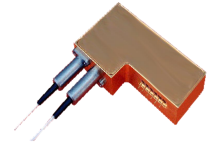


0704 Delay Line Interferometer

DL1000



Optical DPSK Demodulator

Optical DPSK demodulator is a Delay Line Interferometer (DLI), converts phase modulation to amplitude modulation over the entire C+L-band in support of data transmission rates of 2.5, 10 or 40 Gb/s. The DPSK demodulator is based on a patented free-space optical design, which is compact, athermal and polarization-independent.

FEATURES

- Athermal Design
- C+L-band Coverage by A Single Device
- Low Temperature-dependent Frequency Shift (TDFS)
- Low Polarization-dependent Frequency Shift (PDFS)
- Wide Bandwidth
- Low Insertion Loss & PDL
- High Power Handling
- Passive, Semi-tunable and Fully Tunable Operation
- Suitable for both RZ and NRZ Modulation Format
- Single or Dual Data Rate Operation
- Telcordia GR-1221 Qualified

USE IN

- Customized Data Rate for Advanced Applications
- Data Rate Optimization
- Extend Transmission Distance
- 2.5, 10, 20 or 40 Gb/s Commercial DPSK Signal Reception

0704 Delay Line Interferometer

	Tunable	Semi-Tunable	Passive
Wavelength Range (C-band)	1527 nm to 1567 nm		
Wavelength Range (L-band)	1567 nm to 1607 nm		
Free Spectral Range (FSR)	10.7, 43, 50, 67 GHz	10.0, 12.5, 40, 50, 66.67 GHz	
FSR Error	1% max.	0.015% max.	
Insertion Loss	1.7 dB typ.; 2.2 dB max.		
Extinction Ratio	18 dB min.	20 dB min.	
PMD	0.1 ps max.		
Return Loss	40 dB min.		
PDL	0.2 dB max.		
PDFS	3 deg max.		
TDFS	NA	1.5 GHz max.	
Optical Path Delay (between the Two Receiving Ports)	1.0 ps max.		
Tuning Time Constant	1.0 sec max.	6.0 sec	NA
Tuning Range	1.5 FSR min.	±3 GHz	NA
Power Consumption	0.5 W typ.; 1.0 W max.		NA
Tuning Voltage	0 to 5 V		NA
Max. Input Optical Power	300 mW		
Operating Temperature	0°C to 70°C		
Storage Temperature	-40°C to 85°C		
Dimension (LxWxH)	10 GHz to 12.5 GHz	39x26x11 mm	51x30x18 mm
	40 GHz above	26x24x9 mm	25x25x11 mm
Connector Type	TBD		
Fiber Pigtail Type	SMF-28 with 900 μm Loose Tube		
Fiber Pigtail Length	1.0±0.1 m		