

PIN Photodiode

25 Gbps
850 nm



High speed up to
25 Gbps

GaAs PIN
Photodiode

Available in
1x1, 1x4, 1x12

Low bias voltage

Low dark current

4 inch wafer

TRUMPF

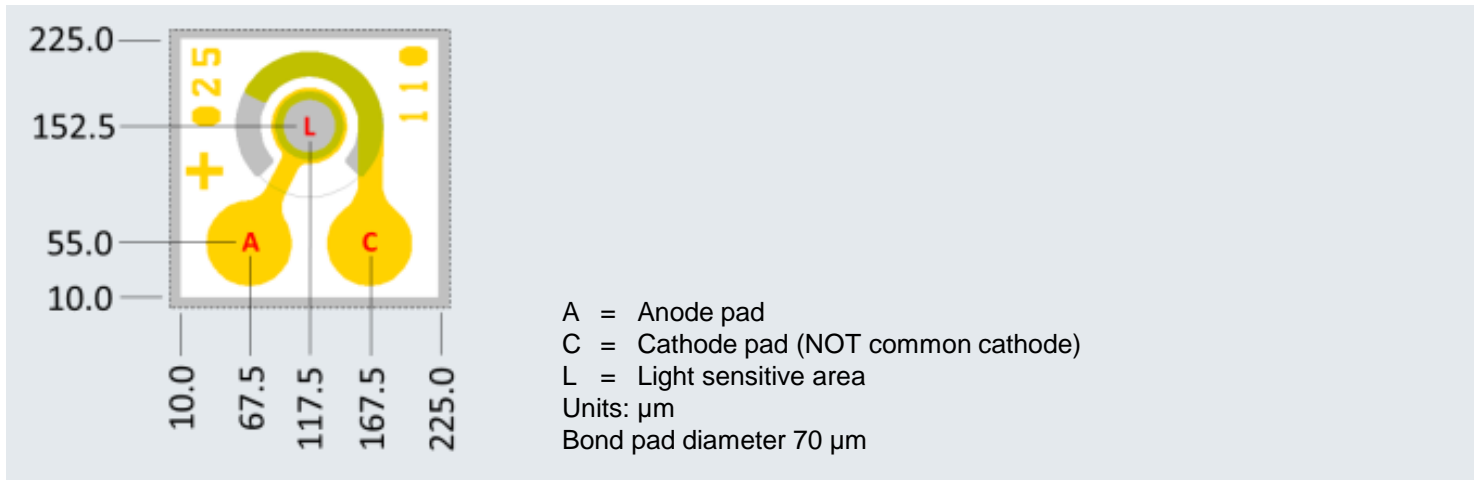


Datasheet: 25 Gbps PIN Photodiode

Electro-Optical Characteristics (T = 25°C unless otherwise stated)

Parameter	Symbol	Units	Min	Typ	Max	Test Condition
Responsivity	R	A/W	0.5	0.6	0.7	Optical input 1 mW
Active area diameter	d_{act}	μm	38	42	47	
Dark current 1	I_{d1}	nA	-1.0	0.2	0.0	$U_{bias} = -2\text{ V}$
Capacitance	C	fF	120	140	160	$U_{bias} = -2\text{ V}$
Modulation bandwidth	f_{6dB}	GHz	16	20		50 Ohm load, -6 dB, $U_{bias} = -2\text{ V}$
Wavelength range	λ	nm	840		860	

Dimensions of 25G Photodiode:



Product variants

Type	Single chip	1 x 4 line array	1 x 12 line array
Part number	TPD-25(01)-850-A0	TPD-25(04)-850-A0	TPD-25(12)-850-A0
Ordering number	ULMPIN-25-TT-N0101U (PD11)	ULMPIN-25-TT-N0104U (PD11)	ULMPIN-25-TT-N0112U (PD11)
Dimensions	235 x 235 x 150 μm	235 x 985 x 150 μm	235 x 2985 x 150 μm
Wiring		Electrically separated channels	Electrically separated channels

For more information visit
www.trumpf.com/s/VCSEL-solutions

Safety information:

- Invisible laser radiation / avoid beam exposure / class 3B laser product
- Electrostatic sensitive devices / observe precautions for handling

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September 2021

