

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 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

Parameters	Values	Units
Channel Spacing	50	GHz
Wavelength Range	1510~1590	nm
Reflective Bandwidth @-0.5dB	>0.2	nm
Reflective Bandwidth @-25dB	<0.6	nm
Reflective Insertion Loss	<0.2	dB
Reflective Adjacent Channel Isolation	>23	dB
Reflective Non-adjacent Channel Isolation	>26	dB
Polarization Dependent Loss	<0.1	dB
Maximum shifted Wavelength	70pm from -5~+70 °C	--
Fiber Type	SMF-28 Compatible	--
Package Dimension	DIA12 x 85	mm
Operating Temperature	0 ~ +75	°C
Shorage Temperature	-40 ~ +85	°C