

# 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 $\lambda_1$	Type 1315	1260	1360	nm
	Type 1513	1520	1600	nm
Reflection Channel Wavelength Range $\lambda_2$	Type 1315	1520	1600	nm
	Type 1513	1260	1360	nm
Insertion Loss *	Pass Channel @ $\lambda_1$		0.8	dB
	Reflect Channel @ $\lambda_2$		0.8	
Isolation	Reflect Channel @ $\lambda_1$	45		dB
	Pass Channel @ $\lambda_2$	45		
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 $\mu$ m Bare Fiber	P1: ( $\phi$ ) 5.5 x (L) 34.0		mm
	900 $\mu$ m Loose Tube	P2: ( $\phi$ ) 5.5 x (L) 40.0		

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

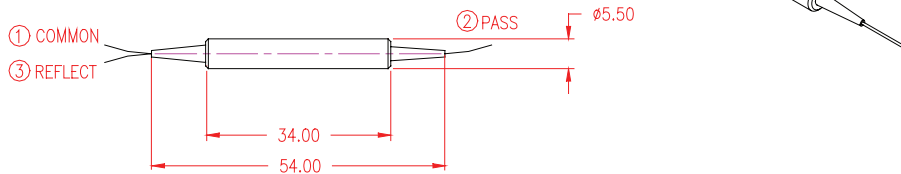
- ◆ Environmental Green Plan Compliance
- ◆ Wide Operating Wavelength Range
- ◆ Low Insertion Loss
- ◆ High Channel Isolation
- ◆ Ultra Flat Wide Passband
- ◆ Highly Stable & Reliable
- ◆ Epoxy-free Optical Path

### Applications

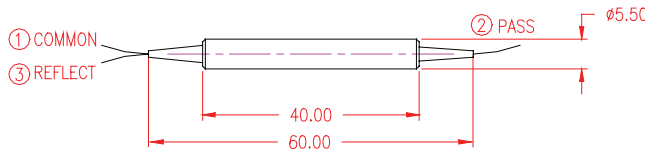
- ◆ Bi-directional WDM Systems
- ◆ Uni-directional WDM Systems
- ◆ CATV Systems

**Mechanical Drawing / Package Dimensions (dimension in mm)**

P1: SMF-28 250 μm bare fiber

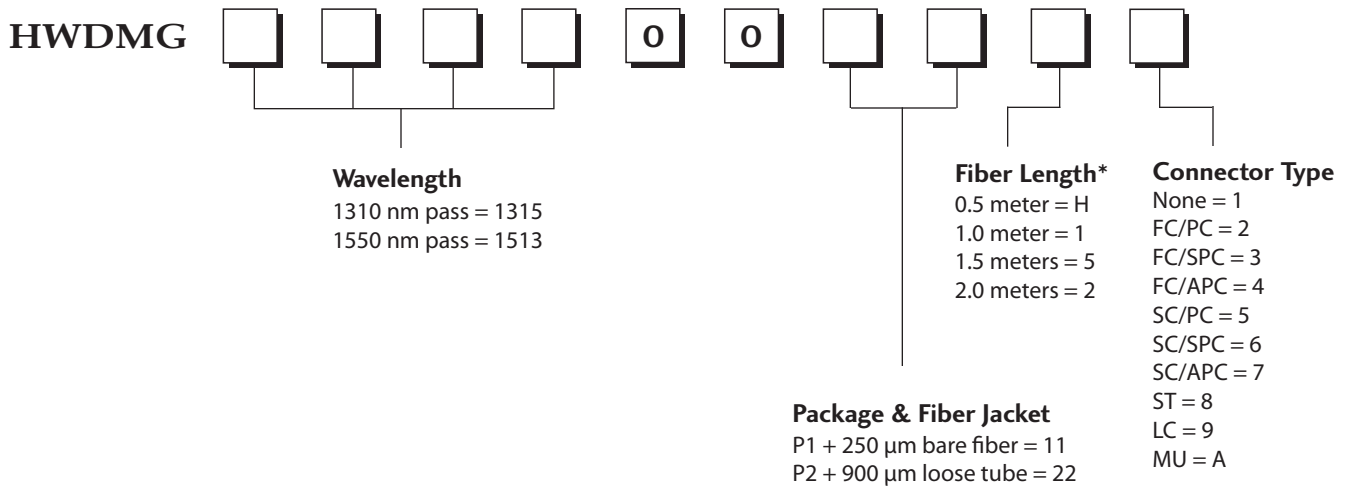


P2: 900 μm loose tube



**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.



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