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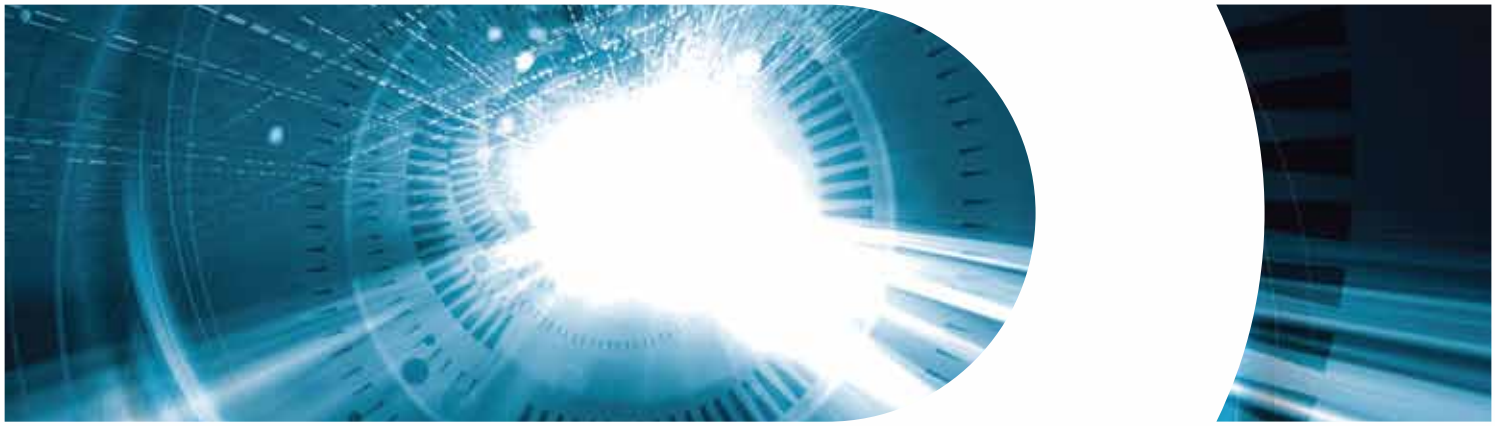


PIN Photodiode

KeyFeatures

- InGaAs Material
- Planar Zn Diffused Structure
- Top-illuminated Photodiode
- Wide Active Area (300 micron or 500 micron in Diameter)
- Low Dark Current
- High Responsivity
- Avanex Reliability and Qualification Program for Built in Quality
- Flip-Chip mounting

Applications

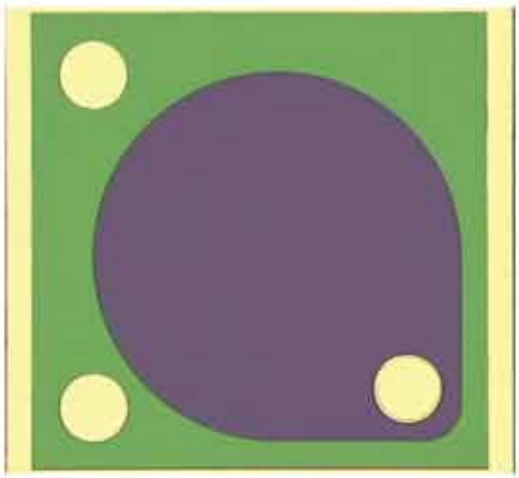
- 2.5Gb/s Receiver Modules
- Telecom
- Instrumentation

1932 DCv1AG

Flip-Chip InGaAs Monitoring PIN Photodiode

1932 DC chip is a flip-chip monitoring photodiode for DC and low frequency monitoring of optical signal. It is based on InGaAs material grown by Metal Organic Vapor Deposition (MOCVD) on InP substrates. The InGaAs PIN photodiode, which diameter is 300 or 500 microns, is realized with Zinc diffusion and with a planar structure for high reliability.

1932 DC chip is a top-illuminated monitoring photodiode compatible with flip-chip mounting suitable for a wide operating wavelength range and available on different sub-mounts.



For moreInfo

Please contact us at:
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or via e-mail at **sales@3spgroup.com**

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1932 DCv1AG

Flip-Chip InGaAs Monitoring PIN Photodiode

ELECTRO-OPTICAL **CHARACTERISTICS**

The following parameters are specified Beginning of Life for chips mounted p-up on Alumina submount and Tsubmount= 25°C.

Parameters	Test conditions	Sym.	Min	Typ	Max.	Unit
Dark current	–5V, 25°C	I_{dark}	-	-	10	nA
Dark current	–5V, 75°C	I_{dark}	-	-	100	nA
Breakdown voltage (reverse bias)	1µA	Vbr	20	-	-	V
Responsivity	λ =1.3µm -3V, 100µm	S	0.8	-	-	A/W
Responsivity	λ = 1.55µm -3V, 100µm	S	0.85	-	-	A/W
Capacitance	1 MHz; –3V	C	-	-	15	pF
Forward voltage	@10mA	Vf	-	-	2	V

Absolute Maximum **Ratings**

Exposing the device to stresses above those listed in this section could cause permanent damage. The device is not meant to operate under conditions outside the operational limits described in subsequent sections.

Exposure to absolute maximum rating conditions for extended periods may adversely affect device reliability.

Parameter Conditions	Symbol	Min	Max	Unit
Storage temperature	T_{stg}	-40	85	°C
Operating temperature	T_{op}	-40	85	°C
Photodiode reverse voltage	Vr	-	15	V
Photodiode forward current	If		10	mA
Optical power	Pin	-	10	mW
ESD*	VESD	400		V

* Human Body model

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1932 DCv1AG

Flip-Chip InGaAs Monitoring PIN Photodiode

Handling

This product is sensitive to electrostatic discharge and should not be handled except at a static free workstation.

Take precautions to prevent ESD; use wrist straps, grounded work surfaces and recognized antistatic techniques when handling the product.

Care should be taken to avoid supply transient and over voltage. Over voltage above the maximum specified in absolute maximum rating section may cause permanent damage to the device.

Ordering **Information**

Part Number 3CN01281XX

Revised March 2012

ORDERING **INFO**

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

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