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# 1480/1550nm Micro-Optic Wavelength Division Multiplexer



**ACP's** Micro-Optics WDM utilizes thin film coating technology and proprietary design of non-flux metal bonding micro optics packaging. It provides low insertion loss, high channel isolation, low temperature sensitivity and epoxy free optical path.

All AC Photonics' products are Telcordia qualification tested.

#### **Key Features**

- Wide Operating Wavelength Range
- Low Insertion Loss
- Ultra Flat Wide Passband
- High Channel Isolation
- High Stability and Reliability
- Epoxy Free Optical Path

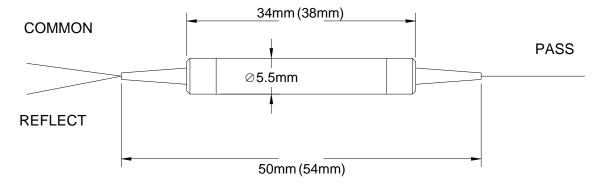
## **Applications**

- System Monitoring
- WDM System
- Transmitters and Fiber Lasers
- Fiber Optical Amplifier
- Fiberoptic Instruments

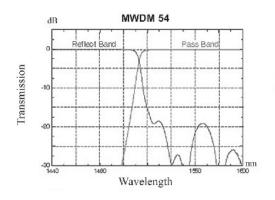
#### **Performance Specifications**

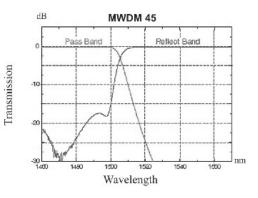
| Parameter                              |                  | Specifications                         |  |
|--|------------------|--|--|
| Pass Channel Wavelength Range          |                  | 1530nm to 1580nm (or 1440nm to 1490nm) |  |
| Reflect Channel Wavelength Range       |                  | 1440nm to 1490nm (or 1530nm to 1580nm) |  |
| Insertion Loss                         | Reflect Channel. | ≤ 0.4dB                                |  |
|  | Pass Channel     | ≤ 0.6dB                                |  |
| Insertion Loss Variation               |                  | ≤ 0.3dB                                |  |
| Channel Isolation                      | Reflect Channel  | ≥ 12dB                                 |  |
|  | Pass Channel     | ≥ 30dB                                 |  |
| Insertion Loss Temperature Sensitivity |                  | ≤ 0.003dB/°C                           |  |
| Polarization Dependent Loss            |                  | ≤ 0.10dB                               |  |
| Polarization Mode Dispersion           |                  | ≤ 0.10ps                               |  |
| Directivity                            |                  | ≥ 60dB                                 |  |
| Return Loss                            |                  | ≥ 50dB                                 |  |
| Optical Power                          |                  | ≤ 300mW                                |  |
| Operating Temperature                  |                  | 0 to +70°C                             |  |
| Storage Temperature                    |                  | -40 to +85°C                           |  |
| Package Dimensions                     |                  | Ø5.5 x L34mm (L38 for 900um)           |  |

### **Mechanical Dimensions**



## **Spectral Chart**





# **Ordering Information**

| MWDM |  |                                    |                      |  |
|------|--|------------------------------------|----------------------|--|
|      | Wavelength   | Pigtail Style                      | Fiber Length         | In/Out<br>Connector  |
|      | 45 = 1480 Pass/1550 Reflect<br>54 = 1550 Pass/1480 Reflect | 1 = Bare Fiber<br>2 = 900um Jacket | 1 = 1.0m<br>2 = 2.0m | 0 = None<br>1 = FC/APC<br>2 = FC/PC<br>3 = SC/APC<br>4 = SC/PC<br>5 = ST<br>6 = LC/UPC<br>7 = LC/APC |