

Fused Coupler, PM Combiner

**Key Features**

- Low insertion loss
- High power handling
- Proven reliability
- 9xx, 14xx and 15xx variants

Applications

- Erbium doped fiber amplifiers (EDFAs)
- Raman amplifiers
- Coherent optical communications

The JDSU Fused Coupler, PM Combiner enables the efficient combination of two orthogonally polarized sources of light at the same wavelength such that they are output through the same, single fiber output. In optical amplifiers this provides a doubling of pump power whilst ensuring pump redundancy should a pump failure occur. Applications include high power optical amplifiers and undersea systems. All ports consist of polarization maintaining fiber.

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Specifications

| Parameter | | 980 nm | S band | C band | L band |
|---|---------|----------------------|-----------------|-----------------|-----------------|
| Operating wavelength range ¹ | | 980 nm | 1440 to 1475 nm | 1528 to 1563 nm | 1570 to 1605 nm |
| Insertion loss (fast axis) ² | | | | | |
| Grade M | Maximum | 0.40 dB | 0.40 dB | 0.50 dB | 0.50 dB |
| Grade W | Maximum | 0.60 dB | 0.60 dB | 0.70 dB | 0.70 dB |
| Housing option | | B | | | |
| Dimensions (Ø x L) for 1x2 and 2x2 | | 3.0 x 71 mm | | | |
| Insertion loss (slow axis) ² | | | | | |
| Grade M | Maximum | 0.35 dB | | | |
| Grade W | Maximum | 0.40 dB | | | |
| Return loss/Directivity | Minimum | 50 dB | | | |
| TDL | Typical | 0.15 dB | | | |
| Pigtail tensile load | Maximum | 5 N | | | |
| Optical power handling | Maximum | 4 W | | | |
| Fiber type | | All ports PM fiber | | | |
| Pigtail | | Primary-coated fiber | | | |
| Operating temperature range | | -5 to 75 °C | | | |
| Storage temperature range | | -40 to 85 °C | | | |

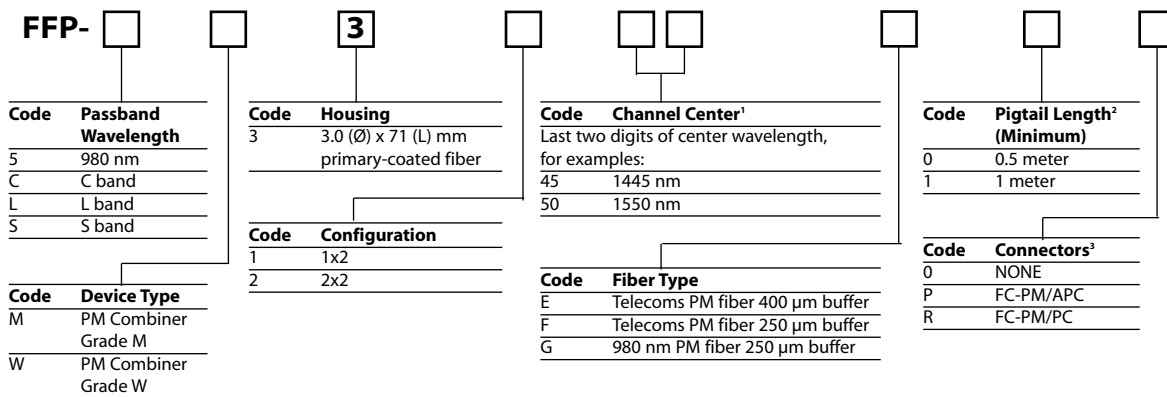
1. The center wavelength may be selected from within the operating wavelength ranges supplied.

2. Insertion loss over operating channel bandwidth (not including TDL or connector losses).

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: FFP-SM3245E10 (S band, PM Combiner Grade M, regular housing, 2x2 Channel Center = 1445 nm, Telecoms PM Fiber 400 μm buffer, 1 m pigtail, no connector)



1. Channel center must be within the selected passband wavelength.
2. Minimum pigtail length. Other pigtail lengths available on request.
3. Insertion loss in specification table does not include connector loss. Other connectors available on request.

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