

PLANAR WAVEGUIDE DENSE WAVELENGTH DIVISION MULTIPLEXER/DEMULTIPLEXER

AWGM5 Series

Product Description

Arrayed-waveguide grating (AWG) wavelength division multiplexers and demultiplexers at 50GHz channel spacing are based on patent-pending CVD process. These silica-on-silicon waveguides exhibit exceptional material uniformity.

Complemented by our automated robust packaging, Oplink's planar light-wave circuits are well suited for demanding telecom applications such as DWDM, long-haul, and metro transmission systems. The AWG offers low insertion loss, accurate channel alignment, very low crosstalk and high channel-to-channel uniformity. This product family complies with Telcordia GR-1221-CORE.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module.



Performance Specification

AWGM5 Parameters	Gaussian	Moderate	Flat-top	Unit
Channel Spacing		50		GHz
Number of Channels		Up to 80		
Channel Passband		± 6.25		GHz
Insertion Loss	< 4.0		< 6.0	dB
Uniformity		< 1.5		dB
Polarization Dependent Loss		< 0.5		dB
Adjacent Channel Crosstalk		> 25		dB
Non-adjacent Channel Crosstalk		> 30		dB
Total Crosstalk		> 20		dB
Return Loss		> 40		dB
Directivity		> 50		dB
Power Consumption		4		W
Maximum Power Handling			300	mW
Operating Temperature		-5 to +70		°C
Storage Temperature		-40 to +85		°C

Features

- ◆ Established Silica-on-Silicon Technology
- ◆ Low Insertion Loss
- ◆ Low PDL
- ◆ Extremely Low Crosstalk
- ◆ Low Chromatic Dispersion
- ◆ Telcordia GR-1221-CORE Qualified

Applications

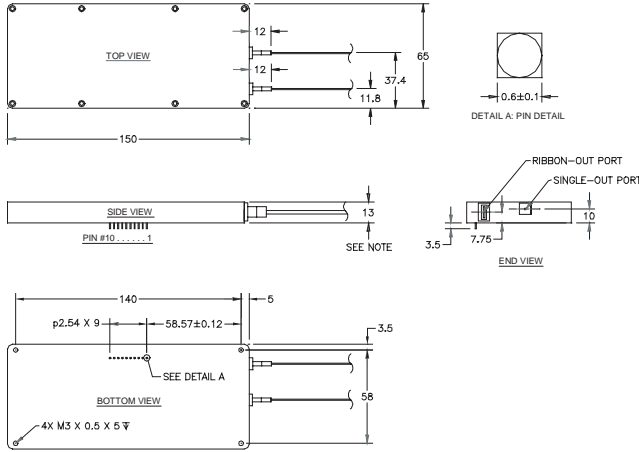
- ◆ DWDM Transmission
- ◆ Wavelength Routing
- ◆ Optical Add/Drop Multiplexing

Options

- ◆ Channel Count: 16, 24, 32, 40, 80 or Custom
- ◆ Channel Spacing: 100GHz, 200GHz
- ◆ Wavelength Plan: ITU Grid in C or L-Band
- ◆ Custom Packaging Available
- ◆ RTD/Thermistor Temperature Sensor or Internal Temp Control Option

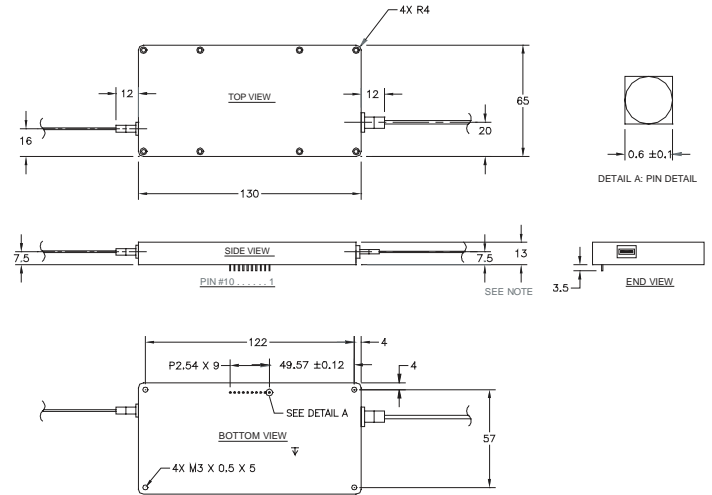
Mechanical Drawing / Package Dimensions

P1:



NOTE:
1. THICKNESS INCREASES TO 16MM FROM 13MM FOR INTERNAL TEMPERATURE CONTROLLER.

P2:

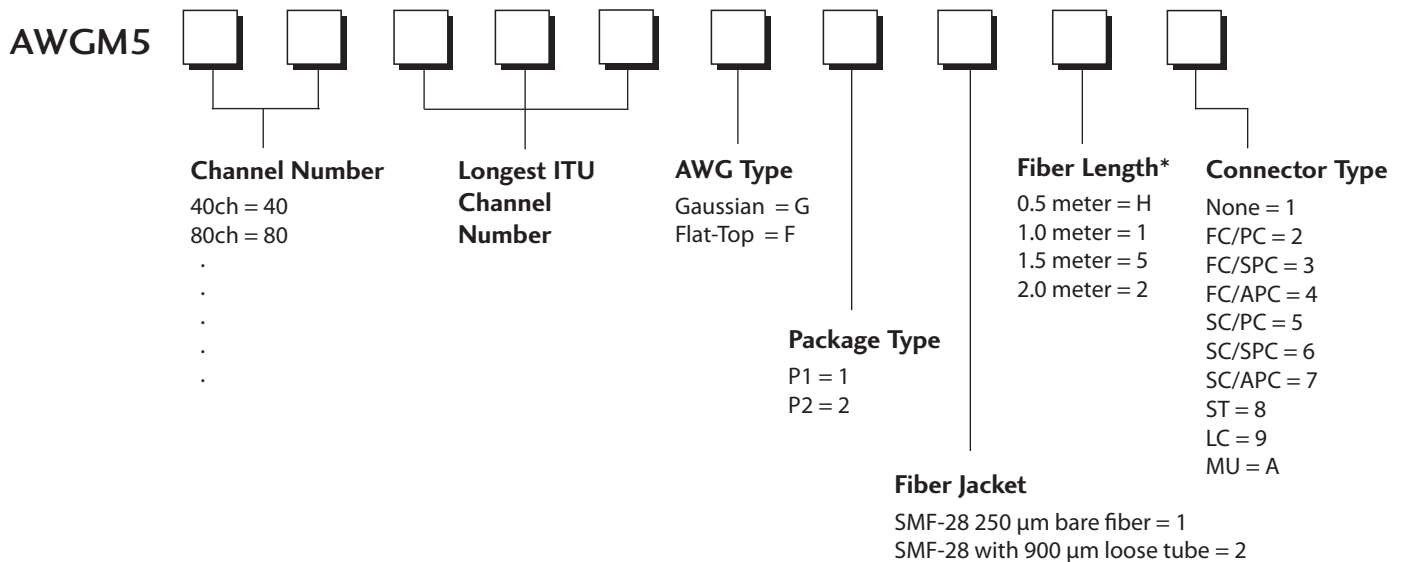


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* The mechanical tolerance should be +/-0.2mm on all package dimensions unless otherwise custom specified

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.



* 1 meter is standard. The lead-time for special fiber length will be longer.