

4-Port Polarization Maintaining Optical Circulator (DPMCIR Series)

Rev 11

Description

The 2 × 2 Polarization Maintaining Optical Circulator is a compact, high performance lightwave component that routes incoming signals from Port 1 to Port 2, incoming Port 2 signals to Port 3, and incoming Port 3 signals to Port 4. The optical circulator provides high isolation, low insertion loss, high extinction ratio, and excellent environmental stability.

Key Features

- High Isolation
- Compact Size

Applications

- Fiber Laser
- Fiber Sensing

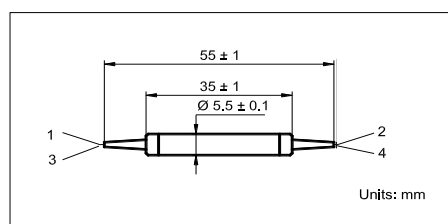
Specifications

Parameter	Unit	Value	
Type		Type A	Type B
Center Wavelength (λ_c)	nm	2000	
Operating Wavelength Range	dB	$\lambda_c \pm 30$	$\lambda_c \pm 20$
Typ. Insertion Loss (for Type1), λ_c	dB	1.3	1.2
Max. Insertion Loss (for Type1), All Wavelength Range	dB	1.6	1.5
Typ. Insertion Loss (for Type2), λ_c	dB	1.5	1.4
Max. Insertion Loss (for Type2), All Wavelength Range	dB	1.8	1.7
Peak Isolation	dB	52	40
Typ. Isolation, λ_c	dB	50	30
Min. Isolation, All Wavelength Range	dB	40	20
Min. Extinction Ratio	dB	18	18
Min. Crosstalk (1 → 3, 2 → 4)	dB	50	
Min. Return Loss	dB	55	
Max. Optical Power (Continuous Wave)	mW	300	
Fiber Type	-	Type 1: PM 1550 Panda Fiber for all Ports Type 2: PM1950 Panda Fiber for all Ports	
Max. Tensile Load	N	5	
Operating Temperature	°C	- 5 to + 70	
Storage Temperature	°C	- 40 to + 85	

¹IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

²The routing path: Type A: 1 → 2, 2 → 3, 3 → 4; Type B: 1 → 2, 2 → 3, 3 → 4, 4 → 1.

Package Dimensions



Ordering Information

DPMCIR-①①①①-②-③-④-⑤-⑥

①①①①: Wavelength

2000 - 2000 nm

SS - Specify

②: Type

1 - Type A

2 - Type B

③: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

N - None

S - Specify

④: Fiber Jacket

B - 250 µm Panda Fiber

L - 900 µm Loose Tube

S - Specify

⑤: Fiber Length

Q - 0.75 m

S - Specify

⑥: Fiber Type

1 - Type1: PM 1550

2 - Type2: PM1950