

Wavelength	Type	Technology	Case
Blue-Green	SMD	GaP	SMD 1206

all dimensions: mm
all tolerances: ± 0,1

Description

Narrow bandwidth and high spectral sensitivity in the bluish-green visible range (380...555 nm), compact design in standard SMD package allows for easy circuit board mounting and assembling of arrays

Applications

Alarm systems, light barriers, special sensors for automotive industry

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		TCl _D	5	%/K
Operating temperature range		T _{amb}	-20 to +85	°C
Storage temperature range		T _{stg}	-40 to +125	°C

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 = 5 V	I _D		5	30	pA
Peak sensitivity wavelength	V _R = 0 V	λ _p	460	470	480	nm
Responsivity at λ _p	V _R = 0 V	S _λ		0.3		A/W
Sensitivity range at 1% ¹⁾	V _R = 0 V	λ _{min} , λ _{max}	385		565	nm
Spectral bandwidth at 50%	V _R = 0 V	Δλ _{0.5}		100		nm
Shunt resistance	V _R = 10 mV	R _{SH}	70	100		GΩ
Noise equivalent power	λ = 470 nm	NEP		4.4x10 ⁻¹⁵		W/√Hz
Specific detectivity	λ = 470 nm	D*		1.8x10 ¹³		cm · √Hz · W ⁻¹
Junction capacitance	V _R = 0 V	C _J		150		pF
Switching time (R _L = 50 Ω)	V _R = 1 V	t _r , t _f		200		ns

¹⁾for information only

Labeling

Type	Lot N°	Typ. S _λ [A/W]	Quantity
EPD-470-1-0.9			

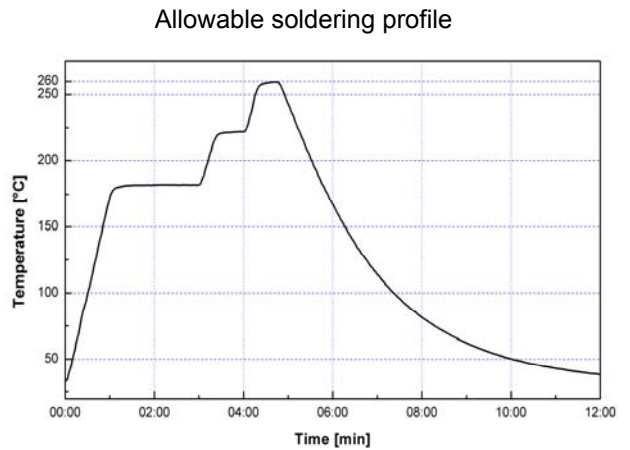
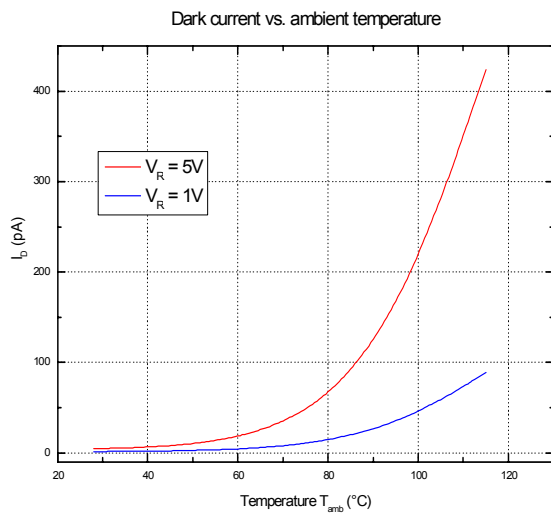
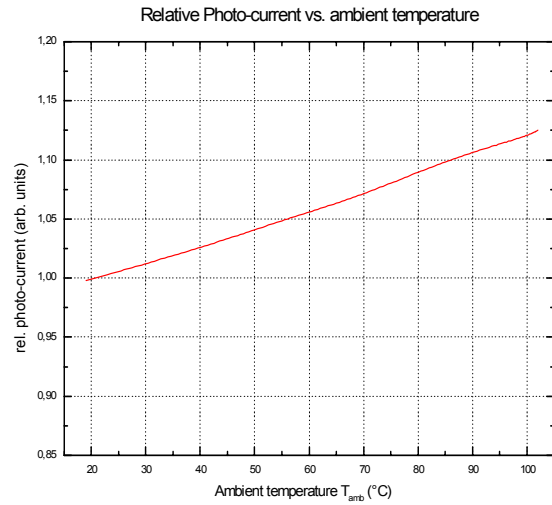
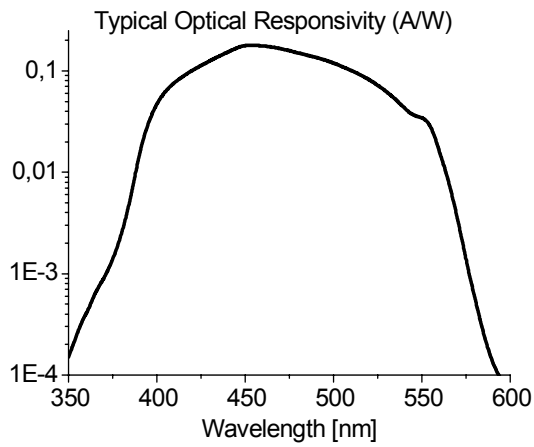
*Note: All measurements carried out with EPIGAP equipment

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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