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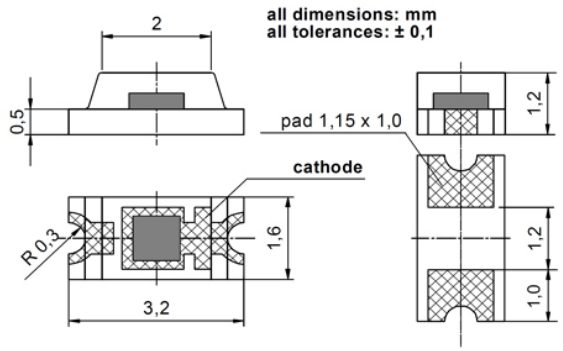
EPD-880-1-0.9

Wavelength	Type	Technology	Case
Infrared	SMD	GaAs	SMD 1206



Description

Selective photodiode with narrow bandwidth and high spectral sensitivity in the infrared range (810…950 nm). Compact design in standard SMD package allows for easy circuit board mounting and assembling of arrays.

Applications

Alarm systems, light barriers, special sensors

Miscellaneous Parameters

T_{amb} = 25℃, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.62	mm²
Temperature coefficient of I_D		TCI_D	5	%/K
Operating temperature range		T_{amb}	-20 to +85	℃
Storage temperature range		T_{stg}	-40 to +125	℃

Optical and Electrical Characteristics

T_{amb} = 25℃, 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
Responsivity at λ_P	V_R = 0 V	S_λ	0.3	0.55		A/W
Sensitivity range at 10% [1)]	V_R = 0 V	λ_{min}, λ_{max}	800		960	nm
Spectral bandwidth at 50%	V_R = 0 V	$\Delta\lambda_{0.5}$		115		nm
Shunt resistance	V_R = 10 mV	R_{SH}		205		GΩ
Noise equivalent power	λ = 880 nm	NEP		3.2×10^{-14}		$W/\sqrt{Hz}$
Specific detectivity	λ = 880 nm	D*		2.4×10^{12}		$cm \cdot \sqrt{Hz} \cdot W^{-1}$
Junction capacitance	V_R = 0 V	C_J		500		pF
Switching time (R_L = 50 Ω)	V_R = 1 V	t_r, t_f		175		ns

[1)] for information only

Note: The above specifications are for reference purpose only and subjected to change without prior notice.

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