

Phase Demodulator

Key Features

20, 40, 50, 70 GHz and Custom Rates

Fits Inside 300 pin MSA Package

Near Zero PDL and Insertion Loss

C + L Band Operation

Very Low Power Consumption

Applications

Telecom Demodulation

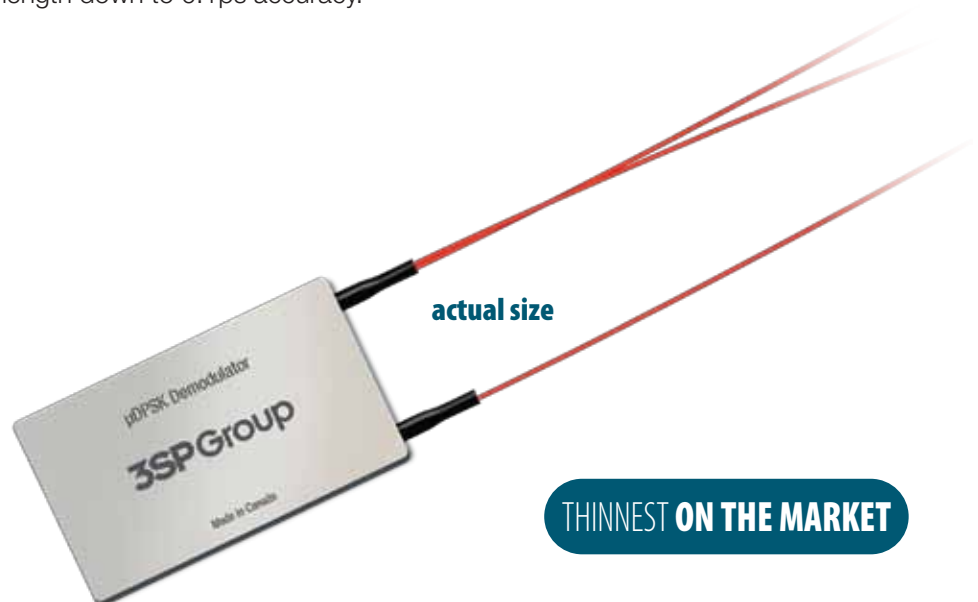
μ DPSK Demodulator

3SPGroup' micro-DPSK (μ DPSK) Demodulator is an All-Fiber delay line interferometer constructed from two continuous lengths of Corning SMF28 fiber fused to form wavelength insensitive 3dB couplers.

This results in unparalleled insertion loss, fringe contrast, port imbalance and polarization-dependency performance.

Phase tuning is achieved using a heater directly deposited on the optical fiber, providing minimal power consumption and fast rise times.

This device is offered in an ultra compact, stable and reliable package perfect to be integrated inside an MSA package. It is also fully compliant with RoHS requirements. Free from resonance below 2 kHz, the device can operate in the presence of ambient vibration. Connectorization is available as an option, with matched pigtail length down to 0.1ps accuracy.



THINNEST ON THE MARKET

For more info

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Phase Demodulator



μDPSK Demodulator

SPECIFICATIONS* STANDARD CONFIGURATIONS

| | | | | |
|---|------------------------------|---------|---------|---------|
| Free Spectral Range | 20 GHz | 40 GHz | 50 GHz | 70 GHz |
| Isolation | 28 dB | | | |
| Optical Return Loss | > 50 dB | | | |
| PDF (1) | 0.2 GHz | 0.4 GHz | 0.5 GHz | 0.7 GHz |
| Operating Wavelengths | 1530 - 1610 nm | | | |
| Peak Insertion Loss (2) | 0.7 dB | | | |
| Differential Delay between Pigtails (3) | < 0.25 ps | | | |
| Heater Resistance | 325 Ω | | | |
| Tuning Rise Time (4) | 150 ms | | | |
| Tuning Fall Time (4) | 150 ms | | | |
| Typical Power Consumption | 150 mW | | | |
| Operating Case Temperature | -5 to 70° C | | | |
| Size | 49 x 29 x 4.3 mm (L x W x H) | | | |

(1) Δf between polarization eigenstates – more details available upon request

(2) Does not include contribution from connectors

(3) Delay difference between ports 1 & 2; applies to connectorized units only. Offered either unterminated or with connectors

(4) Time to reach half way point

*Specifications subject to change without notice.

Revised May 2012

Please note: information in this document is typical and must be specifically confirmed in writing by your supplier before it becomes applicable to any order or contract. Information is subject to change without notice.

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ORDERING INFO

Please contact your Sales Manager. 3SPGroup can also develop custom products to meet a wide range of technical requirements.

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