

Athermal Packaged FBG

Alxenses's Athermal packaged FBG is a low-loss narrowband reflective optical filter with wavelength drift of less than 0.1 nm over the temperature range of 0°C-75°C. Negative thermal expansion material was used to assemble the FBG package for temperature-compensation. The athermal packaged FBG is much less temperature-sensitive than normal FBG and is suitable for applications where optical filter with high thermal stability is required. They can be used as channel filters/blockers for DWDM systems as well as wavelength references for fiber sensor systems.

Features

- Low insertion loss
- Low polarization dependent loss
- Excellent channel isolation
- Wide temperature operation range with minimal wavelength drift

Applications

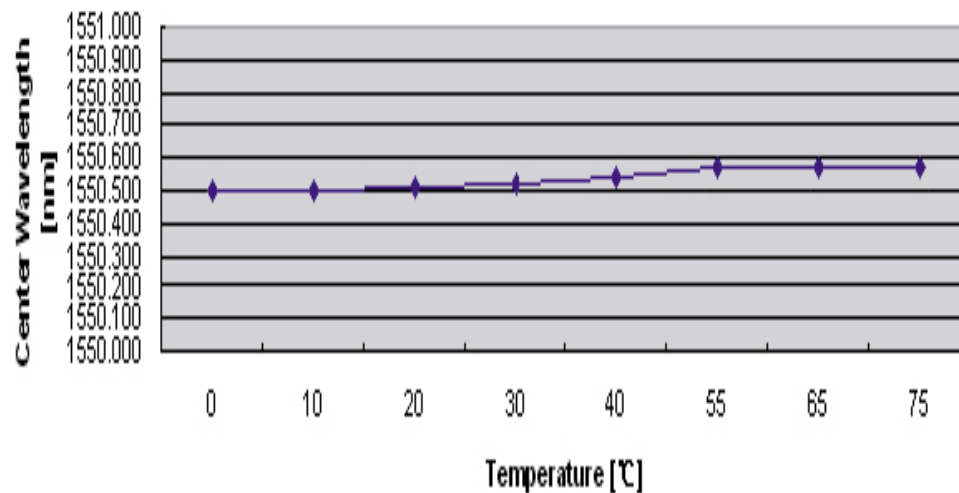
- Channel add/drop Multiplexer for DWDM systems
- Wavelength reference
- Wavelength locking

SPECIFICATIONS

Athermal Packaged FBG

Parameter	Values	Units
Channel Spacing	50	GHz
Wavelength Range	1510~1590	nm
Reflective Bandwidth @-0.5dB	>0.2	nm
Reflective Bandwidth @-25dB	<0.55	nm
Reflective Insertion Loss	<0.2	dB
Reflective Adjacent Channel Isolation	>23	dB
Reflective Non-adjacent Channel Isolation	>28	dB
Polarization Dependent Loss	<0.1	dB
Thermal dependency	<1.5pm/°C, Non-linear	--
Fiber Type	SMF-28 Compatible	--
Package Dimension	54 x 5.5 x 5.5	mm
Operating Temperature	0 ~ 75	°C
Shorage Temperature	-40 ~ +85	°C

THERMAL CHARACTERISTICS



Athermal Packaged FBG Enquiry Form

Parameter	Units	Standard Specification	Customized Specification
Channel Spacing	GHz	50	
Wavelength Range	nm	1510~1590	
Reflective Bandwidth @-0.5dB	nm	>0.2	
Reflective Bandwidth @-25dB	nm	<0.55	
Reflective Insertion Loss	dB	<0.2	
Reflective Adjacent Channel Isolation	dB	>23	
Reflective Non-adjacent Channel Isolation	dB	>28	
Polarization Dependent Loss	dB	<0.1	
Thermal dependency	--	<1.5pm/°C, Non-linear	
Package Dimension	mm	54 x 5.5 x 5.5	
Pigtail length from FBG	m	1m / Customized length	
Connector type: Please specify	--	Customized	