

Wavelength	Type	Technology	Case
Infrared	Planar	InGaAs/InP	3 mm plastic lens

Description

InGaAs-Photodiode mounted in standard 3 mm package without standoff . High spectral sensitivity in the infrared range (NIR, SWIR).

Note: Special packages with standoff available on request

Applications

Optical communications, safety equipment, light barriers

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
Acceptance angle	V _R = 0 V	φ		65		deg.

¹⁾ measured on bare chip

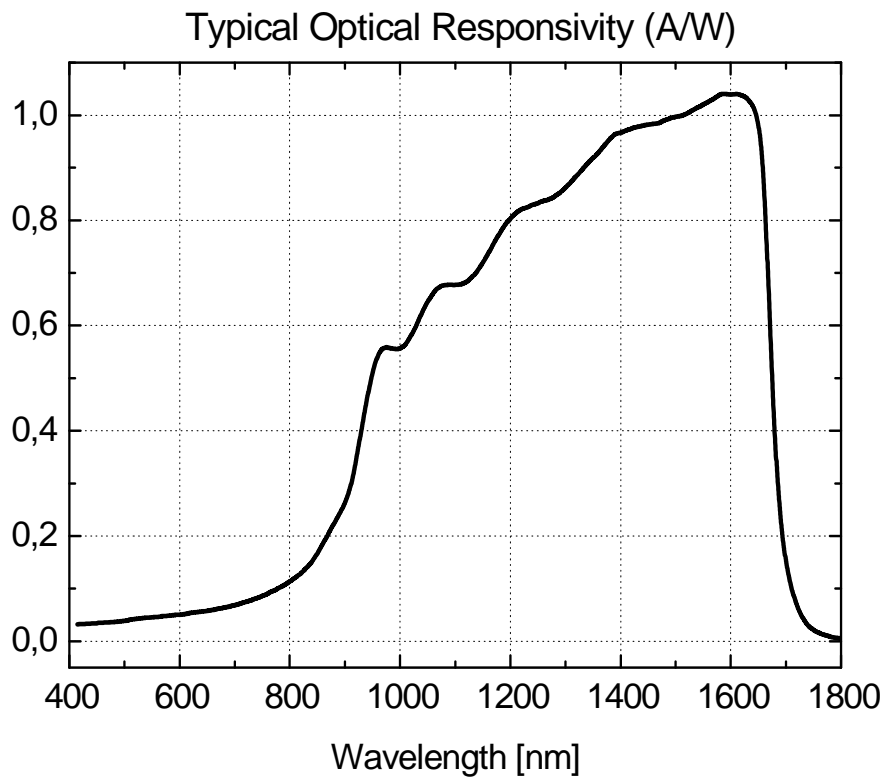
²⁾ for information only

Note: All measurements carried out with JENOPTIK Polymer Systems equipment

Labeling

Type	Lot N°	RD (typ.) [GΩ]	Quantity
EPD-1300-3-0.2			

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