

GREEN HIGH ISOLATION 1310/1550 NM MICRO-OPTIC WDM

HWDMG Series

Product Description

Oplink's High-Isolation Micro-Optic Wavelength Division Multiplexer (HWDM) is based on thin-film filter technology and metal bonding micro-optic packaging. This component is used to combine or separate 1310 and 1550nm band signal. The HWDM device offers a very flat and wide passband, low insertion loss, and much higher isolation than the MWDM device. This product is ideal for high-power Optical Amplification System and WDM Network applications. All Oplink products are epoxy-free in the optical path. Oplink HWDM devices are Bellcore GR-1221 qualification tested.



Performance Specification

HWDMG Series		Min	Max	Unit
Pass Channel Wavelength Range λ_1	Type 1315	1260	1360	nm
	Type 1513	1520	1600	nm
Reflection Channel Wavelength Range λ_2	Type 1315	1520	1600	nm
	Type 1513	1260	1360	nm
Insertion Loss *	Pass Channel @ λ_1 Reflect Channel @ λ_2		0.8 0.8	dB
Isolation	Reflect Channel @ λ_1 Pass Channel @ λ_2	45 45		dB
Passband Ripple			0.30	dB
Directivity		50		dB
Return Loss		50		dB
Polarization Dependent Loss			0.2	dB
Polarization Mode Dispersion			0.05	ps
Maximum Power Handling			500	mW
Operating Temperature		0 to +70		°C
Storage Temperature		-40 to +85		°C
Fiber Type		Corning SMF-28		
Package Dimensions **	250 μ m Bare Fiber 900 μ m Loose Tube	P1: (ϕ) 5.5 x (L) 34.0 P2: (ϕ) 5.5 x (L) 40.0		mm

Note:

* Values are referenced without connector loss.

** The mechanical tolerance should be ± 0.2 mm on all package dimensions unless otherwise custom specified.

*** The maximum IL is under all states of polarization and within the full operating temperature and wavelength ranges specified.

Features

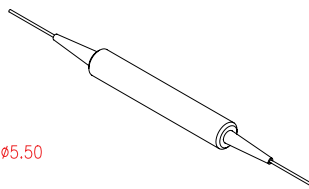
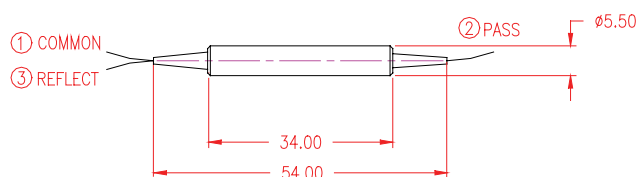
- ◆ Environmental Green Plan Compliance
- ◆ Wide Operating Wavelength Range
- ◆ Low Insertion Loss
- ◆ High Channel Isolation
- ◆ Ultra Flat Wide Passband
- ◆ Highly Stable & Reliable
- ◆ Epoxy-free Optical Path

Applications

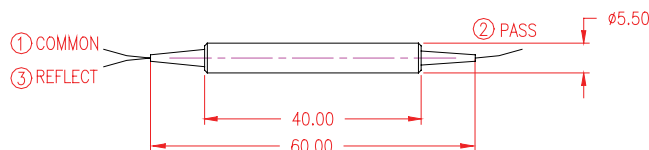
- ◆ Bi-directional WDM Systems
- ◆ Uni-directional WDM Systems
- ◆ CATV Systems

Mechanical Drawing / Package Dimensions (dimension in mm)

P1: SMF-28 250 μm bare fiber



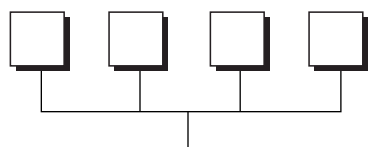
P2: 900 μm loose tube



Ordering Information

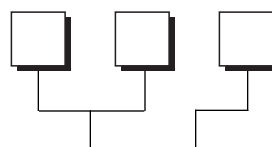
Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.

HWDMG



Wavelength

1310 nm pass = 1315
1550 nm pass = 1513



Fiber Length*

0.5 meter = H
1.0 meter = 1
1.5 meters = 5
2.0 meters = 2



Connector Type

None = 1
FC/PC = 2
FC/SPC = 3
FC/APC = 4
SC/PC = 5
SC/SPC = 6
SC/APC = 7
ST = 8
LC = 9
MU = A

Package & Fiber Jacket

P1 + 250 μ m bare fiber = 11
P2 + 900 μ m loose tube = 22

** The tolerance of fiber length is +/-0.1m. 1 meter is standard. The lead-time for special fiber length will be longer.*