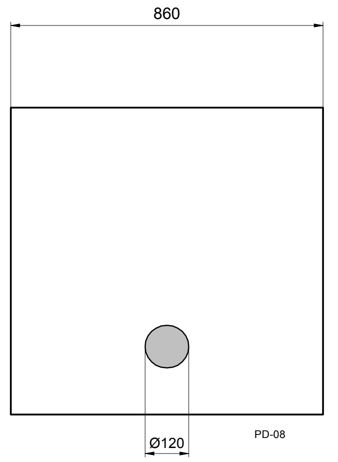
Photodiode-Chip EPC-880-0.9-1

Preliminary 23.05.2007 rev. 01/07

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



typ. dimensions (µm)

typ. thickness
300 µm

anode
gold alloy, 1.5 µm

cathode
gold alloy, 0.5 µm

Description
Infrared-selective photodiode with narrow response range (810 - 950 nm)

Applications
Optical communications, safety equipment, light barriers

Miscellaneous Parameters

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.72	mm²
Operating temperature range		T_{amb}	-40 to +125	°C
Storage temperature range		T_{stg}	-40 to +125	°C

Optical and Electrical Characteristics

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Reverse voltage[3]	I_R = 10 µA	V_R	5			V
Dark current	V_R = 1 V	I_D		1.0	2.5	nA
Peak sensitivity	V_R = 0 V	λ_P		890		nm
Spectral range at 50 %	V_R = 0 V	$\lambda_{0.5}$	820		935	nm
Responsivity at λ_P[1]	V_R = 0 V	S_λ	0.15	0.25		A/W
Responsivity at λ_P[2]	V_R = 0 V	S_λ		0.55		A/W
Spectral bandwidth at 50%	V_R = 0 V	$\Delta\lambda_{0,5}$		115		nm

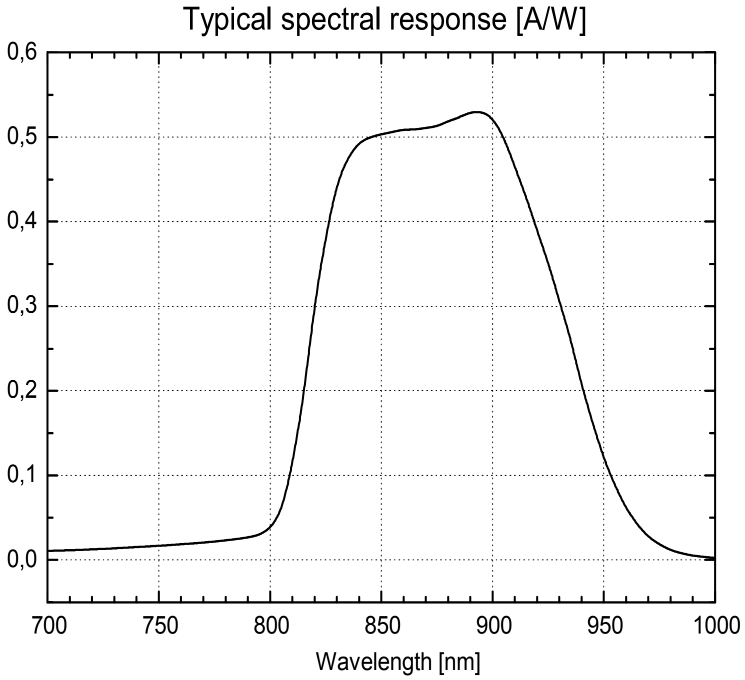
[1] Measured on bare covered chip on TO-18 header
[2] Measured on epoxy covered chip on TO-18 header
[3] information only

Labeling

Type	Typ. I_D [pA]	Typ. S_λ[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


Typical spectral response [A/W]
0,6
0,5
0,4
0,3
0,2
0,1
0,0
700
750
800
850
900
950
1000
Wavelength [nm]