



Polarization Maintaining Fiber Circulator

I&Optics' polarization maintaining fiber circulator can separate similar or same optical signals that travel in opposite directions in a same fiber into different fibers. It features low insertion loss, high extinction ratio, high isolation and broad band property due to our unique technology. It can be used in lasers, LiDARs, telecom, sensors, instruments, testing systems and R&D.

Specification

Parameter	Test Condition	Unit	Value	
Port Configuration	-	-	1x2	2x2
Nominal Center Wavelength	-	nm	1310, 1450, 1550, 1590 or Specify	
Wavelength Range	-	nm	+/-30	
Max. Insertion Loss	at Slow or Fast Axis	dB	0.7, Typ. 0.55 for Single Stage, 0.8, Typ. 0.65 for Dual Stage	0.9, Typ. 0.75 for Single Stage, 1.0, Typ. 0.85 for Dual Stage
Min. Isolation	at 23°C, Center Wavelength	dB	35 for Single Stage, 55 for Dual Stage, Unavailable for C5	
Min. Extinction Ratio	at 23°C, only for PM Fiber Port, at Slow or Fast Axis	dB	20, Typ. 22 for B-Type 22, Typ. 24 for F-Type	
Max. PDL	at 23°C, only for SM Fiber Port	dB	0.1	
Min. Cross-Talk	between Ports That Optical Path Unavailable	dB	50	
Min. Return Loss	at Center Wavelength	dB	50	
Max. Power Handling Rate	CW, Total Power, only at Working Axis	mW	300 or Specify, Power at Blocked Axis <= 30mW	
Fiber Type	-	-	SMF-28e or PM Panda Fiber or Specify	
Max. Fiber Tensile Load	-	N	5	
Operating Temperature	-	°C	-5 to 70	
Storage Temperature	-	°C	-40 to 85	

Above values are for device without connectors. For device with connectors, IL will be 0.3dB higher, ER will be 2dB lower, and return loss will 5dB lower.

The default alignment of working polarization and connector key is to slow axis of fiber. Special requirement please call.

The following optical circuits are available for user's various applications:

C1: port 1 to port 2 and port 2 to port 3, at slow axis, fast axis blocked, single stage

C2: port 1 to port 2 and port 2 to port 3, at slow axis, fast axis blocked, dual stage

C3: port 1 to port 2, both axes working, port 2 to port 3, at slow axis, fast axis blocked, dual stage

C4: port 1 to port 2, at slow axis, fast axis blocked, port 2 to port 3, both axes working, dual stage

C5: port 1 to port 2 and port 2 to port 3, only at slow axis, port 2 to port 1 and port 3 to port 2, only at fast axis

C6: port 1 to port 2 and port 2 to port 3, both axes working

C7: port 1 to port 2, port 2 to port 3, port 3 to port 4 and port 4 to port 1, at slow axis, fast axis blocked, single stage

C8: port 1 to port 2, port 2 to port 3 and port 3 to port 4, at slow axis, fast axis blocked, dual stage

Package Dimensions

Pls contact us or call for detailed informations.

Ordering Informations

PMCT-①-②-③-④-⑤-⑥-⑦

① - Center Wavelength

31- 1310nm

55 - 1550nm

SS - Specify

② - Port Configuration

1 - 1x2

2 - 2x2

③ - Optical Circuit Type

C1 - Type C1

... - ...

C8- Type C8

SS - Specify

④ - Fiber Type on Port 1/2/3/4

1 - SMF-28e Fiber

2 - PM 1310 Panda Fiber

3 - PM 1550 Panda Fiber

⑤ - Connector Type on port 1/2/3/4

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

⑥ - Fiber Jacket on Port 1/2/3/4

B - Bare Fiber

L - 900um Loose Tube

⑦ - Fiber Length

0.8 - 0.8m