

10 Gbps PIN Photodiode Chip

1x1/4/12 chip

- GaAs PIN Photodiode
- low bias voltage, low dark current
- up to 10 Gbps speed
- e.g. for GbE, fiber channel data transmission



ELECTRO-OPITCAL 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		70		
Dark current 1	I_{d1}	nA		0.02	0.2	$U_{bias} = -2$ V
Dark current 2	I_{d2}	uA			1	$U_{bias} = -20$ V
Capacitance	C	fF		290		$U_{bias} = -2$ V
Modulation bandwidth	V_{3dB}	GHz		8		50 Ohm load, -3dB, $U_{bias} = -2$ V
Wavelength range	λ	nm	840		860	

Absolute Maximum Ratings

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

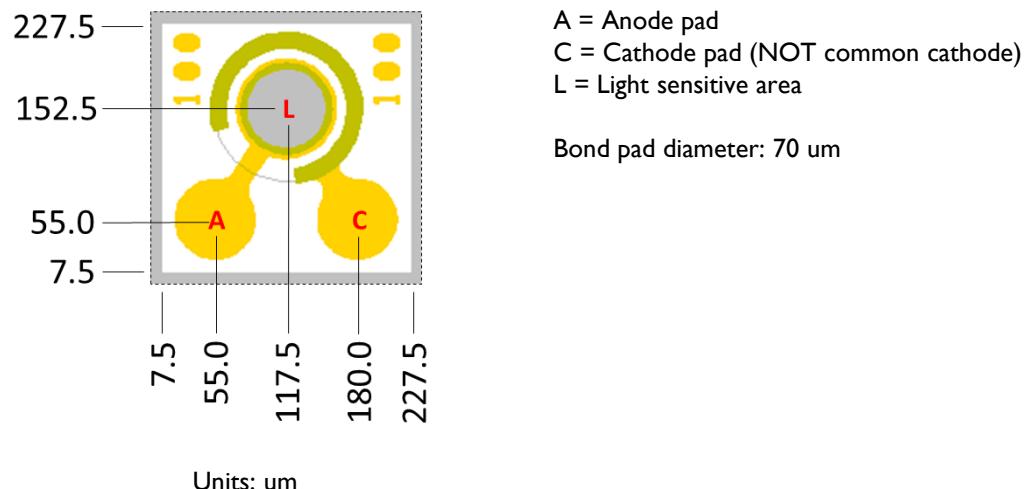
NOTICE: Stresses greater than those listed under „Absolute Maximum Ratings“ may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other condition beyond those indicated for extended periods of time may effect device reliability.



ATTENTION: Electrostatic Sensitive Devices
Observe Precautions for Handling

Single Photodiode chip

Description	PD chip, single channel
Type	ULMPIN-10-TT-N0101U
Mounting	anode and cathode wire bonding on front side
Dimensions	235 um x 235 um
Thickness	150 um



Photodiode line arrays

Description	I x 4 PD line array	I x 4 PD line array
Type	ULMPIN-10-TT-N0104U	ULMPIN-10-TT-N0112U
Wiring	Electrically separated channels	Electrically separated channels
Dimensions	235 um x 985 um	235 um x 2985 um
Thickness	150 um	150 um



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