



EPD-1300-3-0.2

- InGaAs/InP Photodiode
- Sensitivity Range: 800-1750 nm
- Active Area 0,032 mm²
- 3 mm clear epoxy



Description

EPD-1300-3-0.2 is a InGaAs/InP photodiode with an active area of 0,032 mm², mounted on a lead frame and encapsulated in a standard clear 3 mm epoxy package. **EPD-1300-3-0.2** has a sensitivity range of 800 – 1750 nm and peak sensitivity at 1600 nm.

Maximum Ratings

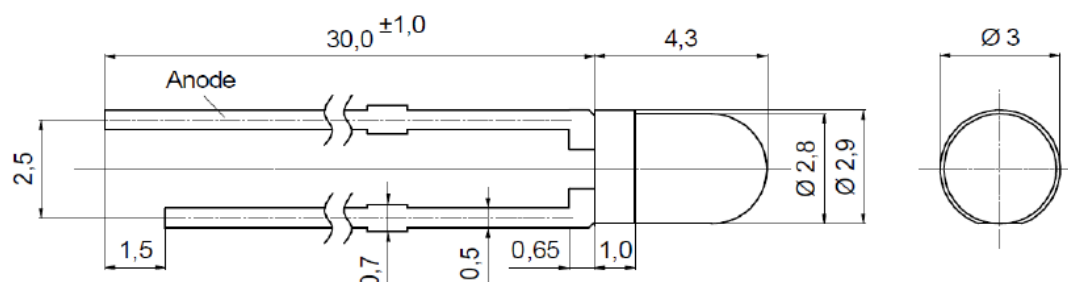
Parameter	Symbol	Values		Unit
		Min.	Max.	
Operating Temperature	T_{CASE}	- 40	+ 85	°C
Storage Temperature	T_{STG}	- 40	+ 100	°C

Optical and Electrical Characteristics ($T_{CASE}=25^{\circ}C$)

Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Sensitive Area	D			0,032		mm ²
Max. Sensitivity Wavelength (>90%)	λ_P	$V_R=0V$	800		1750	nm
Peak Sensitivity Wavelength	λ_{Peak}	$V_R=0V$		1600		nm
Spectral Bandwidth at 50%	$\Delta\lambda_{0.5}$	$V_R=0V$		680		nm
Breakdown Voltage *	V_R	$I_R=10\mu A$	5			V
Dark Current	I_D	$V_R=5V$		15	40	pA
Shunt Resistance	R_{TH}	$V_R=10mV$	3	5		GΩ
Responsivity at 1300 nm	S_λ	$V_R=0V$		0.9		A/W
Noise Equivalent Power	NEP	$\lambda=1300nm$		4×10^{-15}		W/\sqrt{Hz}
Specific Detectivity	D^*	$\lambda=1300nm$		4.5×10^{12}		$cm \cdot \sqrt{Hz} \cdot W^{-1}$
Junction Capacitance	C_J	$V_R=0V$		11		pF
Temperature Coefficient of I_{PH}	$T_C(I_{PH})$				7.4	%/K
Photo Current at 1300 nm *	i_{PH}	$V_R=0V$ $E_E=1mW/cm^2$		0.95		μA

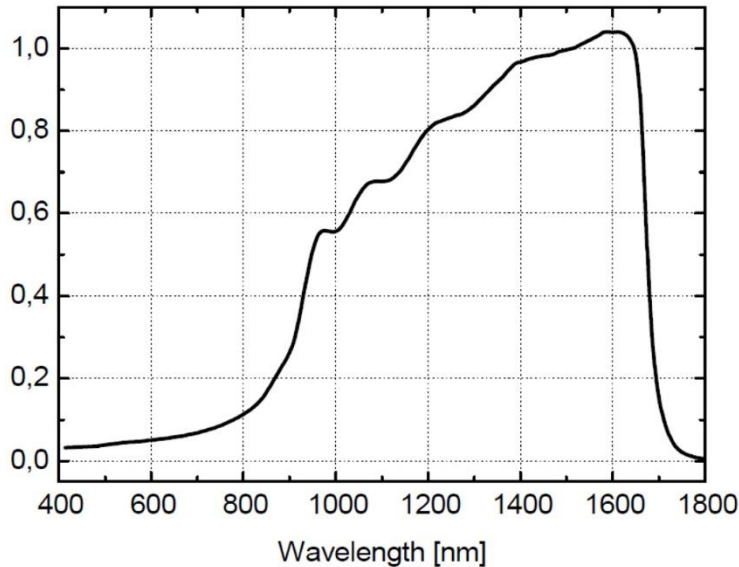
* for information only

Outline Dimensions





Spectral Characteristics



Precautions

Operation:

- Check your connection circuits before turning on the PD.
- Mind the PD polarity: PD anode is marked by long pin.
- DO NOT connect the PD to the multimeter.

Soldering:

- Do avoid overheating of the PD
- Do avoid electrostatic discharge (ESD)
- Do avoid mechanical stress, shock, and vibration
- Do only use non-corrosive flux
- Do not apply current to the PD until it has cooled down to room temperature after soldering

Static Electricity:

PDs are **sensitive to electrostatic discharge (ESD)**. Precautions against ESD must be taken when handling or operating these PDs. Surge voltage or electrostatic discharge can result in complete failure of the device.

