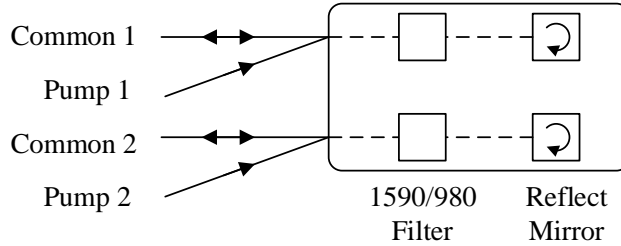


Product: Mini Pump Mirror

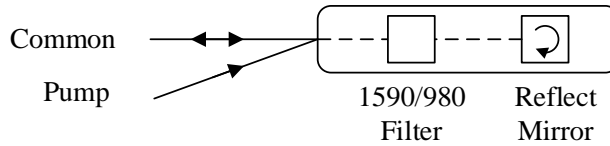
Part Number	Spec Number	Version	Date
MPMRXXXXXXXXXXXX	S005	Rev 01	05/08/2023

1 Function Diagram

Dual Channel:



Single Channel:



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

2.2.1 Dual Channel:

Item	Parameters	Symbol	Min	Typ	Max	Units	Note	
5.	Signal Wavelength 1 (C-band)	λ_{s1}	1525 ~ 1570			nm		
6.	Signal Wavelength 2 (L-band)	λ_{s2}	1570 ~ 1610			nm		
7.	Pump Wavelength	λ_p	965 ~ 990			nm		
8.	Signal Channel (Com – Com)	Insertion Loss @ λ_s	IL	0.8	1.2	dB		
9.		PDL @ λ_s	PDL		0.3	dB		
10.		Cross Talk @ λ_s (Com1 – Com2)	CT	50			dB	
11.	Pump Channel (Pump – Com)	Insertion Loss @ λ_p	IL		0.5	dB		
12.		PDL @ λ_p	PDL		0.15	dB		
13.		Isolation @ λ_s	Iso	15			dB	
14.		Cross Talk @ λ_p (Pump1 – Com2, Pump2 – Com1)	CT	50			dB	
15.	Return Loss (Pump)	RL	50			dB		
16.	Optical Power	Pop			300	mW	G	

2.2.2 Single Channel

Item	Parameters		Symbol	Min	Typ	Max	Units	Note
17.	Signal Wavelength 1 (C-band)		λ_{s1}	1525 ~ 1570			nm	
18.	Signal Wavelength 2 (L-band)		λ_{s2}	1570 ~ 1610			nm	
19.	Pump Wavelength		λ_p	965 ~ 990			nm	
20.	Signal Channel (Com – Com)	Insertion Loss @ λ_s	IL		0.6	1.0	dB	
21.		PDL @ λ_s	PDL			0.15	dB	
22.	Pump Channel (Pump – Com)	Insertion Loss @ λ_p	IL			0.5	dB	
23.		PDL @ λ_p	PDL			0.15	dB	
24.		Isolation @ λ_s	Iso	15			dB	
25.	Return Loss (Pump)		RL	50			dB	
26.	Optical Power		Pop			300	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

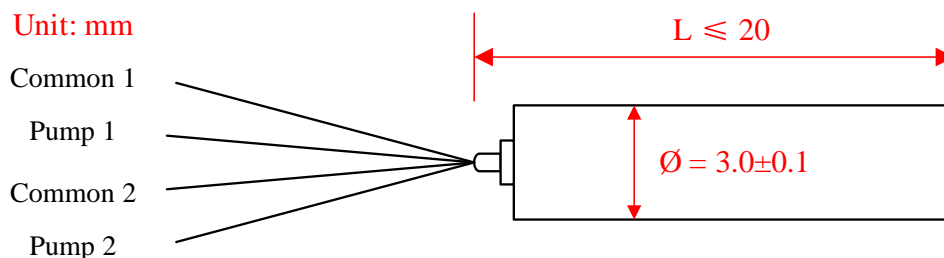
Item	Parameters		Symbol	Min	Typ	Max	Units	Note
27.	Fiber Type			By PN				
28.	Fiber Length			By PN			m	
29.	Fiber Jacket			Bare fiber				
30.	Package Dimension	Dual Channel		$\varnothing=3.0\pm0.1 \times L\leq 20$			mm	
31.	Package Dimension	Single Channel		$\varnothing=2.2\pm0.1 \times L\leq 20$			mm	
32.	Connector Type			By PN				
33.	Fiber Color	Common 1		Blue				[2]
		Pump 1		Black				[2]
		Common 2		Natural				
		Pump 2		Red				[2]
34.	Fiber Color	Common		Natural				
		Pump		Red				[2]

Note:

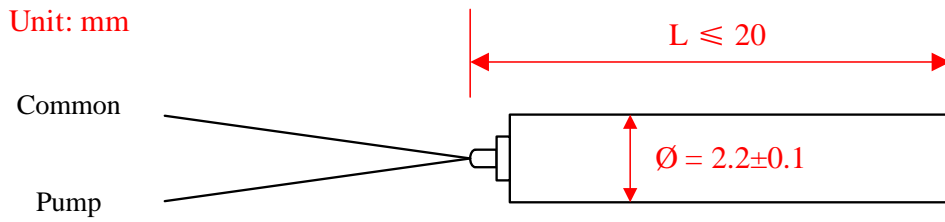
[2] Mark the bare fiber starting at 10~30cm away from the device body to fiber end.

2.3.2 Drawings

Dual Channel:



Single Channel:



3 Device Label, Delivery Data

Triple-Stone standard format.

4 RoHS

RoHS compliant.

5 Ordering Information

