3SPGroup



Mulimode Components

KeyFeatures

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

µDPSK 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.



For moreInfo

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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)	HACK -		< 0.25 ps		
Heater Resistance		XN	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.

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

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MANLIGHT