





Enabling Australia's Field Technicians to build, troubleshoot and maintain better communications networks.



This reference material is provided by TMG Test Equipment, VIAVI's **only** Master Distributor for Contractors in Australia





Finance Available





n-house Diagnostics, Repair & NATA Calibration Laboratory





MAP Tunable Grating Filter





For stand-alone applications, the MAP Tunable Grating Filter may be used as a benchtop

Key Features

- · Narrow bandwidth
- Low polarization dependent loss (PDL) (< 0.3 dB)
- Wide wavelength range (1420 to 1630 nm)
- High power input (1 W)

Applications

- Spontaneous emission suppression
- Amplifier characterization (Up to 1 W of input power)
- BER testing
- Tunable laser based testing

Safety Information

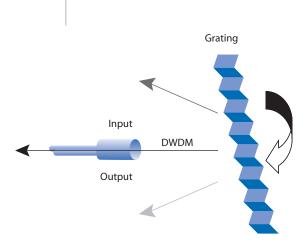
 This cassette, when installed in a MAP chassis, complies to CE requirements plus UL3101-1 and CAN/CSA-C22.2 No. 1010.1 The Multiple Application Platform (MAP) Tunable Grating Filter Cassette is a tunable bandpass filter that offers continuous wavelength tuning from 1420 to 1630 nm. It is used for applications requiring low insertion loss (IL), high rejection, narrow bandwidth and wavelength tuning resolution of 0.005 nm. The standard model has a maximum input power of 300 mW and the high power option provides a maximum input power of 1000 mW.

Three options are available:

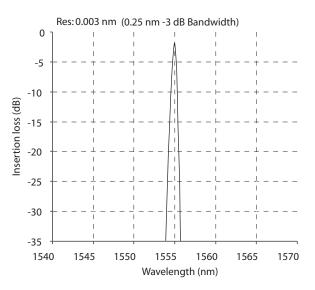
- the peak search option, used to find the absolute maximum transmission power within the filter's wavelength tuning range or a local maximum transmission power within a user-defined wavelength range
- 10% tap option for power monitoring
- 50% tap option for power monitoring.

MAP Tunable Grating Filter Cassette is ideal for applications where the user needs to suppress amplified spontaneous emissions (ASE) or isolate specific wavelengths. These applications include amplifier characterization, bit error rate (BER) testing and optical signal to noise ratio (OSNR) measurement.

The MAP Tunable Grating Filter Cassette is the next generation replacement of the Benchtop Tunable Grating Filter (TB9 series).



The filter makes use of a diffraction grating to separate the input light along several discrete paths. A stepper-motor rotates the grating to transmit the desired wavelength along the output fiber.



Model "G" filter shape shows the low IL and sharpness of the filter.

Specifications

'			
Parameter	Model C	Model G	Model K
Wavelength range	1420 to 1630 nm	1420 to 1630 nm	1420 to 1630 nm
Optical shape	Gaussian	Gaussian	Gaussian
-3 dB bandwidth ¹	$0.11 \text{ nm} \pm 15\%$	$0.25 \text{ nm} \pm 15\%$	$0.55 \text{ nm} \pm 15\%$
3/20 dB ratio¹	0.40 ± 0.05	0.31 ± 0.05	0.31 ± 0.05
Insertion loss (IL) ²			
1520 to 1630 nm	< 6.0 dB	< 4.5 dB	< 4.5 dB
1450 to 1630 nm	< 8.0 dB	< 6.0 dB	< 6.0 dB
Input power ³	300 mW or 1 W	300 mW or 1 W	300 mW
Return loss (RL) ⁴	> 45 dB		
Wavelength resolution	0.005 nm		
Polarization dependent loss (PDL) ⁵ , 1480 to 1630 nm	< 0.3 dB		
Tuning speed	> 5 nm/s		
Peak to average background noise	> 45 dB		
Accuracy	± 0.2 nm		
Peak search accuracy	< 0.2 dB from output peak power		
Polarization mode dispersion (PMD)	< 0.3 ps		
Group delay variation within a -3 dB bandwidth	< 5 ps		
Recommended calibration period	1 year		
Operating temperature	10 to -40 °C		
Storage temperature	-10 to 60 °C		
Dimensions (W x H x D)	8.12 x 13.24 x 39.5 cm		
Weight	2.3 kg		

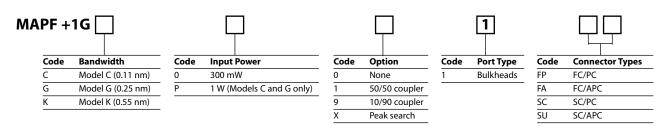
- 1. Measured at 1550 nm.
- 2. Not including tap coupler loss if installed.
- 3. At 23 °C \pm 5 °C.
- 4. At selected wavelength.
- 5. Input power is within the range of -20 dBm to +20 dBm. Excludes PDL effect.





For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: MAPF+1GGP51FP





If the configurations available do not meet your performance requirements, please contact our global sales and customer service team to discuss the potential for specialized solutions.

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. JDSU reserves the right to change at any time without notice the design, specifications, function, fit or form of its products described herein, including withdrawal at any time of a product offered for sale herein. JDSU makes no representations that the products herein are free from any intellectual property claims of others. Please contact JDSU for more information. JDSU and the JDSU logo are trademarks of JDS Uniphase Corporation. Other trademarks are the property of their respective holders. ©2006 JDS Uniphase Corporation. All rights reserved. 10109653 Rev. 007 03/06 MAPTGEDS.TM.AE

Test & Measurement Regional Sales