Polarization Maintaining Filter Splitter Module (1×N)  
(PMFSM Series)

**Description**

The PMFSM series is manufactured by using advanced technology to allow the input signal to be splitted into multi channels at a given splitting ratio while maintaining the polarization of the signal. It is characterized with low insertion loss, high return loss, high extinction ratio and excellent environmental stability and reliability. There are two type of working axis, one is both axis working and another is Fast axis blocked.

**Key Features**

- Low insertion loss
- High extinction ratio
- Excellent stability and reliability

**Applications**

- Fiber lasers
- Fiber amplifiers
- Fiber Sensors
- Optical Communications

**Specifications:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>1×4</th>
<th>1×8</th>
<th>1×16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center wavelength</td>
<td>nm</td>
<td>1310 or 1550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating bandwidth</td>
<td>nm</td>
<td>±30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insertion loss</td>
<td>dB</td>
<td>≤7.2</td>
<td>≤10.7</td>
<td>≤14.2</td>
</tr>
<tr>
<td>Extinction ratio</td>
<td>Type F</td>
<td>≥22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extinction ratio</td>
<td>Type B</td>
<td>≥20</td>
<td>≥17</td>
<td></td>
</tr>
<tr>
<td>Return loss</td>
<td>dB</td>
<td>≥50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directivity</td>
<td>dB</td>
<td>≥50</td>
<td>≥45</td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>°C</td>
<td>-5~+70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>°C</td>
<td>-40~+85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiber Type</td>
<td>/</td>
<td>PM Fiber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Package Dimensions(L×W×H)</td>
<td>mm</td>
<td>100×80×10 (ABS)</td>
<td>125×96×16mm(ABS)</td>
<td></td>
</tr>
</tbody>
</table>

*Type B: Both axis working, Type F: Fast axis blocked.

*IL is 0.3dB higher, RL is 5dB lower and ER is 2dB lower for each connector added. The default connector key is aligned to slow axis.
### Mechanical Dimension:

![Diagram of 1x4 Splitter Module]

![Diagram of 1x8 Splitter Module]

![Diagram of 1x16 Splitter Module]

### Ordering Information

PMFSM-XXXX-XXXX-XX-X-XXX-XX/XXX-XXXX-XXXX-XXXX

- **Package:** 100×80×10, 125×96×16 etc
- **Connector:** FC/UPC, FC/APC etc.
- **Fiber code**
- **Pigtail Type:** 0=250μm, 1=900μm, 4=others
- **Working axis type:** B= Both axis working, F= Fast axis blocked.
- **Splitting ratio:** EV=Evenly splitted, SS=Specify.
- **0104=1×4, 0108=1×8, 0116=1×16**
- **Operating Wavelength:** 1550nm etc.

Product information is subject to change without notice. www.lightcomm.com