

# Polarization Maintaining WDM 980/1550nm



## DATASHEET

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The PMDM 980/1550 is a 1×2 Wavelength Division Multiplexer (WDM) that combines a 980 nm pump laser with a 1550 nm signal laser into a single polarization-maintaining fiber. The pump input supports either PM980 or HI1060 (non-PM) fiber. Utilizing thin-film coating technology and a proprietary micro-optics packaging design, the PMDM enables efficient optical addition at 980 nm while maintaining low insertion loss, high channel isolation, wide passband, low temperature sensitivity, and an epoxy-free optical path. The device meets Telcordia GR-1221-CORE reliability standards, including impact, vibration, thermal shock, and temperature cycling tests.

## Features

- Low Insertion Loss
- Wide Pass Band
- High Channel Isolation
- High Stability and Reliability
- Epoxy Free Optical Path

## Applications

- Fiber Laser
- Sensor

## Specifications

Parameter		Specifications	Unit
Passing Wavelength		1550	nm
Passing Wavelength Bandwidth		± 50	nm
Adding Wavelength		980	nm
Adding Wavelength Band		± 30	nm
Insertion Loss (Passing)		≤ 0.40	dB
Insertion Loss (Adding)		≤ 0.8	dB
Isolation		≥ 20	dB
Insertion Loss Temperature Sensitivity		≤ 0.03	dB/°C
Optical Power (980nm)		≥ 1.5	W
Optical Power (1550nm)		≥ 0.5	W
Return Loss		≥ 45	dB
Polarization Extinction Ratio		≥ 20	dB
Directivity		≥ 50	dB
Optical Power (CW)	from the Pump	1500	mW
	from the Signal	500	
Bare Fiber Length		1	m
Fiber Type	for the Pump	PM980, HI1060	
	for the Signal	PM1550	
Operating Temperature		-5 to +70	°C
Package Dimension		Ø5.5 x L54	mm

**Note:** The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [click this link](#):

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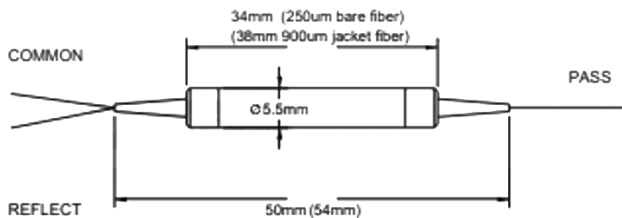
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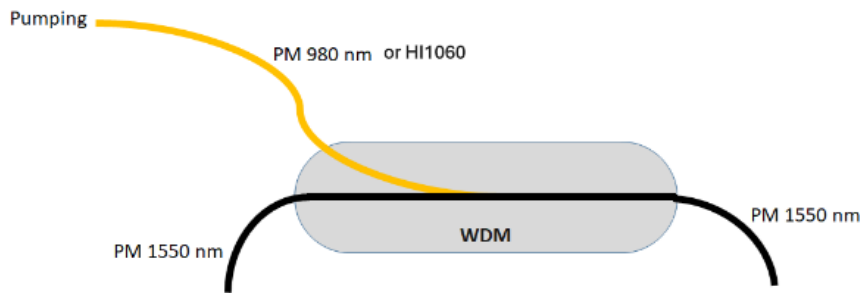
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### Mechanical Dimensions (mm)



\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

### Function



### Ordering Information

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Prefix	Add Wavelength	Pass Wavelength	Configuration	Add Fiber	Pass Fiber	Fiber Cover	Fiber Length	In Connector	Out Connector
PMDM-	980nm = 9	1550nm = 5	1x2 = 1	Hi1060 = 1 PM980 = 9	PM1550 = 1 Special = 0	Bare fiber = 1 0.9mm tube = 2 3mm jacket = 3 2mm jacket = 4 1.6mm jacket = 5	0.5m = 05 1.0m = 10 1.5m = 15 2m = 20	None = 0 FC/APC = 1 FC/PC = 2 SC/APC = 3 SC/PC = 4 LC/UPC = 6 LC/APC = 7	None = 0 FC/APC = 1 FC/PC = 2 SC/APC = 3 SC/PC = 4 LC/UPC = 6 LC/APC = 7