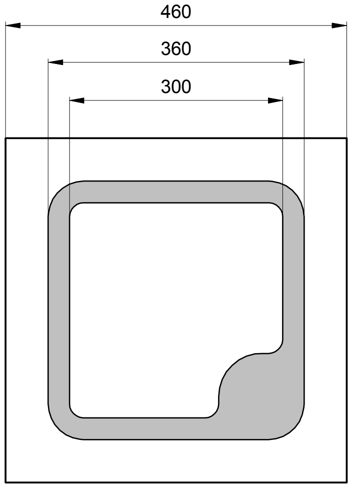
Photodiode-Chip EPC-660-0.5

Preliminary 11.04.2007 rev. 06/07

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



typ. dimensions (µm)

<u>typ. thickness</u> 260 (±25) µm <u>anode</u> gold alloy, 1.5 µm <u>cathode</u> gold alloy, 0.5 µm	**Description** Narrow response range (660 nm peak) **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
Peak sensitivity wavelength	V_R = 0 V	λ_P		660		nm
Spectral range at 50 %	V_R = 0 V	$\lambda_{0.5}$	620		700	nm
Responsivity at λ_P[1]	V_R = 0 V	S_λ		0.20		A/W
Responsivity at λ_P[2]	V_R = 0 V	S_λ		0.42		A/W
Spectral bandwidth at 50%	V_R = 0 V	$\Delta\lambda_{0.5}$		80		nm
Dark current	V_R = 1 V	I_D		40	200	pA
Junction capacitance	V_R = 0 V	C_J		40		pF
Switching time	V_R = 1 V	t_r, t_f		15/30		ns

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

[2] Measured on epoxy covered chip on TO-18 header

Labeling

Type	Typ. I_D [pA]	Typ. S_λ[A/W]	Lot N°	Quantity
EPC-660-0.5				

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

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

Typical responsivity spectrum