) @ $\lambda_s$	ILs		1.2	dB		
9.		PDL (1→2, 4→5) @ $\lambda_s$	PDLs		0.3	dB		
10.		Single Stage Isolation (2→1, 5→4) @ $\lambda_s$	ISO	18			dB	
11.		Dual Stage Isolation (2→1, 5→4) @ $\lambda_s$	ISO	32			dB	
12.		WDM Isolation (2→1, 5→4) @ $\lambda_p$	ISO	30			dB	G
13.	Pump Channel	Insertion Loss (3→2, 6→5) @ $\lambda_p$	ILp		0.7	dB		
14.		PDL (3→2, 6→5) @ $\lambda_p$	PDLp		0.2	dB		
15.		Isolation (3→2, 6→5) @ $\lambda_s$	ISO	15			dB	G
16.	Return Loss @23°C	RL	50			dB		
17.	Directivity (1→3, 4→6, 1→5, 4→2) @23°C	DIR	45			dB		
18.	Directivity (3→1, 6→4, 2→5, 3→6) @23°C	DIR	50			dB		
19.	Optical Power @ $\lambda_s / \lambda_p$	Pop			500	mW	G	

**Note:**

\* Above specifications are for device without connector. IL is 0.3 dB higher, RL is 5 dB lower after connector added.

G: Guaranteed by design.

## 2.3 Mechanical Specifications

### 2.3.1 Specifications

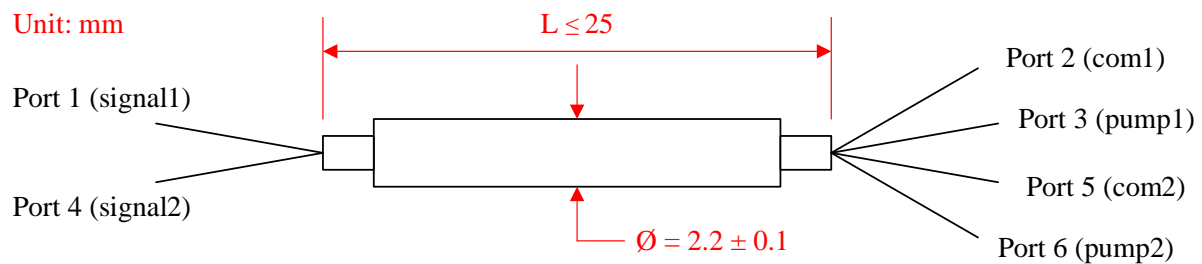
Item	Parameters	Symbol	Min	Typ	Max	Units	Note
20.	Fiber Type	Common & Pump		By PN			[2]
		Signal		ZBL			
21.	Fiber Length			By PN		m	
22.	Fiber Jacket			Bare fiber			
23.	Connector Type			By PN			
24.	Package Dimension			See drawing below		mm	
25.	Fiber Color	Port 1 & Port 2		Red			[3]
		Port 3		Natural			
		Port 4 & Port 5		Black			[3]
		Port 6		Blue			[3]

**Note:**

[2] 125/250μm fiber is OFS 980-20 (125/250) by default, 80/165μm fiber is OFS 980-20 (80/165) by default.

[3] Mark the bare fiber starting at 10~30cm away from the device body to fiber end.

### 2.3.2 Drawing



## 3 Device Label, Delivery Data

Triple-Stone standard format.

## 4 RoHS

RoHS compliant.

## 5 Order Information

