

0804 Delay Line Interferometer





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

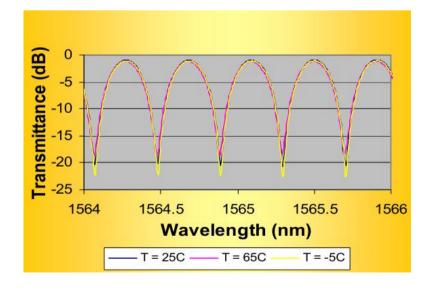
- Athermal Design
- C+L-band Coverage by A Single Device
- Low Temperature-dependent Frequency Shift (TDFS)
- Low Polarization-dependent Frequency Shift (PDFS)
- Wide Bandwidth

- 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



Order notes to our customers: The default parameters are as follows. For special needs, please contact sales.

- 1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.
- 2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.



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| | | Tunable | Semi-Tunable | Passive |
|---|--------------------|--|--------------|--------------|
| Wavelength Rang | ge (C-band) | 1527 nm to 1567 nm | | |
| Wavelength Range (L-band) | | 1567 nm to 1607 nm | | |
| Free Spectral Rar | nge (FSR) | 10.7, 43, 10.0, 12.5, 40, 50, 67 GHz 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 |
| Power Handling | | 300 mW max | Χ. | |
| Operating Temperature | | 0°C to 70°C | | |
| Storage Temperature | | -40°C to 85°C | | |
| Dimension | 10 GHz to 12.5 GHz | 39: | x26x11 mm | 51x30x18 mm |
| | 40 GHz above | 26 | x24x9 mm | 25x25x11 mm |
| Connector Type | | TBD | | |
| Fiber Pigtail Type | | SMF-28 with 900 µm Loose Tube | | |
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