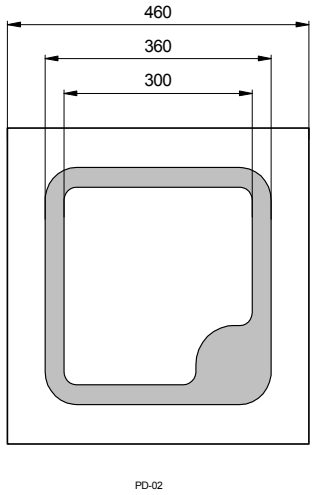
Photodiode-Chip EPC-740-0.5

19.11.2007 rev. 05

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



typ. dimensions (µm)

typ. thickness
300 (±20) µm

anode
gold alloy, 1.5 µm

cathode
gold alloy, 0.5 µm

Description
Infrared-selective photodiode with narrow response range (680-770 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	0.17	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[2]	I_R = 10 µA	V_R	5			V
Dark current	V_R = 5 V	I_D		40	200	pA
Responsivity at λ_P[1]	V_R = 0 V	S_λ		0.5		A/W
Peak sensitivity	V_R = 0 V	λ_P		740		nm
Spectral range at 10 %	V_R = 0 V	$\lambda_{0.5}$	680		770	nm
Spectral bandwidth at 50%	V_R = 0 V	$\Delta\lambda_{0.4}$		80		nm
Junction capacitance	V_R = 0 V	C_J		40		pF
Switching time	V_R = 5 V	t_r, t_f		15/30		ns

[1]Measured on bare chip on TO-18 header

[2]information only

Labeling

Type	Typ. I_D [pA]	Typ. S_λ[A/W]	Lot N°	Quantity
EPC-740-0.5				

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

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

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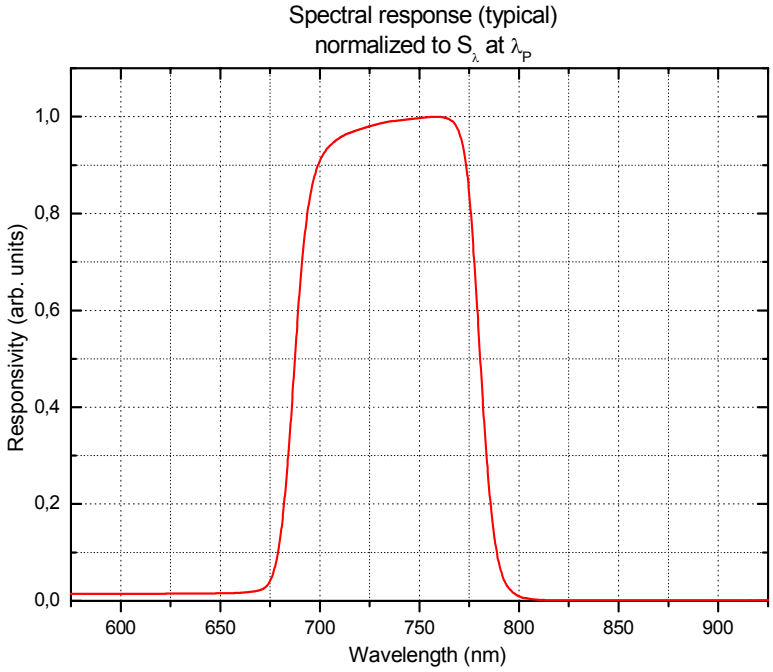

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