

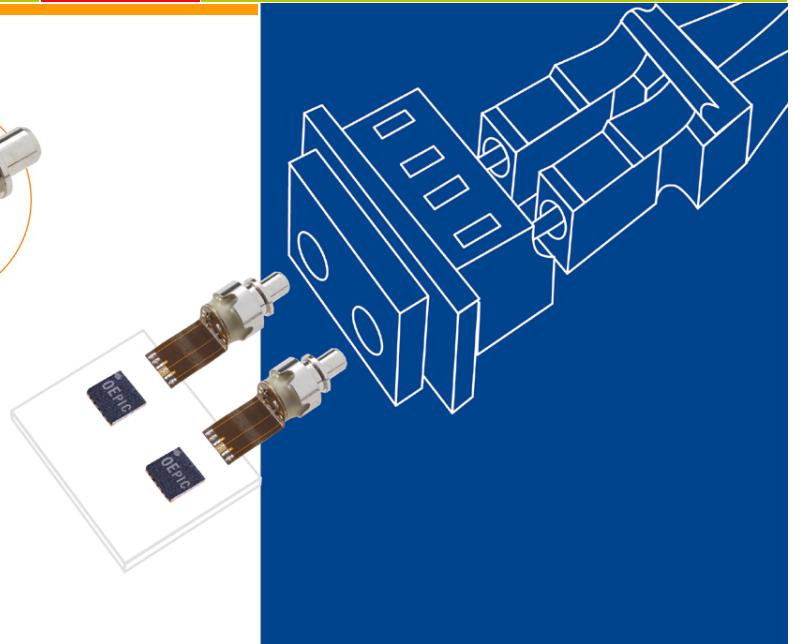


### FEATURES

- 850nm 10 Gb/s PIN photodetector and TIA in an internally-matched TO-46 (Patent Pending)
- TO-Flex™ integral flex board interconnect to transceiver PC board
- High sensitivity: -13dBm
- Low power consumption: 125mW
- Fully Compliant with IEEE 802.3ae

### APPLICATIONS

- VSR Applications
- 10G Ethernet
- Fiber Channel



OEpic's **TO-Flex™** platform provides an integral flex board for flexible alignment and high speed connections to the transceiver PC board. The PT1005-LCF together with the OEpic LV1004-LCF VCSEL transmitter provides a complete VSR optical front-end for small form factor transceivers.

## OPTICAL AND ELECTRICAL CHARACTERISTICS

(Temperature = 25 °C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Supply Voltage	$V_{cc}$		+5		V
Supply Current	$I_c$		50		mA
Power Dissipation	$P_d$		250		mW
Bandwidth (-3dB)	BW	8	9	12.3	GHz
Wavelength	$\lambda$	800	850	870	nm
Conversion Gain (differential)	$G_c$	660			V/W
Dark Current	$I_d$		1	10	nA
Sensitivity $10^{-12}$ BER in OMA	S	-12	-13		dBm
Photodiode Optical Aperture	d		40		$\mu$ m
Saturation Optical Power	$P_{sat}$		+3		dBm
Monitoring Detector Line Bias	$V_{mon}$		+5		V
Monitoring Detector Current	$I_{mon}$		0.7		A/W

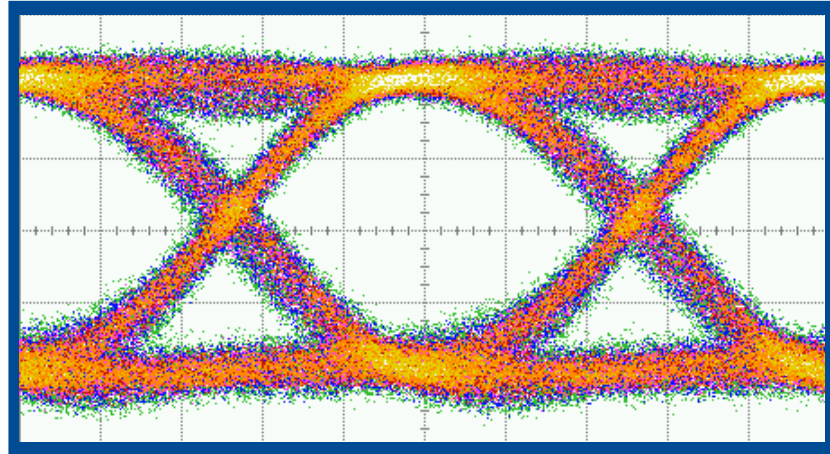
# PT1005-LCF11

10Gb/s, 850nm PIN+TIA in TO-Flex™

Product Specification

## EYE DIAGRAM

PT1005-LCF11 Receiver (PRBS 2<sup>31</sup> -1) Shown

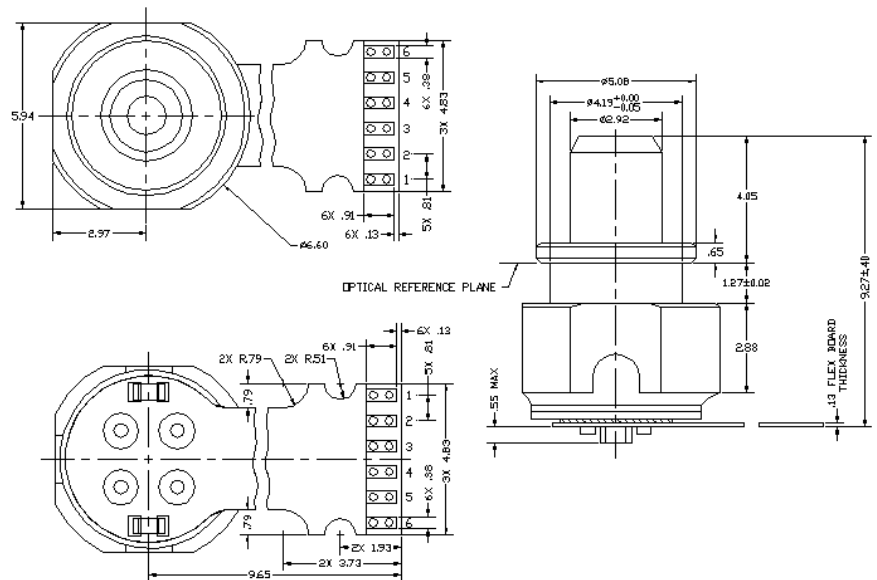


Vertical Scale: 32 mV/div

Horizontal Scale: 20ps/div

## MECHANICAL SPECIFICATIONS

Pin No.	Function
1	VCC
2	Ground
3	Signal -
4	Signal +
5	Ground
6	Vmon



## ABSOLUTE MAXIMUM RATINGS

Supply Voltage	8V
Case Operating Temperature	0 - 85°C
Junction Temperature	175°C
Mounting Temperature	220°C
Input Optical Power	5dBm

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