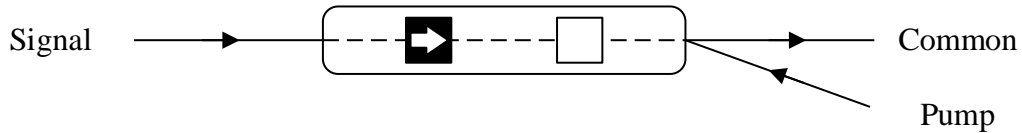


Product: Isolator + 1550/980nm WDM Hybrid

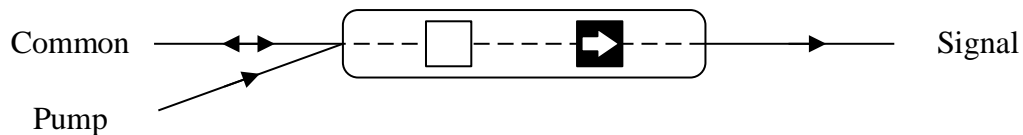
Part Number	Spec Number	Version	Date
IWDMXXXXXXXXXXXX	S001	Rev 07	09/30/2021

1 Function Diagram

Forward Type:



Backward Type:



2 Specifications

2.1 Environment Conditions

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

2.2.1 Forward Type

Item	Parameters	Symbol	Min	Typ	Max	Units	Note
5.	Signal Wavelength	λ_s	1528 ~ 1568			nm	
6.	Pump Wavelength	λ_p	965 ~ 995			nm	
7.	Signal Insertion Loss (Signal → Com) @ λ_s	ILs			1.0	dB	
8.	Pump Insertion Loss (Pump → Com) @ λ_p	ILp			0.5	dB	
9.	Isolator Isolation (Com → Signal) @ λ_s	Single Stage	Iso	20		dB	
		Dual Stage	Iso	35		dB	
10.	WDM Pass Isolation (Signal → Com) @980nm	Iso	25			dB	
11.	WDM Reflect Isolation (Pump → Com) @1550nm	Iso	15			dB	
12.	Polarization Dependent Loss	PDL			0.2	dB	
13.	Return Loss @23°C	RL	50			dB	
14.	Directivity (Pump → Signal) @ λ_p 23°C	Dir	50			dB	G
15.	Polarization Mode Dispersion	Single Stage	PMD		0.25	ps	G
		Dual Stage	PMD		0.05	ps	G
16.	Optical Power	Pop			500	mW	G

2.2.2 Backward Type

Item	Parameters		Symbol	Min	Typ	Max	Units	Note
17.	Signal Wavelength		λ_s	1528 ~ 1568			nm	
18.	Pump Wavelength		λ_p	965 ~ 995			nm	
19.	Signal Insertion Loss (Com → Signal) @ λ_s		ILs			1.0	dB	
20.	Pump Insertion Loss (Pump → Com) @ λ_p		ILp			0.5	dB	
21.	Isolator Isolation (Signal → Com) @ λ_s	Single Stage	Iso	20			dB	
		Dual Stage	Iso	35			dB	
22.	WDM Pass Isolation (Com → Signal) @980nm		Iso	25			dB	
23.	WDM Reflect Isolation (Pump → Com) @1550nm		Iso	15			dB	
24.	Polarization Dependent Loss		PDL			0.2	dB	
25.	Return Loss @23°C		RL	50			dB	
26.	Directivity (Pump → Signal) @ λ_p 23°C		Dir	50			dB	G
27.	Polarization Mode Dispersion	Single Stage	PMD			0.25	ps	G
		Dual Stage	PMD			0.05	ps	G
28.	Optical Power		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

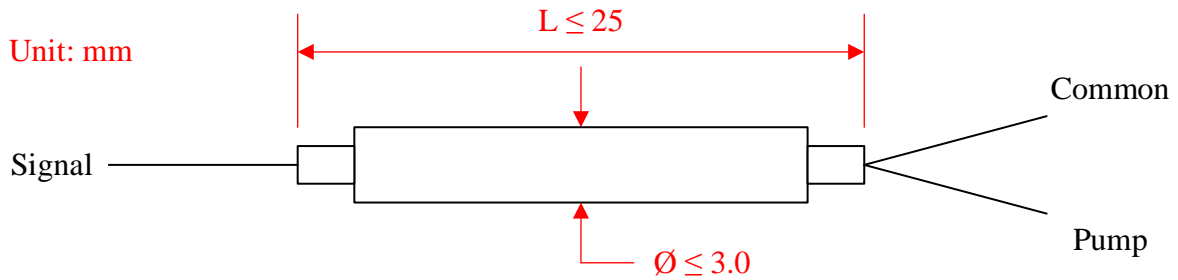
2.3.1 Specifications

Item	Parameters		Symbol	Min	Typ	Max	Units	Note
29.	Fiber Type	Common & Pump		By PN				
		Signal		G.657 A1				
30.	Fiber Length			By PN			m	
31.	Fiber Jacket			125/250 μ m bare fiber				
32.	Connector Type			By PN				
33.	Package Dimension			$\varnothing \leq 3.0 \times L \leq 25$			mm	
34.	Fiber Color	Common		Black				[2]
		Signal & Pump		Natural				

Note:

[2] 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 Ordering Information

