

# GREEN 980/1550 NM MICRO-OPTIC WDM

## MWDMG1598 Series

### Product Description

Oplink's Micro-Optic Wavelength Division Multiplexer (MWDM) is based on thin-film filter technology and metal bonding micro optics packaging. This device offers very flat and wide passband, low insertion loss, and high isolation which makes it ideal for combining pump(980nm) and signal light(1550nm) in Optical Fiber Amplifier Systems. In DWDM systems, this component is used in high-power applications. All Oplink products are epoxy-free in the optical path. Oplink MWDM devices are Bellcore GR-1221 qualification tested.



### Performance Specification

MWDMG1598 Series		Min	Max	Unit
Pass Channel Wavelength Range $\lambda_1$		1520	1610	nm
Reflection Channel Wavelength Range $\lambda_2$		965	995	nm
Insertion Loss *	Pass Channel @ $\lambda_1$		1.0	dB
	Reflect Channel @ $\lambda_2$		0.6	
Isolation	Reflect Channel @ $\lambda_1$	18		dB
	Pass Channel @ $\lambda_2$	30		
Passband Ripple			0.2	dB
Directivity		55		dB
Return Loss		50		dB
Polarization Dependent Loss			0.1	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	Port 1 & 3	Corning Flexcore 1060		
	Port 2	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:

\* All spec excluding connectors.

\*\* 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

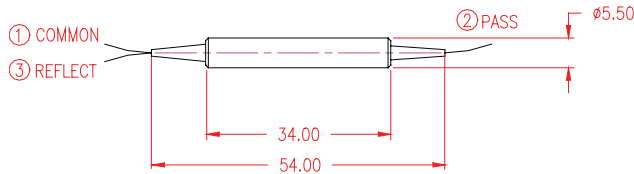
### Applications

- ◆ Fiber Amplifiers
- ◆ WDM Systems

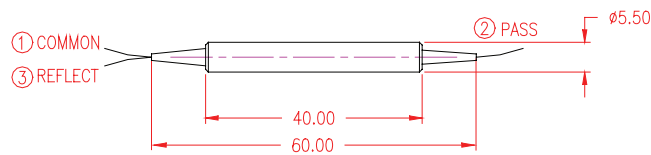
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**Mechanical Drawing / Package Dimensions (dimension in mm)**

P1: SMF-28 250µm bare fiber

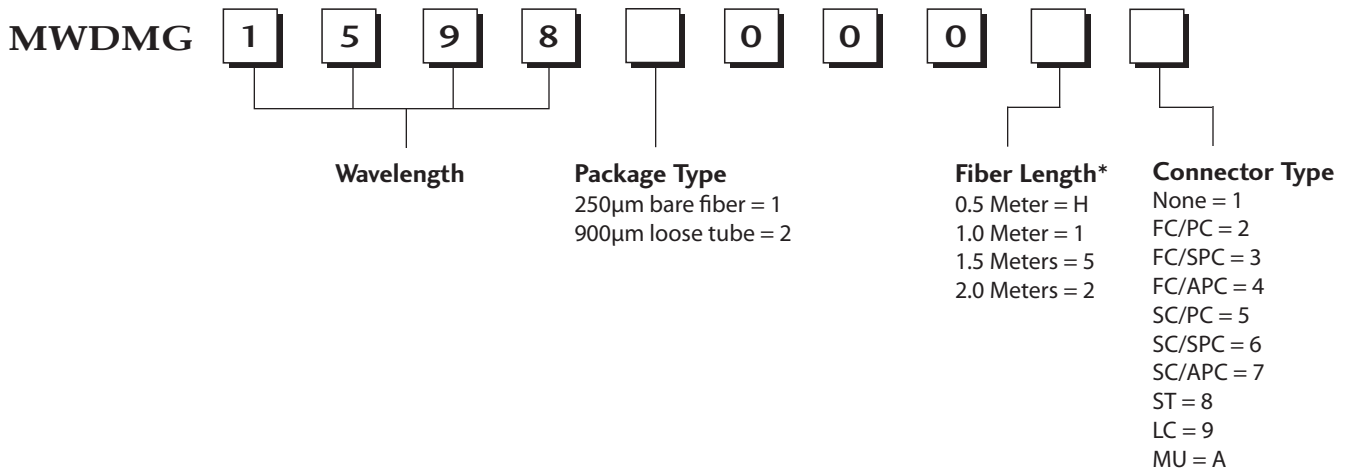


P2: 900µm loose tube



**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.