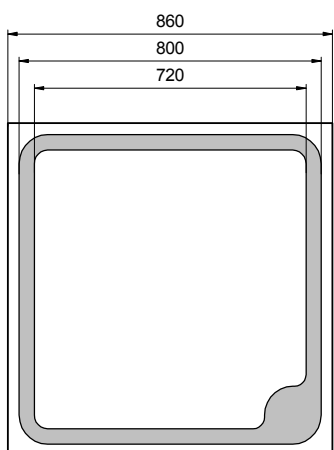


Wavelength range	Type	Technology	Electrodes
Infrared, selective	Integrated filter	AlGaAs/GaAs	P (anode) up

 <p style="text-align: center;">PD-03</p>	typ. dimensions (µm)	
	typ. thickness 300 (±20) µm  <u>anode</u> gold alloy, 1.5 µm  <u>cathode</u> gold alloy, 0.5 µm	<b>Description</b> Infrared-selective photodiode with narrow response range (680-770 nm)  <b>Applications</b> Optical communications, safety equipment, light barriers

## Miscellaneous Parameters

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.62	mm <sup>2</sup>
Operating temperature range		T <sub>amb</sub>	-40 to +125	°C
Storage temperature range		T <sub>stg</sub>	-40 to +125	°C

## Optical and Electrical Characteristics

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Reverse voltage <sup>2</sup>	I <sub>R</sub> = 10 µA	V <sub>R</sub>	5			V
Dark current	V <sub>R</sub> = 5 V	I <sub>D</sub>		40	200	pA
Responsivity at λ <sub>P</sub> <sup>1</sup>	V <sub>R</sub> = 0 V	S <sub>λ</sub>		0.5		A/W
Peak sensitivity	V <sub>R</sub> = 0 V	λ <sub>P</sub>		740		nm
Spectral range at 10 %	V <sub>R</sub> = 0 V	λ <sub>0.5</sub>	680		770	nm
Spectral bandwidth at 50%	V <sub>R</sub> = 0 V	Δλ <sub>0.4</sub>		80		nm
Junction capacitance	V <sub>R</sub> = 0 V	C <sub>J</sub>		40		pF
Switching time	V <sub>R</sub> = 5 V	t <sub>r</sub> , t <sub>f</sub>		15/30		ns

<sup>1</sup>Measured on bare chip on TO-18 header

<sup>2</sup>information only

## Labeling

Type	Typ. I <sub>D</sub> [pA]	Typ. S <sub>λ</sub> [A/W]	Lot N°	Quantity
EPC-740-0.9				

**Packing:** Chips on adhesive film with wire-bond side on top

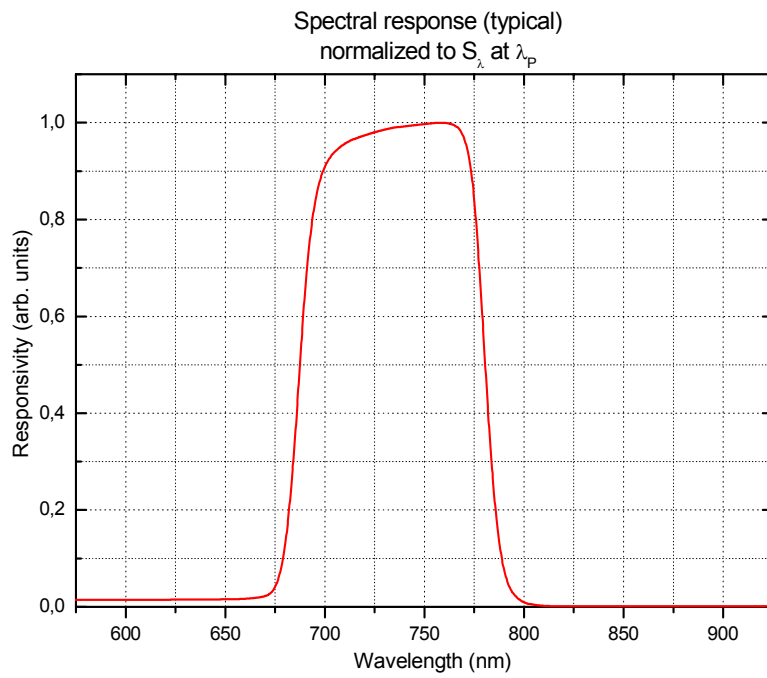
\*Note: All measurements carried out with *EPIGAP* equipment

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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