

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	nm
Optical	Return Loss (exclude connector)	>40		dB
Monitoring	Responsivity (relative to nominal power at input port)	>0.75	>0.8	A/W
	Responsivity Temperature Dependence (@1310nm or 1550nm)	<0.2		dB
	Responsivity Polarization Dependence	<0.1		dB
PD	PD Dark Current (@ 70°C, -5V bias)	0.5G Bandwidth	<10	nA
		2.0G Bandwidth	<2.5	nA
	Reverse Voltage	<20		V
	Forward Current	<10		mA
Input Optical Power		<4		dBm
Conditions	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

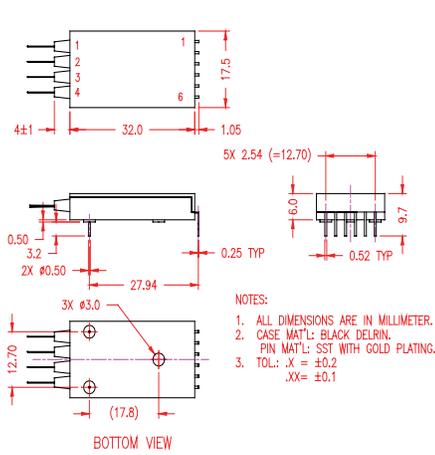
- ◆ Standard, 12/14-pin package easily mounted on a PCB
- ◆ 4, 8 and 10 channel configurations
- ◆ Wide operating wavelength range
- ◆ Low dark current
- ◆ High temperature stability

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

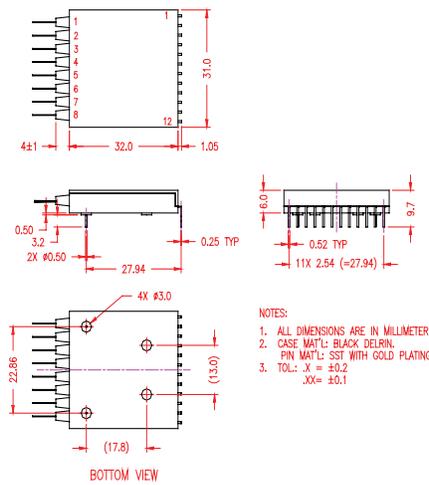
Mechanical Drawing / Package Dimensions (dimension in mm)

1) 4-ch PIPA



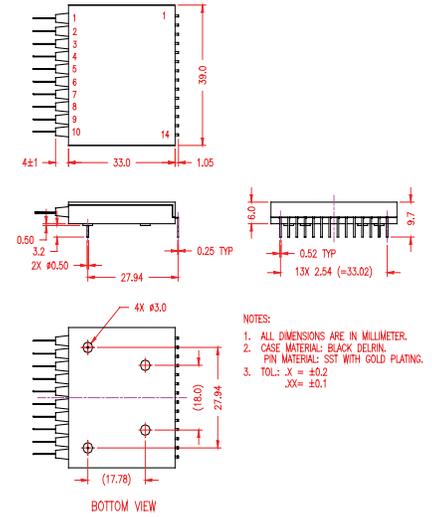
Electrical Pin Assignment	
Pin#:	Common Anode Assignment
Pin1:	Common Cathode for Ch1 & 2
Pin2:	Anode Ch1
Pin3:	Anode Ch2
Pin4:	Common Cathode for Ch3 & 4
Pin5:	Anode Ch3
Pin6:	Anode Ch4

2) 8-ch PIPA



Electrical Pin Assignment	
Pin#:	Common Anode Assignment
Pin1:	Common Cathode for Ch1 & 2
Pin2:	Anode Ch1
Pin3:	Anode Ch2
Pin4:	Common Cathode for Ch3 & 4
Pin5:	Anode Ch3
Pin6:	Anode Ch4
Pin7:	Anode Ch5
Pin8:	Common Cathode for Ch5 & 6
Pin9:	Anode Ch6
Pin10:	Anode Ch7
Pin11:	Common Cathode for Ch7 & 8
Pin12:	Anode Ch8

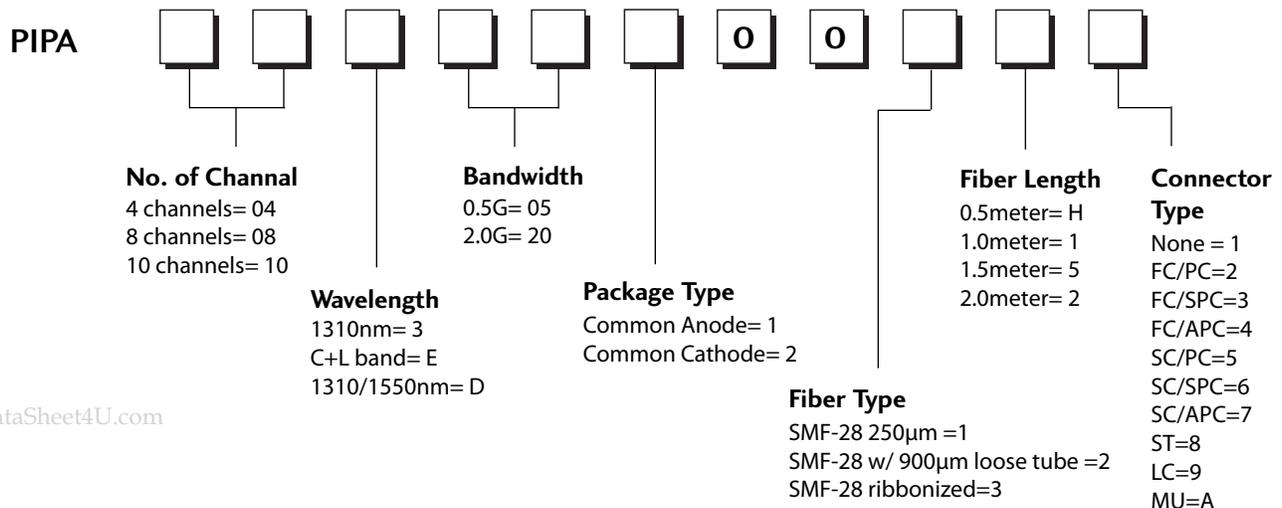
3) 10-ch PIPA



Electrical Pin Assignment	
Pin#:	Common Anode Assignment
Pin1:	Common Cathode for Ch1 to 4
Pin2:	Anode Ch1
Pin3:	Anode Ch2
Pin4:	Anode Ch3
Pin5:	Anode Ch4
Pin6:	Anode Ch5
Pin7:	Common Cathode for Ch5 to 8
Pin8:	Anode Ch6
Pin9:	Anode Ch7
Pin10:	Anode Ch8
Pin11:	Anode Ch9
Pin12:	Common Cathode for Ch9 & 10
Pin13:	Anode Ch10
Pin14:	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.



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RoHS:

- PIPA is RoHS 5 compliant (RoHS permitted Lead in solder exemption is applied).
- Add "G" to the end of the above PN for RoHS 6 Requirement.