

Wavelength	Type	Technology	Case
Blue-Green	SMD	GaP	SMD 1206

	<p>Description</p> <p>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</p> <p>Applications</p> <p>Alarm systems, light barriers, special sensors for automotive industry</p>
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Miscellaneous Parameters

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.62	mm ²
Temperature coefficient of I_D		T_{CI_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

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage ¹⁾	$I_R = 10 \mu\text{A}$	V_R	5			V
Dark current	$V_R = 5 \text{V}$	I_D		5	30	pA
Peak sensitivity wavelength	$V_R = 0 \text{V}$	λ_p	460	470	480	nm
Responsivity at λ_p	$V_R = 0 \text{V}$	S_λ		0.3		A/W
Sensitivity range at 1% ¹⁾	$V_R = 0 \text{V}$	$\lambda_{min}, \lambda_{max}$	385		565	nm
Spectral bandwidth at 50%	$V_R = 0 \text{V}$	$\Delta\lambda_{0.5}$		100		nm
Shunt resistance	$V_R = 10 \text{mV}$	R_{SH}	70	100		GΩ
Noise equivalent power	$\lambda = 470 \text{nm}$	NEP		4.4×10^{-15}		W/ $\sqrt{\text{Hz}}$
Specific detectivity	$\lambda = 470 \text{nm}$	D^*		1.8×10^{13}		$\text{cm} \cdot \sqrt{\text{Hz}} \cdot \text{W}^{-1}$
Junction capacitance	$V_R = 0 \text{V}$	C_J		150		pF
Switching time ($R_L = 50 \Omega$)	$V_R = 1 \text{V}$	t_r, t_f		200		ns

¹⁾for information only

Labeling

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

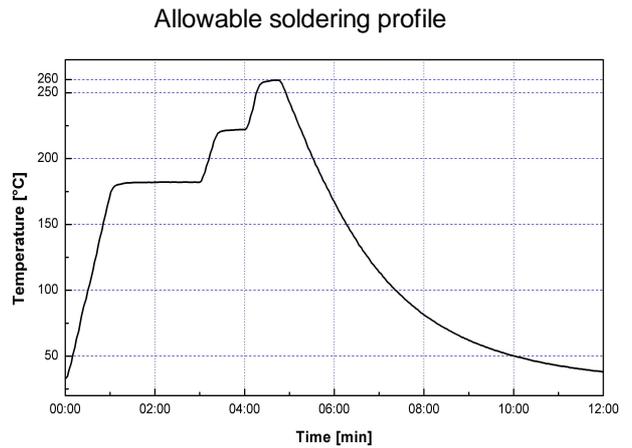
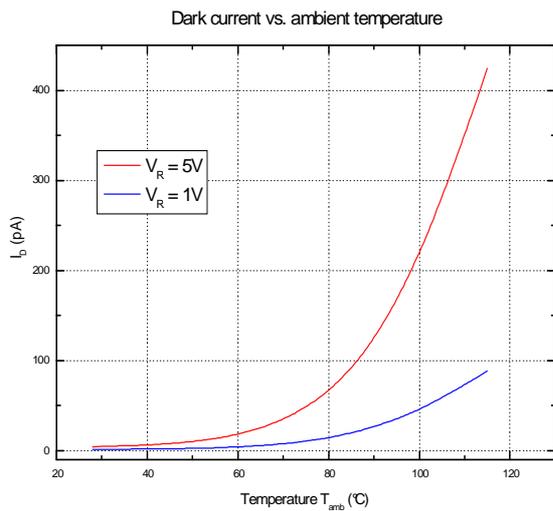
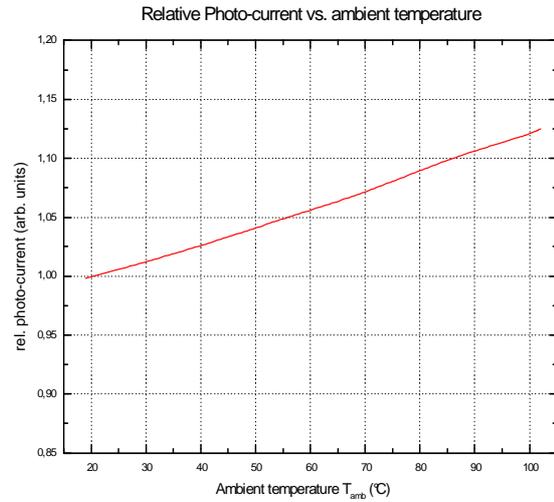
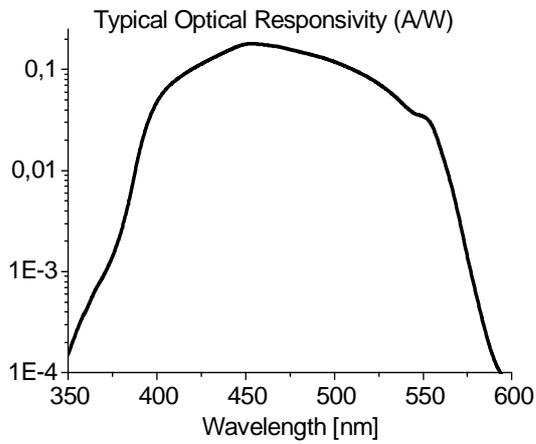
*Note: All measurements carried out with *EPIGAP* equipment

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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