

## 850/1550nm Fused Type PM WDM Coupler (PMWDMC)

### Features

Low Insertion Loss  
High Isolation & High ER  
Telcordia GR-1221 Compliant  
Both Axis Working

### Application

PMF Amplifier  
Testing Equipment  
Fiber Laser  
Monitoring in Coherent System

### Specifications



| Parameters                             | Unit | 850/1550                           |        |
|----------------------------------------|------|------------------------------------|--------|
| Center Wavelength <sup>[1]</sup>       | nm   | 850                                | 1550   |
| Operating Wavelength Bandwidth         | nm   | ±5                                 | ±5     |
| Max Insertion Loss (IL) <sup>[2]</sup> | dB   | 0.8                                | 0.6    |
| Min Isolation (IS) <sup>[3]</sup>      | dB   | 15                                 | 17     |
| Polarization Extinction Ratio (PER)    | dB   | 18                                 | 18     |
| Fiber Type                             |      | PM850                              | PM1550 |
| Fiber Type at Com Port                 |      | PM1550                             |        |
| Return Loss (RL) <sup>[4]</sup>        | dB   | ≥50                                |        |
| Cross Talk (CR) <sup>[5]</sup>         | dB   | ≥50                                |        |
| Max Power Handling CW <sup>[6]</sup>   | W    | 1W ( with connector), 4W (spliced) |        |
| Operating Temperature                  | °C   | -40 ~ +85                          |        |
| Storage Temperature                    | °C   | -40 ~ +85                          |        |

<sup>[1]</sup> Center Wavelength can be customized.

<sup>[2]</sup> Test at room temperature without connectors. With connectors, IL+0.3dB, PER-2dB, RL-5dB.

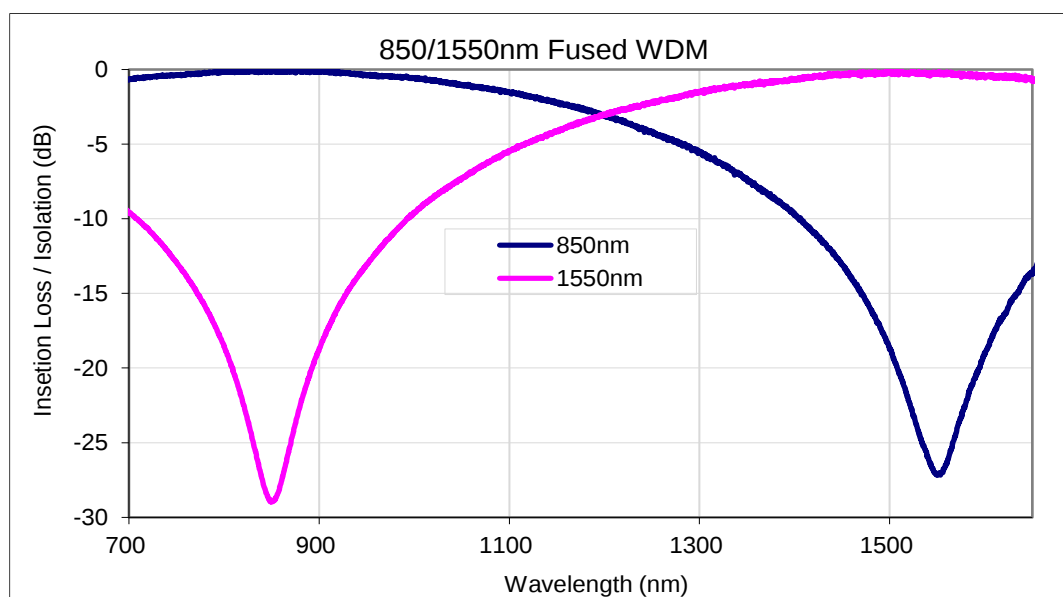
<sup>[3]</sup> Test at center wavelength.

<sup>[4]</sup> When test RL, coil all other port fibers 3-5 turns around a 10-30mm diameter loop, this prevents back reflections into test port, which would significantly lower RL.

<sup>[5]</sup>  $CR=10 * \log_{10} (P_{port \lambda 1} \div P_{port \lambda 2})$ , P=power in mW, test wavelength can be either wavelength of the two,

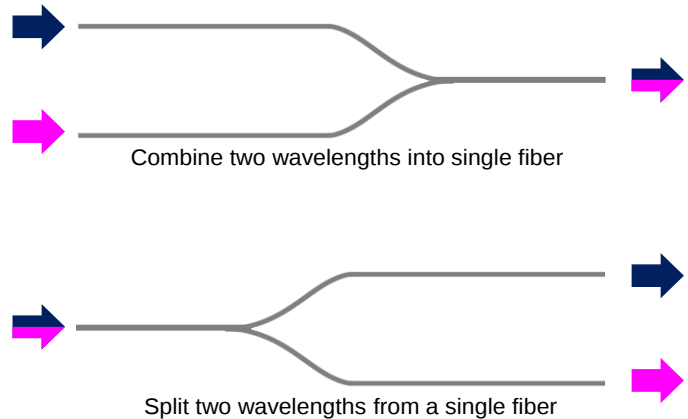
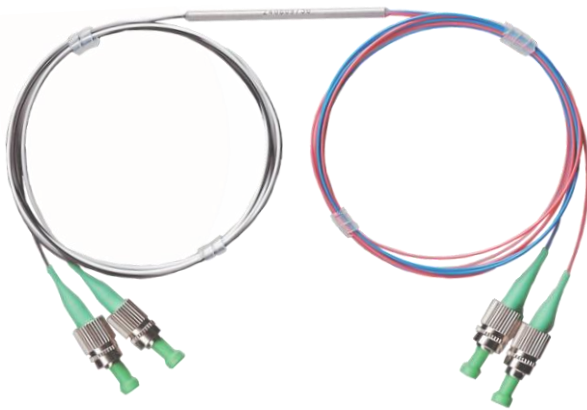
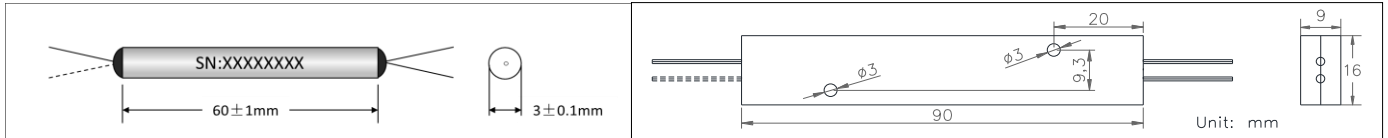
<sup>[6]</sup> Max power is for total power of longer wavelength+shorter wavelength. Higher power available on request.

### Typical Spectrum



### Package Information

|                    |                         |                  |                     |
|--------------------|-------------------------|------------------|---------------------|
| Port Configuration | 1x2 or 2x2              |                  |                     |
| Fiber Length       | 0.8m, others on request |                  |                     |
| Pigtail Type       | 250μm Bare Fiber        | 900μm Loose Tube | 2mm/3mm Loose Cable |
| Dimensions(mm)     | φ3x60                   | φ3x60            | 90x16x9             |
| Approx Weight (g)  | 30                      | 45               | 60                  |



Bidirectional

### Ordering Information

PMWDMC- ①①①①①①①①-②②②-③③③-④④④-⑤⑤⑤-⑥⑥⑥-⑦⑦⑦⑦⑦

|   |              |                                                                                    |
|---|--------------|------------------------------------------------------------------------------------|
| ① | Port Type    | 1x2; 2x2;                                                                          |
| ② | Wavelength   | 850/1550;                                                                          |
| ③ | Pigtail Type | 250=250μm Fiber; 900=900μm Loose Tube; 2000=2mm Loose Cable; 3000=3mm Loose Cable; |
| ④ | Fiber Type   | 5=PM Fiber;                                                                        |
| ⑤ | Fiber Length | 1=1m; XX=other;                                                                    |
| ⑥ | Connector    | NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others;         |
| ⑦ | Package      | 3x60; 90x16x9;                                                                     |