

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

	<p><b>Description</b></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><b>Applications</b></p> <p>Optical communications, safety equipment, light barriers</p>

**Miscellaneous Parameters**

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.032	mm <sup>2</sup>
Temperature coefficient		T <sub>C(I<sub>D</sub>)</sub>	7.4	%/K
Operating temperature range		T <sub>amb</sub>	-40 to +85	°C
Storage temperature range		T <sub>stg</sub>	-40 to +100	°C

**Optical and Electrical Characteristics**

T<sub>amb</sub> = 25°C, unless otherwise specified

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

<sup>1)</sup> measured on bare chip

<sup>2)</sup> for information only

Note: All measurements carried out with EPIGAP equipment

**Labeling**

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

