

## Thin-Film 1480/1550 Wavelength Division Multiplexer

This document proposes the specification of the Thin-Film Wavelength Division Multiplexer that transmits light at 1550 nm and reflects light at 1480 nm.

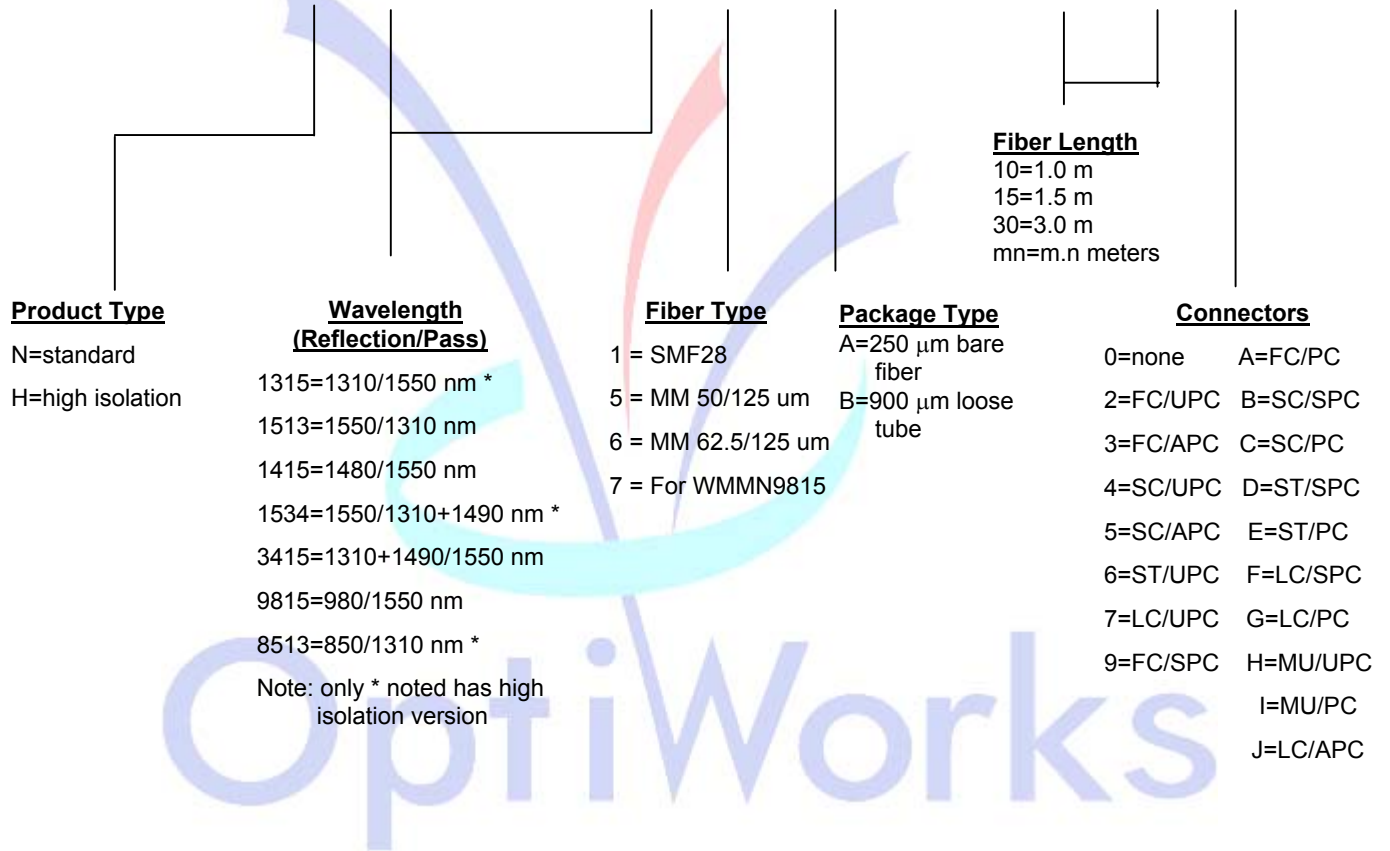
### Specifications

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

Parameters		Specifications	Unit
Transmitted Band		1530-1610	nm
Reflected Band		1460-1490	nm
Passband Insertion Loss		$\leq 0.7$	dB
Reflected band Insertion Loss		$\leq 0.4$	dB
Insertion loss uniformity over Transmitted band		$\leq 0.3$	dB
Isolation in Transmission against Reflected Band		$\geq 30$	dB
Isolation in Reflection against Transmitted Band		$\geq 15$	dB
PDL		$\leq 0.1$	dB
PMD		$\leq 0.1$	ps
Return Loss		$\geq 50$	dB
Directivity		$\geq 55$	dB
Optical Power Handling		$> 500$	mW
Operating Temperature		0 to 70	°C
Storage Temperature		-40 to 85	°C
Fiber Type		SMF 28	
Package Dimension (excluding strain relief)	Bare Fiber	$\phi 5.5 \times 35$ typical	mm
	900 $\mu\text{m}$ Loose Tube	$\phi 5.5 \times 40$ typical	

**Part number of WDM**

W	M	M								N	N			
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**Product Type**

N=standard  
H=high isolation

**Wavelength  
(Reflection/Pass)**

- 1315=1310/1550 nm \*
- 1513=1550/1310 nm
- 1415=1480/1550 nm
- 1534=1550/1310+1490 nm \*
- 3415=1310+1490/1550 nm
- 9815=980/1550 nm
- 8513=850/1310 nm \*

Note: only \* noted has high isolation version

**Fiber Type**

- 1 = SMF28
- 5 = MM 50/125 um
- 6 = MM 62.5/125 um
- 7 = For WMMN9815

**Package Type**

- A=250 μm bare fiber
- B=900 μm loose tube

**Connectors**

- 0=none    A=FC/PC
- 2=FC/UPC    B=SC/SPC
- 3=FC/APC    C=SC/PC
- 4=SC/UPC    D=ST/SPC
- 5=SC/APC    E=ST/PC
- 6=ST/UPC    F=LC/SPC
- 7=LC/UPC    G=LC/PC
- 9=FC/SPC    H=MU/UPC
- I=MU/PC
- J=LC/APC

**Fiber Length**

- 10=1.0 m
- 15=1.5 m
- 30=3.0 m
- mn=m.n meters