

Wavelength	Type	Technology	Case
Infrared	Integrated filter	AlGaAs/GaAs	5 mm plastic lens

	<p>Description</p> <p>Selective photodiode mounted in standard 5 mm package without standoff. Narrow bandwidth and high spectral sensitivity in the infrared range (810...950 nm).</p> <p>Note: Special packages with standoff available on request</p> <p>Applications</p> <p>Alarm systems, light barriers, special sensors, analytics, optical communication</p>
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Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.62	mm ²
Temperature coefficient of I _D		T _C (I _D)	5	%/K
Operating temperature range		T _{amb}	-20 to +85	°C
Storage temperature range		T _{stg}	-30 to +100	°C
Acceptance angle at 50% S _λ		φ	20	deg.

Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage ¹⁾	I _R = 10 μA	V _R	5			V
Dark current	V _R = 1 V	I _D		1.0	2.5	nA
Peak sensitivity wavelength	V _R = 0 V	λ _p		890		nm
Sensitivity range at 10% ¹⁾	V _R = 0 V	λ _{min} , λ _{max}	800		960	nm
Spectral bandwidth at 50%	V _R = 0 V	Δλ _{0.5}		115		nm
Shunt resistance ¹⁾	V _R = 10 mV	R _{SH}		150		GΩ
Noise equivalent power ¹⁾	λ = 880 nm	NEP		3.3x10 ⁻¹⁴		W/√Hz
Specific detectivity ¹⁾	λ = 880 nm	D*		2.4x10 ¹²		cm · √Hz · W ⁻¹
Junction capacitance	V _R = 0 V	C _J		120		pF
Switching time (R _L = 50 Ω)	V _R = 1 V	t _r , t _f		200		ns
Photo current at 880 nm	V _R = 0 V E = 50 μW/cm ²	I _{Ph}		2.0		μA

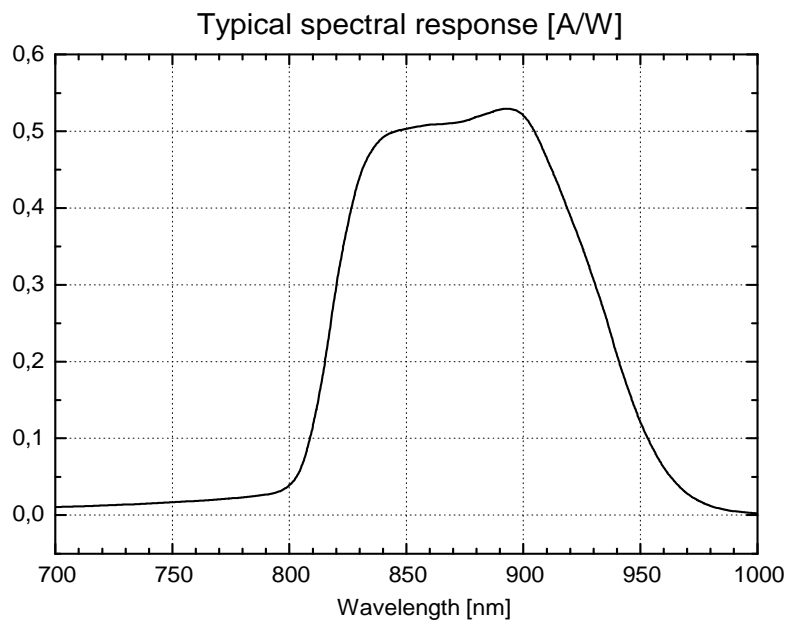
¹⁾for information only

Note: All measurements carried out with JENOPTIK Polymer Systems equipment

Labeling

Type	Lot N°	R _D (typ.) [GΩ]	Quantity
EPD-880-5-0.9			

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.



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