

## Polarization Maintaining Filter Coupler Module (1 x 3 / 1 x 4 / 1 x 8) (PMFCM Series)

Rev 11B

### Description

The PMFCM series is manufactured using advanced technology to allow the input signal to be split into multi channels at a given splitting ratio with high extinction ratio, low excess loss, good uniformity, low wavelength dependence and low temperature dependence. It can be widely used in fiber sensors, amplifiers, lasers, etc.

### Key Features

- High Extinction Ratio
- Low Wavelength Dependence Loss
- Low Insertion Loss

### Applications

- Fiber Lasers
- Fiber Sensing

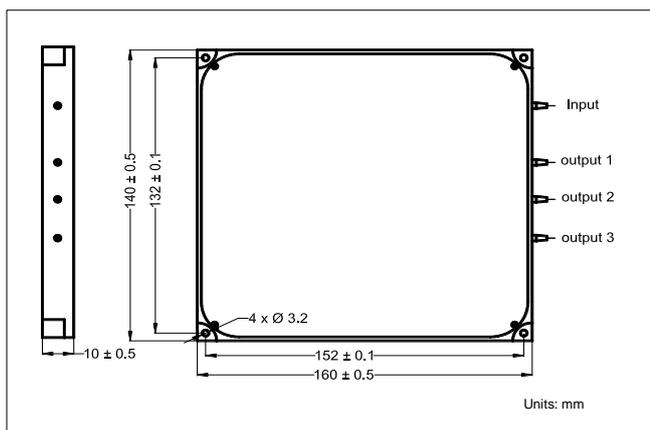
### Specifications

Parameter	Unit	Value	Value	Value
Configuration	-	1 x 3	1 x 4	1 x 8
Center Wavelength ( $\lambda_c$ )	nm	1310 or 1550	1310 or 1550	1310 or 1550
Operating Wavelength Range	nm	$\lambda_c \pm 30$	$\lambda_c \pm 30$	$\lambda_c \pm 30$
Insertion Loss	dB	$\leq 5.8$ , Typ. 5.6	$\leq 7.5$ , Typ. 7.0	$\leq 11$ , Typ. 10.5
Wavelength Dependent Loss	dB	$\leq 0.5$ , Typ. 0.3	$\leq 0.5$ , Typ. 0.3	$\leq 0.5$ , Typ. 0.3
Max. IL Uniformity	dB	0.6	0.8	1
Min. Return Loss	dB	50	50	50
Min. Directivity	dB	50	50	45
Min. Extinction Ratio	dB	20	20	20
Max. Optical Power	mW	300	300	300
Max. Temperature Dependent Loss	dB/°C	0.006	0.006	0.008
Fiber Type	-	PM Panda Fiber	PM Panda Fiber	PM Panda Fiber
Operating Temperature	°C	- 5 to + 70	- 5 to + 70	- 5 to + 70
Storage Temperature	°C	- 40 to + 85	- 40 to + 85	- 40 to + 85
Package Dimensions	mm	160 x 140 x 10	160 x 140 x 10	160 x 160 x 10

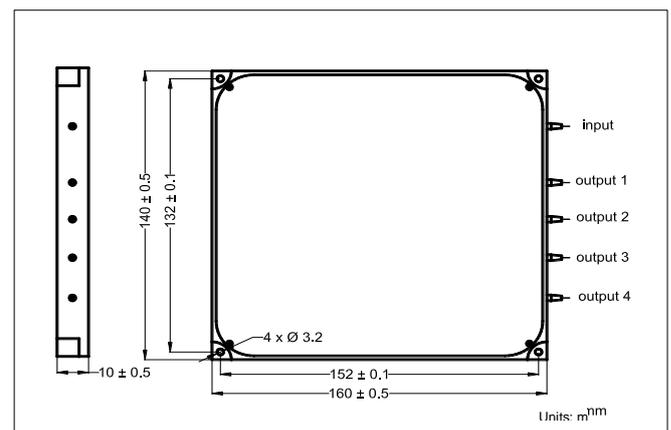
<sup>1</sup>IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

<sup>2</sup>All of above value are tested at room temperature @ 23 °C, unless other specified.

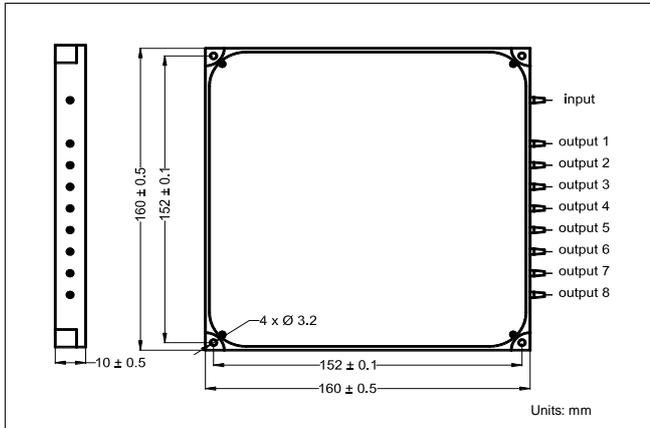
### Package Dimensions



1 x 3 Coupler Module



1 x 4 Coupler Module



1 x 8 Coupler Module

### Ordering Information

**PMFCM-①①-②②②②-③③-④-⑤-⑥-⑦**

①①: Center Wavelength

31 - 1310 nm

55 - 1550 nm

SS - Specify

②②②②: Configuration

0103 - 1 x 3

0104 - 1 x 4

0108 - 1 x 8

③③: Splitting Ratio

EV - Evenly Splitted

SS - Specify

④: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

N - None

S - Specify

⑤: Fiber Jacket

B - 250 µm Bare Fiber

L - 900 µm Loose Tube

3 - 3 mm Cable

⑥: Fiber Length

H - 0.5 m

S - Specify

⑦: Working Axis

F - Fast Axis Blocked