

# 1540-1560nm PM Polarization Maintaining Bandpass Filter



## ● Product Description

PM Band Pass Filter Idealphotonics' fiber filters use a special fiber structure to select or filter out specific wavelengths of light from different wavelengths. We can provide filter devices with different optical power versions according to user needs, which can be used in dense wavelength division multiplexing fiber communications, frequency division

multiplexing fiber communications, spectrum testing, fiber sensors, fiber lasers and fiber amplifiers. If you need to customize the center wavelength, operating temperature or specific working bandwidth, please contact us for customization.

## ● Product features

High isolation 、 Low insertion loss (0.7dB) 、 High return loss (50dB) 、

Excellent environmental stability 、 High power handling capability

## ● Part Number

MP-PMBPF-5577-20-20-0.3-B-NN-BB-0.8-01A-01

## ● Application area

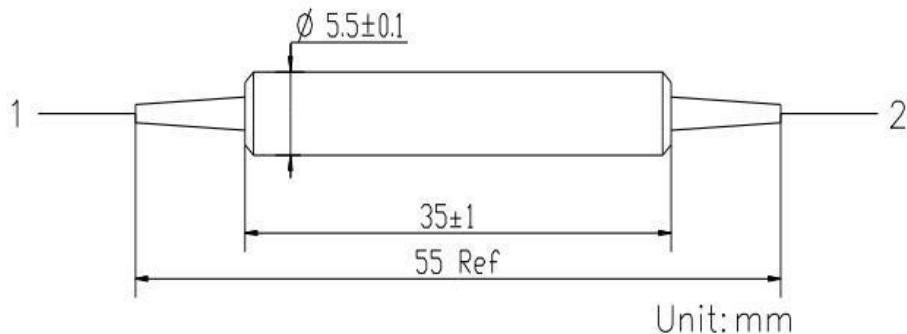
Band Erbium-Doped Fiber Amplifier 、 High -density wavelength division

multiplexing system 、 Fiber laser 、 Research

## ● Core parameters

| Nominal Center Wavelength | Suppression Band | Fiber Type |
|---------------------------|------------------|------------|
| 1540-1560nm               | 765-785          | PM1550     |

## ● Dimension Drawing



## ● General Parameters

| Parameter  | Unit | Index                      |
|--|------|----------------------------|
| <b>Nominal center wavelength</b>                       | nm   | <b>1540-1560</b>           |
| <b>Max. Insertion Loss (over Pass Band for B-Type)</b> | dB   | <b>0.7</b>                 |
| <b>Max. Insertion Loss (over Pass Band for F-Type)</b> | dB   | <b>0.9</b>                 |
| <b>Suppression band (Stop Band)</b>                    | nm   | <b>765~785</b>             |
| <b>Min. Stopband Isolation (Stop Band Isolation)</b>   | dB   | <b>25</b>                  |
| <b>extinction ratio at 23°C (ER) (only for B-Type)</b> | dB   | <b>20</b>                  |
| <b>extinction ratio at 23°C (ER) (only for F-Type)</b> | dB   | <b>22</b>                  |
| <b>Min. Return Loss</b>                                | dB   | <b>50</b>                  |
| <b>Fiber Type</b>                                      | -    | <b>PM 1550 panda fiber</b> |
| <b>Max. tensile load</b>                               | N    | <b>5</b>                   |
| <b>Max. Optical Power (CW)</b>                         | mW   | <b>300</b>                 |
| <b>Operating temperature</b>                           | °C   | <b>-5 to 70</b>            |
| <b>Storage temperature</b>                             | °C   | <b>-40 to +85</b>          |

**Remark:**

\*The above specifications apply to devices without connectors.

\*For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower, and

ER will be 2dB lower.

\*PM fiber and connector keys are aligned with the slow axis.

\*The material must be RoHS compliant.

## Model Description

**PMBPF-①①①①-②②-③③-④④-⑤-⑥⑥-⑦⑦-⑧-⑨⑨-⑩⑩**

①①①①: Wavelength  
5577- 1550nm Pass / 775nm Stop  
SSSS - Specify

⑤: Axis Alignment  
F - Fast Axis Blocked  
B - Both Axis Working

②②: Pass Band Width  
20 - 20nm  
SS - Specify

⑥⑥: Connector Type on Port 1, 2  
1B - FC/UPC  
2B - FC/APC (Step)  
3D - SC/UPC

③③: Stop Band Width  
20 - 20nm  
SS - Specify

④④: Handling Power  
0.3 - 300mW  
SS - Specify

⑦⑦: Fiber Jacket on Port 1, 2

B - Bare Fiber  
C - 900um Loose Tube(Red)  
D - 900um Loose Tube(Blue )  
E - 900um Loose Tube(Black )  
SS - Specify

⑧: Fiber Length

0.8 - 0.8 m  
S - Specify

⑨⑨: Fiber Type

01A -PM1550 Fiber

⑩⑩ Package Type

01 - Ø5.5x35