

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

	typ. dimensions ( $\mu\text{m}$ )	
	typ. thickness 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 photo-diode 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	1.79	$\text{mm}^2$
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
Dark current	$V_R = 1\text{ V}$	$I_D$		1.0	2.5	nA
Peak sensitivity	$V_R = 0\text{ V}$	$\lambda_P$		890		nm
Spectral range at 50 %	$V_R = 0\text{ V}$	$\lambda_{0.5}$	820		935	nm
Spectral bandwidth at 50%	$V_R = 0\text{ V}$	$\Delta\lambda_{0.5}$		115		nm
Responsivity at $\lambda_P^1$	$V_R = 0\text{ V}$	$S_\lambda$		0.27		A/W
Switching time	$V_R = 1\text{ V}$	$t_r, t_f$		200		ns

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

## Labeling

Type	Typ. $I_D$ [pA]	Typ. $S_\lambda$ [A/W]	Lot N°	Quantity
EPC-880-1.4				

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

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

