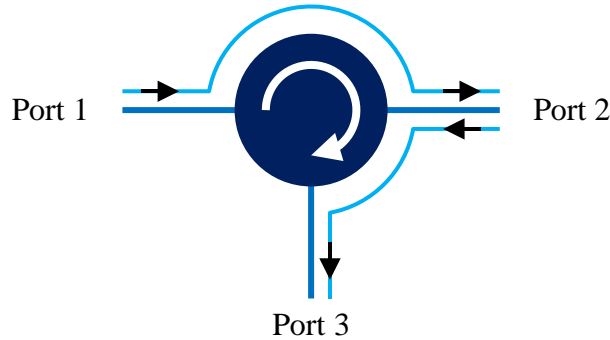


**Product: 3 Port Full Band Optical Circulator**

Part Number	Spec Number	Version	Date
SCIRXXXXXXXXXXXX	S006	Rev 01	06/07/2023

**1 Function Diagram**

This is optical circulator of 1260 ~1620nm. The function of 3 port circulator is Port 1 to Port 2, Port 2 to Port 3.



**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.	Operating Wavelength	$\lambda_{op}$	1260 ~ 1620			nm	
6.	Insertion Loss (1→2, 2→3) @1440nm 23°C	IL			0.8	dB	
7.	Insertion Loss (1→2, 2→3) @ $\lambda_{op}$ 23°C	IL			2.0	dB	
8.	Isolation (2→1, 3→2) @1440nm 23°C	ISO	35			dB	
9.	Isolation (2→1, 3→2) @ $\lambda_{op}$ 23°C	ISO	15			dB	
10.	Polarization Dependent Loss @1440nm	PDL			0.25	dB	
11.	Directivity (1→3) @1440nm 23°C	DIR	50			dB	
12.	Return Loss @1440nm 23°C	RL	45			dB	
13.	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.

**2.2.1 Full Band (CWDM) Insertion Loss**

Wavelength (nm)	1271	1291	1311	1331	1351	1371	1391	1411	1431
Max. IL (dB) @23°C	2.0	1.8	1.6	1.3	1.2	1.1	1.0	0.9	0.8
Wavelength (nm)	1451	1471	1491	1511	1531	1551	1571	1591	1611
Max. IL (dB) @23°C	0.9	0.9	0.9	1.0	1.1	1.1	1.2	1.4	1.6

## 2.3 Mechanical Specifications

### 2.3.1 Specifications

Item	Parameters	Symbol	Min	Typ	Max	Units	Note
14.	Fiber Type			G.657 A1			
15.	Fiber Length			By PN		m	
16.	Fiber Jacket			By PN			[2]
17.	Connector Type			By PN			
18.	Package Dimension			See below for details		mm	
19.	Fiber Color	Port 1		Black			[3]
		Port 2		Natural			
		Port 3		Natural			

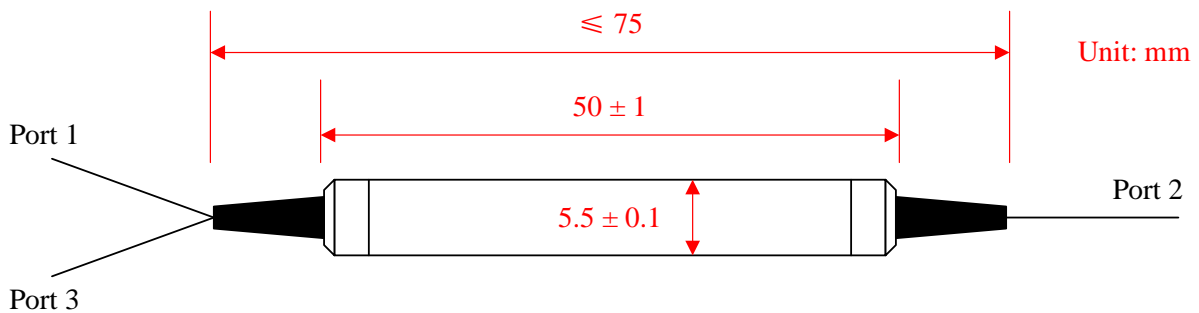
**Note:**

[2] Available in bare fiber or loose tube. Loose tube is only for steel tube packaging.

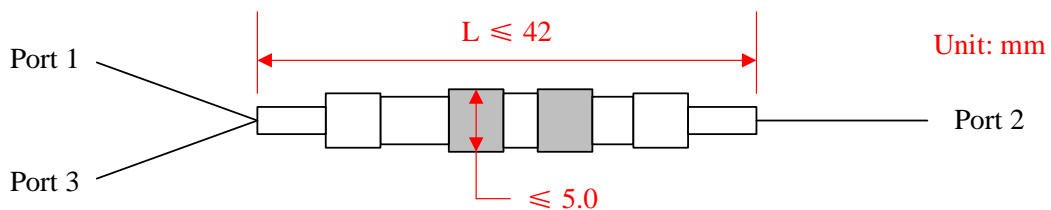
[3] Mark the bare fiber starting at 10~30cm away from the device body to fiber end.

### 2.3.2 Drawings

#### 2.3.2.1 Steel tube package



#### 2.3.2.2 Glass tube package



## 3 Device Label, Delivery Data

Triple-Stone standard format.

## 4 RoHS

RoHS compliant.

## 5 Order Information

