

# Ultra-Narrow Bandwidth Pass-band Filter based on Fiber Bragg Grating

## Filter Specifications IXC-FBG-PS

**Part number**

**IXC-FBG-PS-1550-1-ATH-PM-C**

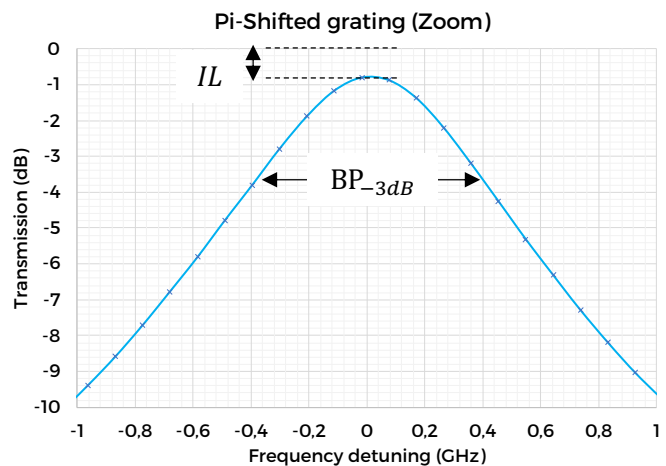
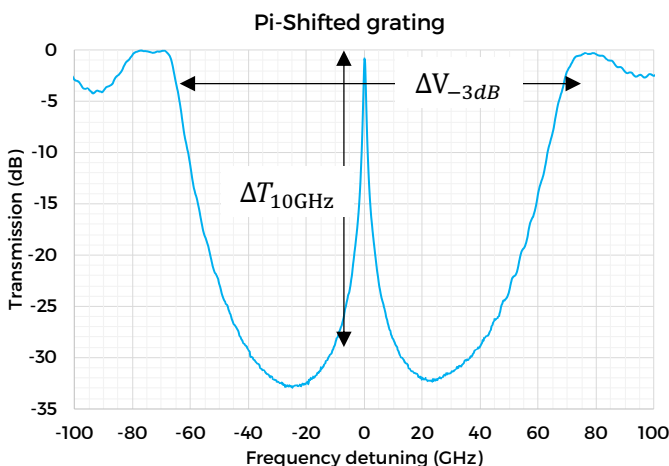
**Parameters (measured in transmission)**

Parameters (measured in transmission)	Specifications	Units
Center wavelength <sup>1</sup>	1550	nm
Rejection bandwidth $\Delta V_{-3dB}$	> 125	GHz
Bandpass linewidth $BP_{-3dB}$	< 1	GHz
Rejection level $\Delta T_{10GHz}$	> 25	dB
Insertion loss $IL^2$	< 1	dB
Thermal stabilization in [20 ; 70]°C	< 2	pm/°C
Wavelength shift in [- 5 ; 70]°C	< 150	pm

**Other specifications**

Fiber type	PM single mode	
FBG packaging	Athermal (55 x 5 x 5)	mm
Input power (max.) <sup>3</sup>	1	mW
Pigtail length, each side (A / B)	1	m
Optical connector, each side	FC/APC PM	
Wavelength adjustment (tuning screw)	± 100	pm

**Typical spectrum (measured in transmission)**



<sup>1</sup> Referenced to vacuum at +/- 0.05nm, slow axis  
<sup>2</sup> By design  
<sup>3</sup> Without thermal dissipation (athermal package)



**Parameters**

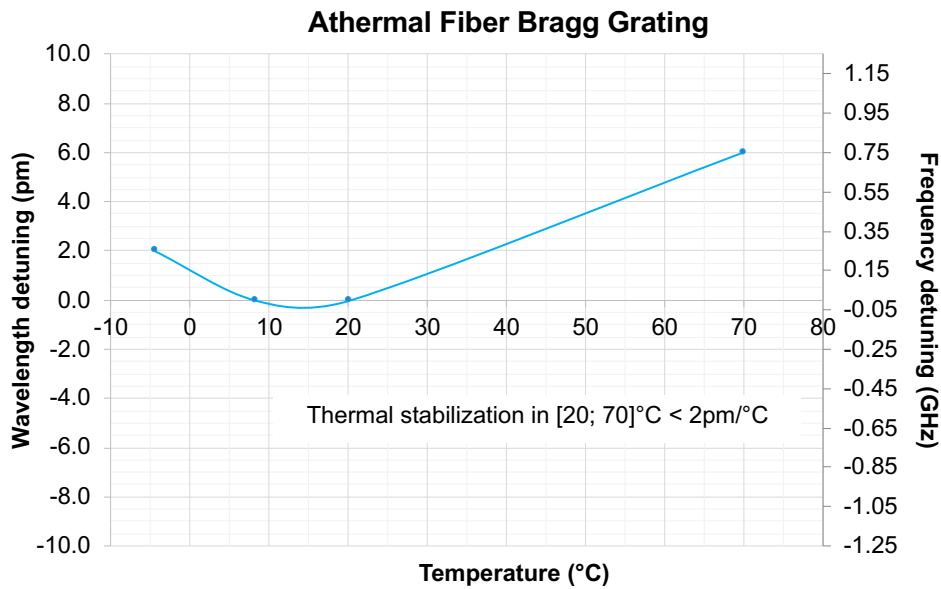
**Specifications**

**Units**

**Packaging Specifications**

Operating temperature	[- 5 ; 70]	°C
Storage temperature	[- 40 ; 80]	°C
Fiber protection	buffer 900 μm (boots 20 mm)	
Complies with Telcordia GR-1209		

**Athermal characteristic**



**FBG configuration**

