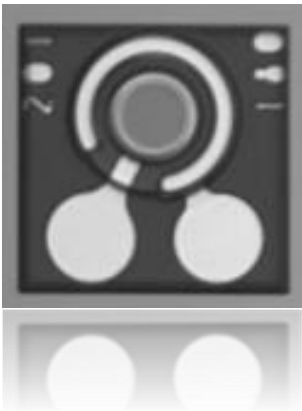


I 4 Gbps PIN Photodiode Chip

I x I / 4 / I 2 chip

- GaAs PIN Photodiode
- Low bias voltage, low dark current
- High speed modulation up to I 4 Gbps
- E.g. for FDR InfiniBand data transmission



ELECTRO-OPTICAL CHARACTERISTICS

Chip temperature = 25°C unless otherwise stated

PARAMETER	SYMBOL	UNITS	MIN	TYP	MAX	TEST CONDITIONS
Responsivity	R	A/W		0.6		
Active area diameter	d _{act}	µm		55		
Dark current 1	I _{d1}	nA		0.02	0.2	U _{bias} = -2 V
Dark current 2	I _{d2}	uA			I	U _{bias} = -20 V
Capacitance	C	fF		180		U _{bias} = -2 V
Modulation bandwidth	v _{3dB}	GHz		12		50 Ohm load, -3dB, U _{bias} = -2 V
Wavelength range	λ	nm	840		860	

Absolute Maximum Ratings

Storage temperature	-40...140°C
Operating temperature	0...85°C
Contiuous forward current	10mA
Soldering temperature	330°C

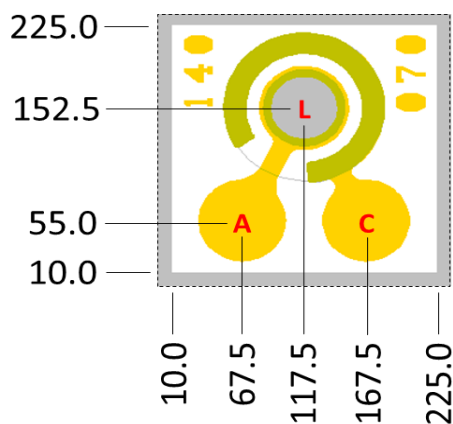
NOTICE: Stresses greater than those listed under „Absolute Maximum Ratings“ may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other condition beyond those indicated for extended periods of time may effect device reliability.



ATTENTION: Electrostatic Sensitive Devices
Observe Precautions for Handling

Single Photodiode chip

Description	PD chip, single channel
Type	ULMPIN-I4-TT-N0101U
Mounting	anode and cathode wire bonding on front side
Dimensions	235 μm x 235 μm
Thickness	150 μm

Units: μm

A = Anode pad
 C = Cathode pad (NOT common cathode)
 L = Light sensitive area

Bond pad diameter: 70 μm

Photodiode line arrays

Description	1 x 4 PD line array	1 x 12 PD line array
Type	ULMPIN-I4-TT-N0104U	ULMPIN-I4-TT-N0112U
Wiring	Electrically separated channels	Electrically separated channels
Dimensions	235 μm x 985 μm	235 μm x 2985 μm
Thickness	150 μm	150 μm



© 2018 Koninklijke Philips N.V. (Royal Philips)
 All rights reserved.

Specifications are subject to change without notice.
 Trademarks are the property of Koninklijke Philips
 N.V. (Royal Philips) or their respective owners.

Philips Photonics GmbH
 Tel +49 731 550194-011
 Fax +49 731 550194-026
philips.photonics.ulm@philips.com
www.photonics.philips.com