

Thin-Film 1550/1310 Wavelength Division Multiplexer

This document proposes the specification of the Thin-Film Wavelength Division Multiplexer that transmits light at 1310 nm and reflects light at 1550 nm.

Specifications

(All parameters are referenced without connectors. Typical connector loss 0.25 dB/pair)

| Parameters | | Specifications | Unit |
|--|------------------------|---|------|
| Transmitted Band | | 1270-1350 | nm |
| Reflected Band | | 1520-1610 | nm |
| Passband Insertion Loss | | ≤ 0.7 | dB |
| Reflected band Insertion Loss | | ≤ 0.5 | dB |
| Insertion loss uniformity over Transmitted band | | ≤ 0.2 | dB |
| Insertion loss uniformity over Reflected band | | ≤ 0.2 | dB |
| Isolation in Transmission against Reflected Band | | ≥ 35 | dB |
| Isolation in Reflection against Transmitted Band | | ≥ 18 | dB |
| PDL | | ≤ 0.1 | dB |
| PMD | | ≤ 0.1 | ps |
| Return Loss | Single-mode | ≥ 50 | dB |
| | Multi-mode | ≥ 40 | |
| Directivity | Single-mode | ≥ 55 | dB |
| | Multi-mode | ≥ 45 | |
| Optical Power Handling | | > 500 | mW |
| Operating Temperature | | 0 to 70 | °C |
| Storage Temperature | | -40 to 85 | °C |
| Fiber Type | | SMF 28, Multimode 62.5/125, or Multimode 50/125 | |
| Package Dimension (excluding strain relief) | Bare Fiber | $\phi 5.5 \times 35$ typical | mm |
| | 900 μ m Loose Tube | $\phi 5.5 \times 40$ typical | |

Part number of WDM

| | | | | | | | | | | | | | | |
|---|---|---|--|--|--|--|--|--|--|--|--|---|--|--|
| W | M | M | | | | | | | | | | N | | |
|---|---|---|--|--|--|--|--|--|--|--|--|---|--|--|

