



**Thin-Film 1310/1550 High Isolation
Wavelength Division Multiplexer**

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

1. Specifications

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

Parameters		Specifications	Unit
Transmitted Band		1520-1610	nm
Reflected Band		1270-1350	nm
Passband Insertion Loss		≤ 1.0	dB
Reflected band Insertion Loss		≤ 1.0	dB
Insertion loss uniformity over Transmitted band		≤ 0.3	dB
Insertion loss uniformity over Reflected band		≤ 0.3	dB
Isolation in Transmission against Reflected band		≥ 45	dB
Isolation in Reflection against Transmitted band		≥ 45	dB
PDL in Transmission		≤ 0.1	dB
PDL in Reflection		≤ 0.2	dB
PMD		≤ 0.1	ps
Return Loss		≥ 50	dB
		≥ 40	
Directivity		≥ 55	dB
		≥ 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 μm Loose Tube	$\phi 5.5 \times 40$ typical	

2. Part number of WDM

W	M	M									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 μ m
 6 = MM 62.5/125 μ m
 7 = For WMMN9815

Package Type
 S=single tube
 N=module
 G=LGX

Fiber Length
 10=1.0 m
 15=1.5 m
 30=3.0 m

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

Fiber Jacket
 A=250 μ m bare fiber
 B=900 μ m loose tube
 E=tight buffer

3. size reference

NA

4. RoHS appliance. GR-1209-Core, GR-1221-Core Generic Requirement and test standard.

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