

Wavelength	Type	Technology	Case
Infrared	Planar	InGaAs/InP	5 mm plastic lens

	<p>Description</p> <p>InGaAs-Photodiode mounted in standard 5 mm package without standoff . High spectral sensitivity in the infrared range (NIR, SWIR).</p> <p>Note: Special packages with standoff available on request</p> <p>Applications</p> <p>Optical communications, safety equipment, light barriers</p>
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Miscellaneous Parameters

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.032	mm ²
Temperature coefficient		T _{C(I_D)}	7.4	%/K
Operating temperature range		T _{amb}	-40 to +85	°C
Storage temperature range		T _{stg}	-40 to +100	°C

Optical and Electrical Characteristics

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 10 mA	V _F		1.7		V
Breakdown voltage ²⁾	I _R = 10 µA	V _R	5			V
Sensitivity range at 10 %	V _R = 0 V	λ	800		1750	nm
Spectral bandwidth at 50 %	V _R = 0 V	Δλ _{0.5}		680		nm
Responsivity at 1300 nm ¹⁾	V _R = 0 V	S _λ		0.9		A/W
Dark current	V _R = 5 V	I _D		30	200	pA
Shunt resistance	V _R = 10 mV	R _{SH}	3	5		GΩ
Noise equivalent power	λ = 1300 nm	NEP		4.0x10 ⁻¹⁵		W/√Hz
Specific detectivity	λ = 1300 nm	D*		4.5x10 ¹²		cm · √Hz · W ⁻¹
Junction capacitance	V _R = 0 V	C _J		11		pF
Photo current at 1300 nm*	V _R = 0 V E _e = 1mW/cm ²	I _{Ph}		0.95		µA

¹⁾ measured on bare chip

²⁾ for information only

Note: All measurements carried out with JENOPTIK Polymer Systems equipment

Labeling

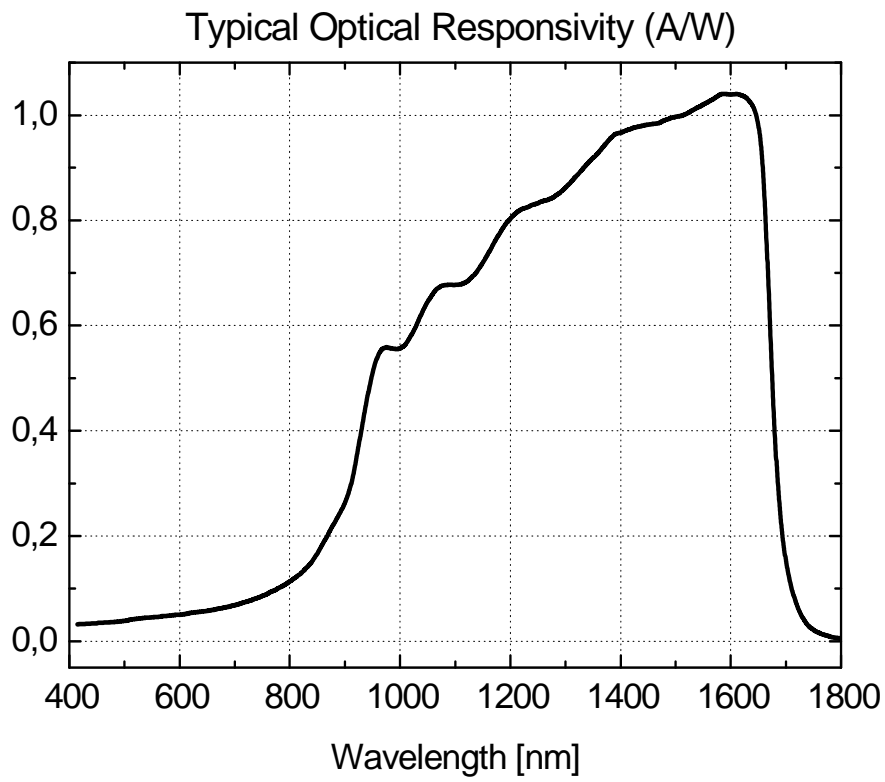
Type	Lot N°	RD (typ.) [GΩ]	Quantity
EPD-1300-5-0.2			

We reserve the right to make changes to improve technical design and may do so without further notice.

Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

JENOPTIK Polymer Systems GmbH, D-12555 Berlin, Köpenicker Str.325 b, Haus 201

Tel.: +49-30-6576 2543, Fax : +49-30-6576 2545



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