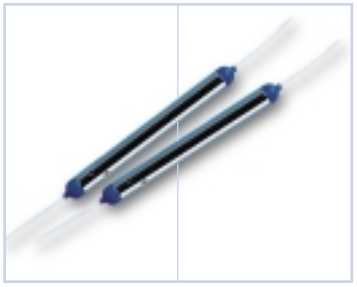
PRODUCT BULLETIN

PASSIVE ATHERMAL BRAGG GRATING FILTER



Description

CiDRA introduces passive athermal gratings for DWDM channel filtering and routing applications. Custom products are also available on an OEM basis. These devices are based on CiDRA's proprietary waveguide platform technology which overcomes traditional drift mechanisms inherent in other athermal Bragg products. This robust design results in exceptional wavelength stability over a wide operating temperature range. The unique thermal compensation approach results in a compact package with outstanding performance and high reliability. The package design also allows precise factory setting of the grating center wavelength to exact customer specifications.

Features

- Available in a standard 50GHz filter version and to custom specifications
- High volume, scalable production
- Precisely settable to all ITU channels
- Exceptional wavelength stability over a wide operating temperature range
- Outstanding environmental performance over -40°C to 85°C temperature cycling, as well as 85°C/85% RH Damp Heat Test
- Compact package, standard fiber pigtails
- Ultra-low cladding mode losses

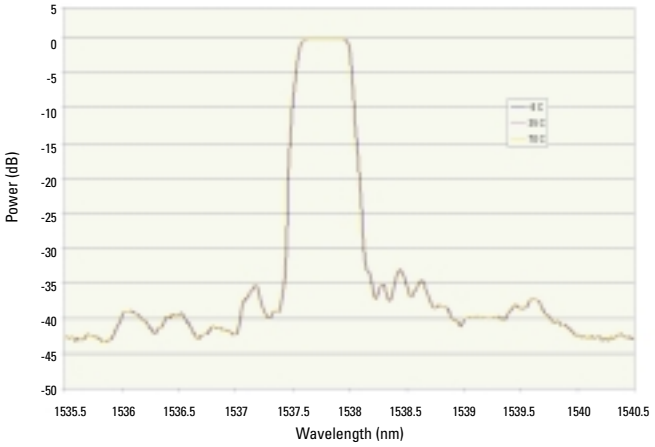
Applications

- DWDM channel filters
- Fixed DWDM routing and branching modules
- Precision wavelength referencing

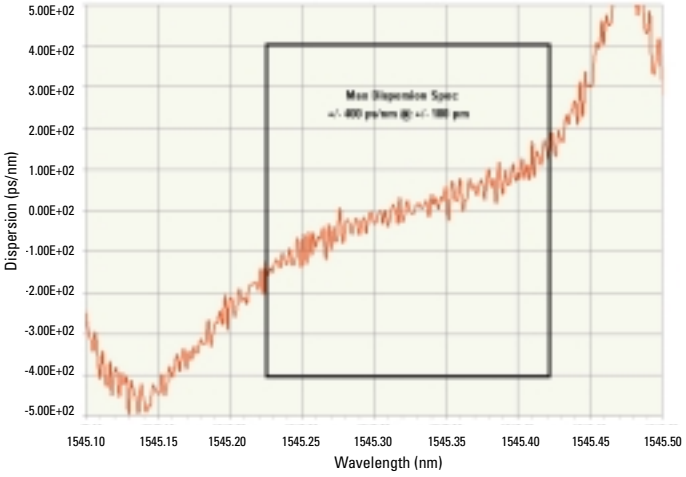
Standards

- Compliant with Telcordia GR-1209 and GR-1221 requirements

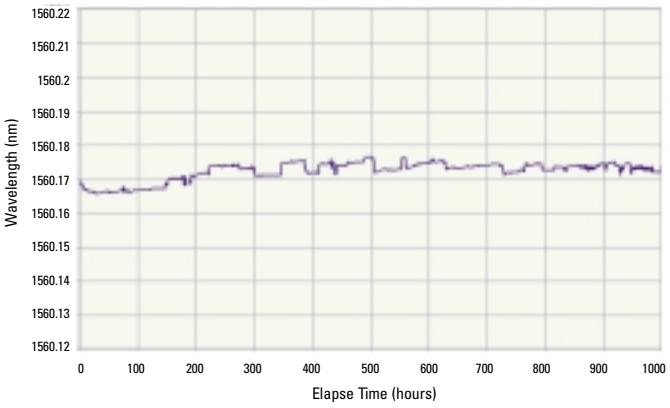
Filter Profile Over Temperature



Dispersion for 50GHz Grating



Damp Heat Test 85°C/85% RH



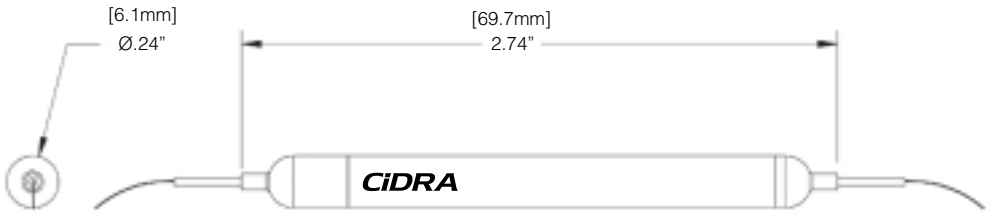
CUSTOMER WORKSHEET

PASSIVE ATHERMAL BRAGG GRATING FILTER

Please fill in your custom product specifications below:

PARAMETER	STANDARD 50GHZ FILTER	YOUR SPECS
Center Wavelength	C- and L-Band	
Center Wavelength Accuracy (@ 30°C)	±10pm	
-0.5dB Reflected Bandwidth	>0.25nm	
Adjacent Channel Isolation	>20dB	
Non-Adjacent Channel Isolation	>25dB	
Transmission Bandwidth @ -25dB	>0.15nm	
Insertion Loss	0.33dB max, 0.27dB typical	
Cladding Mode Losses	<0.25dB	
PDL	<0.2dB	
Chromatic Dispersion	<±400ps/nm	
Wavelength Compensation	≤40pm over operating range	
Operating Temperature Range	-5°C to 70°C	
Optical Interface	1m 250um buffered fiber (SMF 28 or equivalent)	
Standards	Compliant with Telcordia GR-1209 and GR-1221 requirements	

Mechanical Drawing



Fax completed worksheet to CiDRA Customer Service. For additional information on CiDRA's products, call (203) 265-3307 or e-mail us at **salesandmarketing@cidra.com**.

Name:_____

Company:_____

Title:_____

Address:_____

City:_____ State:_____ Zip:_____

Phone:_____

Fax:_____

E-mail:_____

Attention:

CiDRA Customer Service

(203) 294-4211 fax