# PIGTAIL INTEGRATED INGAAS PIN PHOTODIODE ARRAY

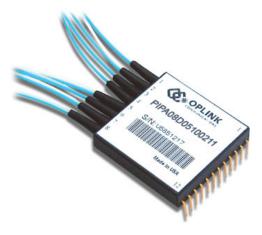
# **PIPA** Series

## **Product Description**

Oplink's Pigtail Integrated Photodiode Array (PIPA) is a compact, multi-channel power-monitoring device. It increases module design flexibility and efficiency by significantly reducing the number of assembly components and facilitating fiber management.

Easily mounted on a PCB, Oplink's standard 12/14-pin package provides power monitoring for up to ten channels. Applications include DWDM channel power monitoring, optical network switching/protection monitoring, re-configurable optical add/drop multiplexers, and gain/attenuation monitoring in amplifier systems.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.



## **Performance Specification**

	Parameters	Specification		Unit	
Operating Wavelength Range		1260~1360	1510~1610	mm	
Optical	Return Loss (exclude connector)		>40		dB
Monitoring	Responsivity (relat power at input po		>0.75	>0.8	A/W
	Responsivity Temperature Depen- dence (@1310nm or 1550nm)		<0.2		dB
	Responsivity Polarization Depen- dence		<0.1		dB
PD	PD Dark Current	0.5G Bandwidth	<10		nA
	(@ 70°C, -5V bias)	2.0G Bandwidth	<2.5		nA
	Reverse Voltage		<20		V
	Forward Current		<10		mA
Conditions	Input Optical Power		<4		dBm
	Operating Temperature Range (<85%RH, Non-condensing)		-5 to +70		°C
	Storage Temperature Range (<85%RH, Non-condensing)		-40 to -85		°C

Notes:

1) Excluding connectors.

## Features

- Standard, 12/14-pin package easily mounted on a PCB
- ♦ 4, 8 and 10 channel configurations
- Wide operating wavelength range
- Low dark current
- High temperature stability

### **Applications**

- DWDM channel monitoring
- Optical network switch/protection monitoring
- Re-configurable optical add/drop multiplexers
- Gain/attenuation monitoring in amplifier systems
- EDFAs and Raman amplifiers



Mechanical Drawing / Package Dimensions (dimension in mm)

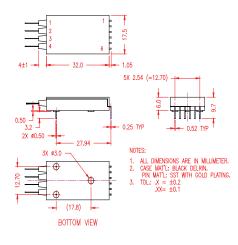
2) 8-ch PIPA

Electrical Pin Assignment Pin#: Common Cathode Assig Pin1: Common Cathode for Ch1 Pin2: Anode Ch1

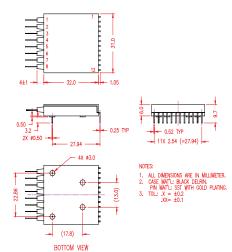
Pin11: Common Cathode for Ch7 & 8 Pin12: Anode Ch8

Pin2: Anode Ch1 Pin3: Anode Ch2 Pin4: Common Ca Pin5: Anode Ch3 Pin6: Anode Ch4 Pin7: Anode Ch4 Pin8: Common Ca Pin8: Common Ca Pin9: Anode Ch6 Pin10: Anode Ch7

# I) 4-ch PIPA



Pin#:	Common Cathode Assignment	Common Anode Assignment
Pin I:	Common Cathode for Ch1 & 2	Common Anode for Ch1 & 2
Pin2:	Anode Ch1	Cathode Ch1
Pin3:	Anode Ch2	Cathode Ch2
Pin4:	Common Cathode for Ch3 & 4	Common Anode for Ch3 & 4
Pin5:	Anode Ch3	Cathode Ch3
Pin6:	Anode Ch4	Cathode Ch4

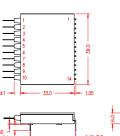


Common Anode Assignm Common Anode for Ch1 & 2 Cathode Ch1

Cathode Ch2 Common Anode for Ch3 & 4 Cathode Ch3

Common Anode for Ch7 & 8 Cathode Ch8

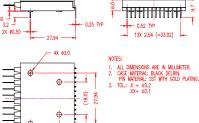
Cathode Ch4 Cathode Ch5 Common Anode for Ch5 & 6 Cathode Ch6 Cathode Ch7



(17.78)

BOTTOM VIEW

3) 10-ch PIPA



PIPA SERIES

Electrical Pin Assignment					
Pin#:	Common Cathode Assignment	Common Anode Assignment			
Pin I:	Common Cathode for Ch1 to 4	Common Anode for Ch1 to 4			
Pin2:	Anode Ch1	Cathode Ch1			
Pin3:	Anode Ch2	Cathode Ch2			
Pin4:	Anode Ch3	Cathode Ch3			
Pin5:	Anode Ch4	Cathode Ch4			
Pin6:	Anode Ch5	Cathode Ch5			
Pin7:	Common Cathode for Ch5 to 8	Common Anode for Ch5 to 8			
Pin8:	Anode Ch6	Cathode Ch6			
Pin9:	Anode Ch7	Cathode Ch7			
Pin I 0:	Anode Ch8	Cathode Ch8			
Pin I I :	Anode Ch9	Cathode Ch9			
Pin I 2:	Common Cathode for Ch9 & 10	Common Anode for Ch9 & 10			
Pin I 3:	Anode Ch10	Cathode Ch10			
Pin 14:	Not connected	Not connected			

# **Ordering Information**

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.

de for Ch3 & 4

hode for Ch5 & 6

PIPA			● ●	0		]	
	No. of Channal	Bandwidt	th		Fiber Length	Connector	
	4 channels= 04	0.5G= 05			0.5meter= H	Туре	
	8 channels= 08 10 channels= 10	2.0G= 20			1.0meter= 1 1.5meter= 5 2.0meter= 2	None= 1 FC/PC= 2	
	V	Vavelength	Package Type		2.01112121-2	FC/SPC= 3 FC/APC= 4	
	C	310nm= 3 :+L band= E 310/1550nm= D	Common Anode= Common Cathode	-		SC/PC= 5 SC/SPC= 6 SC/APC= 7	
				Fiber Type		ST= 8	
PollS.				SMF-28 250 SMF-28 w/ 9 SMF-28 ribb	900µm loose tube= 2	LC/PC= 9 MU= A LC/APC= B	

# RoHS:

1. Add "G" to the end of the above PN for RoHS 6 Requirement.

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Authorized Distributor

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Molex: PIPA08E20200111G