

Advanced FBG Phase Shift Gratings and System Integration

Phase shift gratings

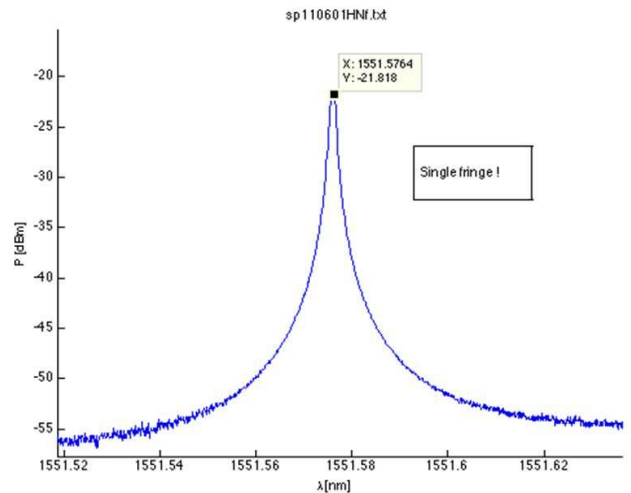
Key features

- 100 x better performance than regular FBG
- Convert wavelength change directly to voltages
- Signal to noise of 50 db
- Works in transmission

Applications

- Leak detection Fuel Tank
- Acoustic Emission
- Leak detection in pipeline
- Delamination in carbonfiber composite panels in aircrafts
- PD detection in transformers, generators and generators

Phase shift gratings



Specifications

Specifications	Min	Max	Typical
Center wavelength in nm	1530	1565	
Wavelength Tolerance in nm	± 0.1	± 0.2	
Line width		1 pm	
Grating length	1 mm	20 mm	

Performance & Limitations

- Low frequency down to 10 Hz
- High frequency up to 2 MHz

Supporting Interrogation

- Pound Down Hall Method for Signal Processing modules available
- Packaging adapted to target applications
- PD Sensing 30 – 300KHz in transformers + generators
- Special thin package for in slot PD detection