



## Manual Tunable PM Fiber Coupler

I&Optics' tunable polarization maintaining fiber coupler can split any input light into two portions by any wanted splitting ratio or mix two input lights in one or two by any wanted ratio. It features flexible various coupling ratio, low excess loss and high extinction ratio 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   | 980, 1064 or Specify                             |                |
| Wavelength Range          | -  | nm   | +/-20  |                |
| Max. Excess Loss          | at Slow or Fast Axis                                     | dB   | 0.9, Typ. 0.7                                    | 1.1, Typ. 0.85 |
| Nominal Tap Ratio         | at Tap Port  | %    | Tunable from 0.1 to 99                           |                |
| Min. Extinction Ratio     | at 23°C, only for PM Fiber Port,<br>at Slow or Fast Axis | dB   | 21, Typ. 23 for B-Type<br>22, Typ. 24 for F-Type |                |
| Min. Directivity          | Port 3 to Port 2 (1x2) or Port<br>1/(3) to Port 2/(4)    | dB   | 50   |                |
| Min. Return Loss          | at Center Wavelength                                     | dB   | 50   |                |
| Max. Power Handling Rate  | Continuous Wave, Total Power                             | mW   | 300 or Specify                                   |                |
| Fiber Type                | -  | -    | HI 1060 or PM 980 Panda Fiber or Specify         |                |
| Max. Fiber Tensile Load   | -  | N    | 5  |                |
| Operating Temperature     | -  | °C   | -5 to 50   |                |
| 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.

### Package Dimensions

Detailed Informations And Dimensions Please Contact Us. Customized Design Is Available Upon Request.

### Ordering Informations

MTPMFC-①-②-③-④-⑤-⑥-⑦

① - Center Wavelength  
98 - 980nm  
06 - 1064nm  
SS - Specify

③ - Operating Axis  
B - Both Axes Working  
F - Fast Axis Blocked

⑥ - Fiber Jacket on Port 1/2/3/4  
B - Bare Fiber  
L - 900um Loose Tube

② - Port Configuration  
1 - 1x2  
2 - 2x2

④ - Fiber Type on Tap Port  
1 - HI 1060 Fiber  
2 - PM 980 Panda Fiber

⑦ - Fiber Length  
0.8 - 0.8m

⑤ - Connector Type on port 1/2/3/4  
1 - FC/UPC  
2 - FC/APC  
3 - SC/UPC  
4 - SC/APC