

Fused Biconic WDM(FBW)-FBFD Series

The Agilecom's FBFD series WDM made by the fused biconic taper (FBT) fusing process. It provides low insertion loss and high isolation for combining pump 1480nm and signal light 1550nm in Optical Fiber Amplifier Systems. They comply with Telcordia GR-1209-CORE and GR-1221-CORE standards for performance and reliability.

Key Features

- Low excess loss and PDL
- High reliability
- High directivity
- Wide operating temperature up to 280°C
- Broad bandwidth

Applications

- Network monitoring
- EDFA
- Optical testing system
- Optical fiber sensors
- High temperature fiberoptic systems

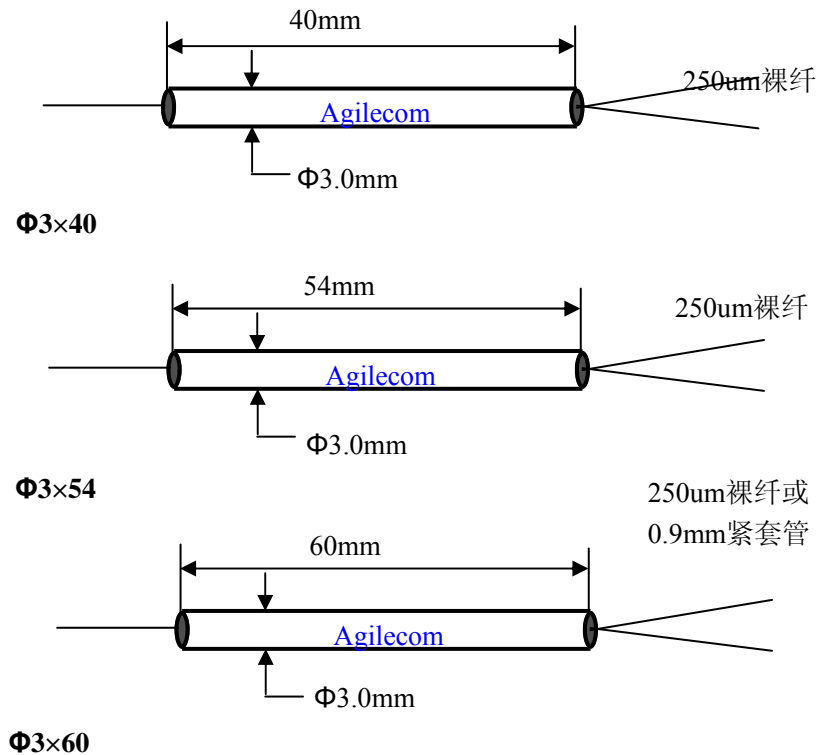


FBW Specifications

| Parameter | | Unit | 1060/1310 | | 1310/1490 | | 980/1550 | | 980/1060 | | 980/1310 | | 1550/1620 | | 1310/1490 | | 1310/1550 | | 1480/1550 | |
|-----------------------|-----|------|--|------|-----------|------|--------------|------|----------|------|----------|------|-----------|------|-----------|------|-----------|------|-------------|------|
| Grade | | | P | A | P | A | P | A | P | A | P | A | P | A | P | A | P | A | P | A |
| Configuration | | | 1×2 / 2×2 | | | | | | | | | | | | | | | | | |
| Configuration | | | SMF28, Φ80μm fibers, Allwave, HI1060 FLEX, OFS980-16, PM fibers, | | | | | | | | | | | | | | | | | |
| Long Wavelength | | nm | 1310±15 | | 1490±10 | | 1550/1585±20 | | 1060±5 | | 1310±10 | | 1620±5 | | 1490±10 | | 1550±15 | | 1550/1600±5 | |
| Insertion Loss | Max | dB | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 |
| Isolation | Typ | dB | 17.0 | 16.0 | 17.0 | 16.0 | 20.0 | 18.0 | 15.0 | 13.0 | 18.0 | 16.0 | 15.0 | 13.0 | 17.0 | 16.0 | 17.0 | 16.0 | 16.0 | 14.0 |
| PDL | Max | dB | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 |
| Short Wavelength | | nm | 1060±15 | | 1310±10 | | 970±10 | | 980±5 | | 980±10 | | 1550±5 | | 1310±10 | | 1310±15 | | 1480±5 | |
| Insertion Loss | Max | dB | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 | 0.30 | 0.40 |
| Isolation | Typ | dB | 17.0 | 16.0 | 17.0 | 16.0 | 20.0 | 18.0 | 15.0 | 13.0 | 18.0 | 16.0 | 15.0 | 13.0 | 17.0 | 16.0 | 17.0 | 16.0 | 16.0 | 14.0 |
| PDL | Max | dB | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 | 0.10 | 0.15 |
| Return Loss | Min | dB | 50 (Test at central wavelength only) | | | | | | | | | | | | | | | | | |
| Operating Power | Max | W | 5.0 | | | | | | | | | | | | | | | | | |
| Operating Temperature | | °C | -40 ~ +85 | | | | | | | | | | | | | | | | | |
| Storage Temperature | | °C | -60 ~ +85 | | | | | | | | | | | | | | | | | |
| Package Type | B1 | mm | Φ3×40 for 250μm bare fiber | | | | | | | | | | | | | | | | | |
| | L1 | | Φ3×60 for 900μm loose tube | | | | | | | | | | | | | | | | | |
| | M1 | | 10×20×90 for 900μm loose tube or 3mm cable | | | | | | | | | | | | | | | | | |
| Special Feature | H | °C | High temperature of over 280°C | | | | | | | | | | | | | | | | | |
| | S | % | Special configuration of 1×3, 1310nm, 1490nm, and 1550nm | | | | | | | | | | | | | | | | | |
| | V | dB | Very high isolation version over 32dB available in module | | | | | | | | | | | | | | | | | |

Notes: Specifications without fiber connectors

Dimensions Diagram



Ordering Information

For more information on these or other products and their availability, please contact our sales department at 408-943-0815 in North America and 86-760-86781889 in China or via e-mail at info@agilecom.net.

Sample: FBW— 18506131-01

| Code | Configuration | Code | Wavelength | Code | Package | Code | Pigtail | Code | Fiber Length | Code | Connector |
|------|---------------|------|-------------|------|-------------|------|---------------------|------|--------------|------|-----------|
| 1 | 1×2 | 13 | 1060/1310nm | 0 | None | 0 | 250um Bare Fiber | 1 | 0.5m | 0 | None |
| 2 | 2×2 | 34 | 1310/1490nm | 1 | Φ3×54 mm | 1 | 0.9mm Loose Tube | 2 | 1.0m | 1 | SC/UPC |
| | | 35 | 1310/1550nm | 2 | Φ4×64 mm | 2 | 2.0mm Loose Tube | 3 | 1.5m | 2 | SC/APC |
| | | 56 | 1550/1620nm | 3 | Φ3×60 mm | 3 | 3.0mm Loose Tube | 4 | 2.0m | 3 | FC/UPC |
| | | 85 | 1480/1550nm | 4 | Φ3×40 mm | 4 | 0.9mm Tight Tube | 5 | 2.5m | 4 | FC/APC |
| | | 91 | 980/1060nm | 5 | Φ3×45 mm | 5 | 2.0mm Tight Tube | 6 | 3.0m | 5 | LC/UPC |
| | | 93 | 980/1310nm | 6 | 10×20×90 mm | 6 | 3.0mm Tight Tube | A | 1.25m | 6 | LC/APC |
| | | 95 | 980/1550nm | 7 | 80×100×10mm | 7 | 2.0mm MM Loose Tube | B | 1.75m | 7 | ST/UPC |
| | | XX | Customize | X | Customize | 8 | 2.0mm MM Loose Tube | C | 2.25m | 8 | MU |
| | | | | | | X | Customize | X | Customize | X | Customize |

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Rev. 005 07/2009