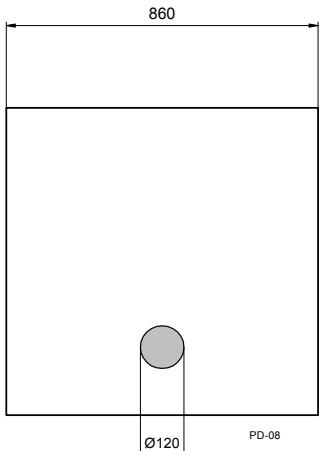


Wavelength range	Type	Technology	Electrodes
Infrared, selective	Integrated filter	GaAs	P (anode) up

	typ. dimensions ( $\mu\text{m}$ )	
	<u>typ. thickness</u> 300 $\mu\text{m}$ <u>anode</u> gold alloy, 1.5 $\mu\text{m}$ <u>cathode</u> gold alloy, 0.5 $\mu\text{m}$	<b>Description</b> Infrared-selective photodiode with narrow response range (810 - 950 nm)  <b>Applications</b> Optical communications, safety equipment, light barriers

### Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.72	$\text{mm}^2$
Operating temperature range		$T_{\text{amb}}$	-40 to +125	$^{\circ}\text{C}$
Storage temperature range		$T_{\text{stg}}$	-40 to +125	$^{\circ}\text{C}$

### Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Reverse voltage <sup>3</sup>	$I_{\text{R}} = 10 \mu\text{A}$	$V_{\text{R}}$	5			V
Dark current	$V_{\text{R}} = 1 \text{ V}$	$I_{\text{D}}$		1.0	2.5	nA
Peak sensitivity	$V_{\text{R}} = 0 \text{ V}$	$\lambda_{\text{P}}$		890		nm
Spectral range at 50 %	$V_{\text{R}} = 0 \text{ V}$	$\lambda_{0.5}$	820		935	nm
Responsivity at $\lambda_{\text{P}}$ <sup>1</sup>	$V_{\text{R}} = 0 \text{ V}$	$S_{\lambda}$	0.15	0.25		A/W
Responsivity at $\lambda_{\text{P}}$ <sup>2</sup>	$V_{\text{R}} = 0 \text{ V}$	$S_{\lambda}$		0.55		A/W
Spectral bandwidth at 50%	$V_{\text{R}} = 0 \text{ V}$	$\Delta\lambda_{0.5}$		115		nm

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

<sup>2</sup>Measured on epoxy covered chip on TO-18 header

<sup>3</sup>information only

### Labeling

Type	Typ. $I_{\text{D}}$ [pA]	Typ. $S_{\lambda}$ [A/W]	Lot N°	Quantity
EPC-880-0.9-1				

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

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

