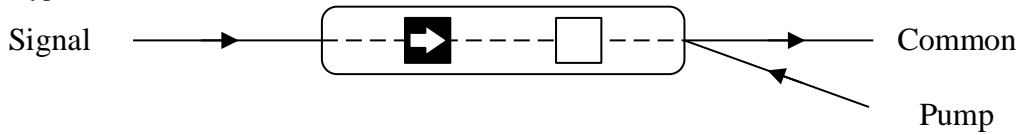


Product: Isolator+ 940/1550 (1590) WDM Hybrid

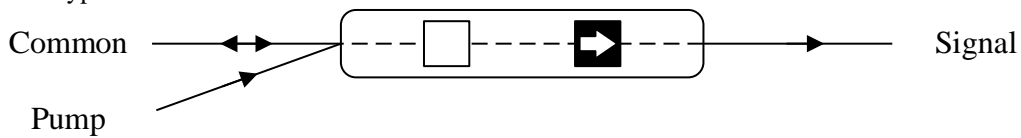
Part Number	Spec Number	Version	Date
IWDMXXXXXXXXXXXX	S056	Rev 01	04/30/2024

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	-40		105	°C	
2.	Storage Temperature	Tstor	-40		120	°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	λ_s	1530~1570 or 1570~1610			nm	
6.	Pump Wavelength	λ_p	940			nm	
7.	Signal Insertion Loss (Com - Signal) @ λ_s	ILs			0.8	dB	
8.	Pump Insertion Loss (Pump - Com) @ λ_p	ILp			0.5	dB	
9.	Isolator Isolation (Signal - Com) @ λ_s	Dual Stage	ISO	30		dB	
10.		Single Stage	ISO	18		dB	
11.	WDM Pass Isolation (Com - Signal) @ λ_p	ISO	35			dB	
12.	WDM Reflect Isolation (Com - Pump) @ λ_s	ISO	18			dB	
13.	Extinction Ratio @23°C (For PM Fiber)	ER	18			dB	
14.	Polarization Dependent Loss (For SM Fiber)	PDL			0.25	dB	
15.	Wavelength Dependent Loss	WDL			0.15	dB	
16.	Temperature dependent Loss	@ λ_s	TDL		0.3	dB	
17.		@ λ_p	TDL		0.25	dB	
18.	Return Loss @ λ_s	@ λ_s	RL	50		dB	
19.		@ λ_p	RL	25		dB	
20.	Directivity (Signal - Pump)	DIR	50			dB	
21.	Optical Power Handling	Signal (Average)	Pop		2	W	
22.		Pump	Pop		10	W	

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.

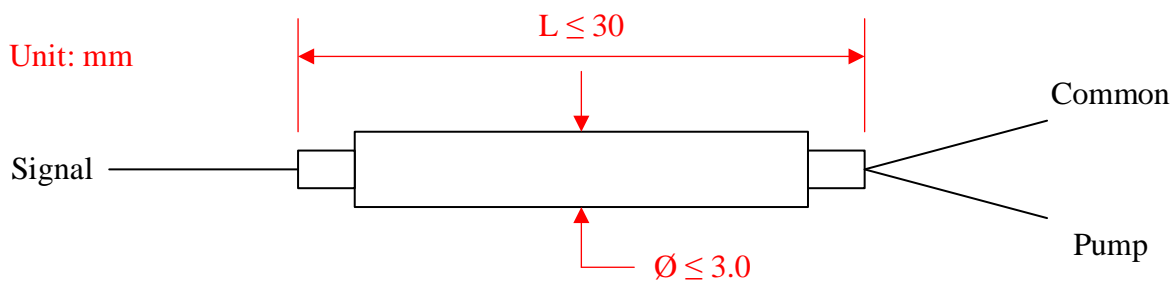
2.3 Mechanical Specifications

2.3.1 Specifications

Item	Parameters	Symbol	Min	Typ	Max	Units	Note
23.	Fiber Type	Common		SM or PM Double-Clad Fibers			
24.		Signal		SM or PM Fiber			
25.		Pump		MM Fiber			
26.	Fiber Length			By PN		m	
27.	Fiber Jacket			bare fiber			
28.	Package Dimension			See below for details		mm	
29.	Connector Type (All Ports)			None			
30.	Fiber Color	Common		Black			[2]
		Signal		Natural			
		Pump		Natural			

Note:

2.3.2 Drawing



3 Device Label, Delivery Data

Triple-Stone standard format

4 RoHS

RoHS compliant

5 Order Information

