

## Integrated Coherent Receiver(ICR)



### Product Introduction

The device integrates demodulator of 40G/s and 100 G/s Dual Polarization Quadrature Phase Shift Keyed (DP-DQPSK) format signals and balanced receiver, which comprises four sets of high sensitivity photodiodes and four differential linear amplifiers. The demodulator is based on Planar Lightwave Circuit (PLC) technology and is aligned to photodiodes accurately, providing demodulated optical signal to the balanced receiver, and after O/E conversion of which the four differential RF signals up to 32G Baud Rate are output. The product is compliant to OIF-DPC-RX-01.1.

### Features

- Baud rate up to 32 GBd
- Polarization diversity
- Monitor photodiode
- Selectable automatic / manual gain control
- -5 °C to 75 °C operation

### Applications

- 100G/200G coherent transmission system
- OIF MSA 100G transmission modules

### Standards

- Compliant to OIF-DPC-RX-01.1
- Telcordia GR-468-Core compliant

### Specifications

Parameter	Unit	Min	Typ	Max	Note
Electrical					

Symbol Rate	Gbaud			32	
Small Signal Bandwidth(3dB)	GHz	18			
Responsivity	A/W	0.04			
Output Swing	mVppd	300	600	900	Peak to peak
Channel Skew	ps			10	
Power Consumption	W			1.2	
Optical					
Frequency Range	THz	191.35		196.2	C-Band
Phase Error	degree			±5	
Polarization Extinction Ratio	dB	18			
Optical Return Loss	dB			-27	

#### Ordering Information

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- Form factor: 1:Gen 1(OIF1.1), 2:Gen 2(OIF1.2)
- Connector: FC,SC,LC,MU/PC,UPC,APC
- Fiber Length: 1:1m、customer specify
- Bit rate: 100:100Gb/s