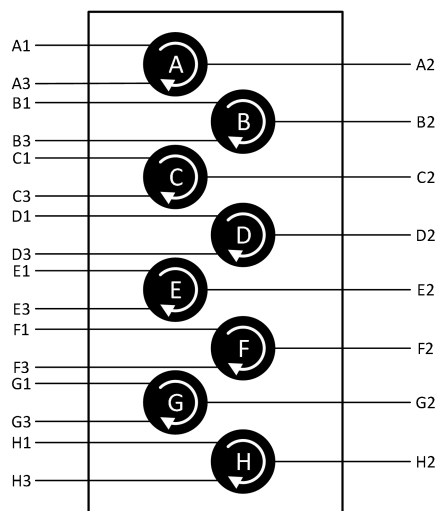


Product: Octa 3 Port Optical Circulator

Part Number	Spec Number	Version	Date
OCIRXXXXXXXXXXXX	S041	Rev 01	12/19/2024

1 Function Diagram

This is the octa 3 port optical circulator. The function of 3 port circulator is Port 1 to Port 2, Port 2 to Port 3. An octa circulator integrates 8 optical circulators which have 3 ports each and work independently.



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	0		85	%	[1]
4.	Storage Relative Humidity	RHstor	0		85	%	[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.	Center wavelength	λ_c		1300 or 1550		nm	
6.	Operating Wavelength	λ_{op}		$\lambda_c \pm 30$		nm	
7.	Insertion Loss ($X1 \rightarrow X2$, $X2 \rightarrow X3$) @ λ_{op}	IL			1.0	dB	
8.	Isolation ($X2 \rightarrow X1$, $X3 \rightarrow X2$) @ λ_{op}	Iso	40			dB	
9.	Polarization Dependent Loss @ λ_c , 23°C	PDL			0.25	dB	
10.	Directivity ($X1 \rightarrow X3$) @ 23°C	DIR	50			dB	
11.	Return Loss (All Ports) @ 23°C	RL	48			dB	
12.	Cross Talk	CT	50			dB	
13.	Polarization Mode Dispersion	PMD			0.1	ps	G
14.	Optical Power	Pop			300	mW	G

Note:

*X=A、B、C、D、E、F、G、H

*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.

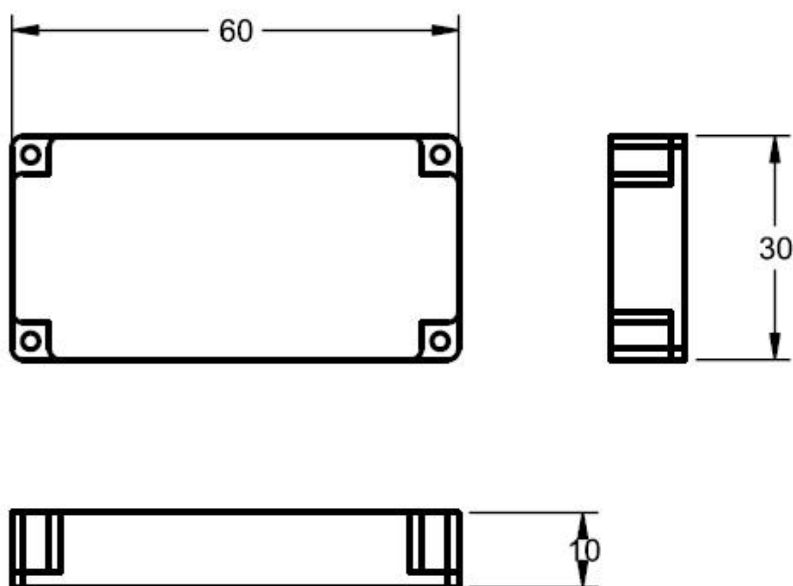
2.3 Mechanical Specifications

2.3.1 Specifications

Item	Parameters		Symbol	Min	Typ	Max	Units	Note
15.	Fiber Type				G.657 A1			
16.	Fiber Fanout				By PN			
17.	Fiber Length				By PN		m	
18.	Fiber Jacket				By PN			[2]
19.	Connector Type				By PN			
20.	Package Dimension				60×30×10 (TBD)		mm	
21.	Fiber Color	Port X1			Black			
		Port X2			Red			
		Port X3			Blue			

Note:

2.3.2 Drawings



3 Device Label, Delivery Data

Triple-Stone standard format.

4 RoHS

RoHS compliant.

5 Order Information

