

Wavelength	Type	Technology	Case
Infrared	water clear	AlGaAs/GaAs	5 mm plastic lens

	<p>Description</p> <p>Selective photodiode mounted in standard 5 mm package without standoff. Narrow response range (740 nm peak) by means of integrated filter</p> <p>Note: Special packages with standoff available on request</p>
	<p>Applications</p> <p>Optical communications, safety equipment, light barriers</p>

Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.17	mm ²
Temperature coefficient of I _D		T _C (I _D)	5	%/K
Operating temperature range		T _{amb}	-20 to +85	°C
Storage temperature range		T _{stg}	-30 to +100	°C
Soldering Temperature	t ≤ 3 s, 3 mm from case	T _{slid}	260	°C
Acceptance angle at 50% S _λ		φ	20	deg.

Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage ¹⁾	I _R = 10 μA	V _R	5			V
Dark current	V _R = 5 V	I _D		40	200	pA
Peak sensitivity wavelength	V _R = 0 V	λ _p		740		nm
Responsivity at λ _p	V _R = 0 V	S _λ		0.5		A/W
Spectral range at 10 %	V _R = 0 V	λ _{0.5}	680		770	nm
Spectral bandwidth at 50%	V _R = 0 V	Δλ _{0.5}		80		nm
Shunt resistance	V _R = 10 mV	R _{SH}		200		GΩ
Noise equivalent power	λ = 740 nm	NEP		7.2x10 ⁻¹⁵		W/√Hz
Specific detectivity	λ = 740 nm	D*		5.7x10 ¹²		cm·√Hz·W ⁻¹
Junction capacitance	V _R = 0 V	C _J		120		pF
Switching time (R _L = 50 Ω)	V _R = 5 V	t _r , t _f		170		ns
Photo-current at λ _p ^{1,2)}	V _R = 0 V E _e = 1mW/cm ²	I _{Ph}		2,5		μA

¹⁾for information only

²⁾ Halogen lamp source with appropriate filter

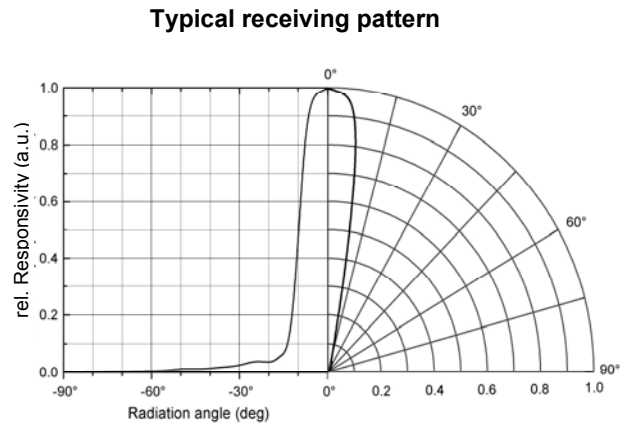
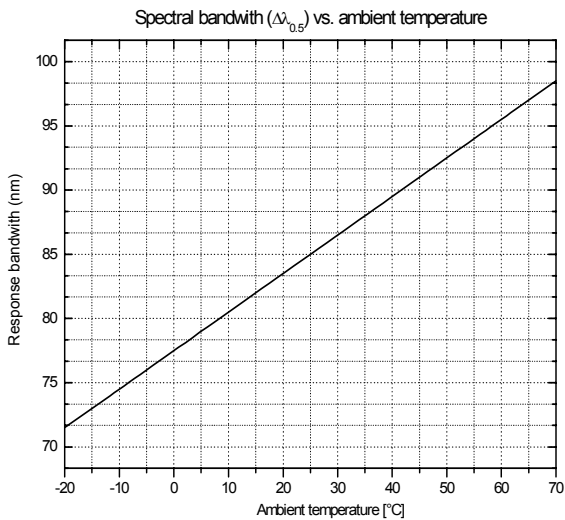
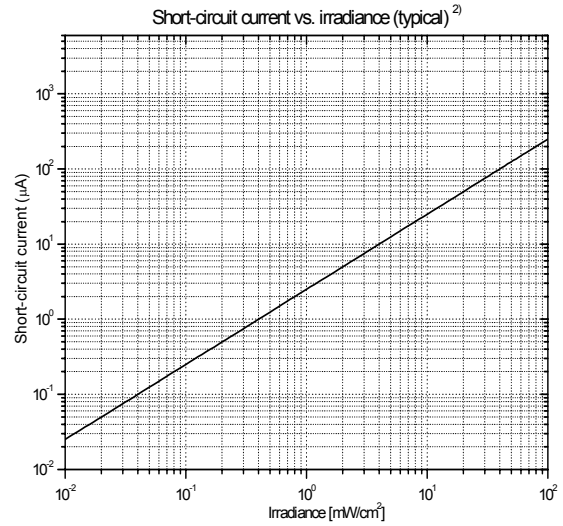
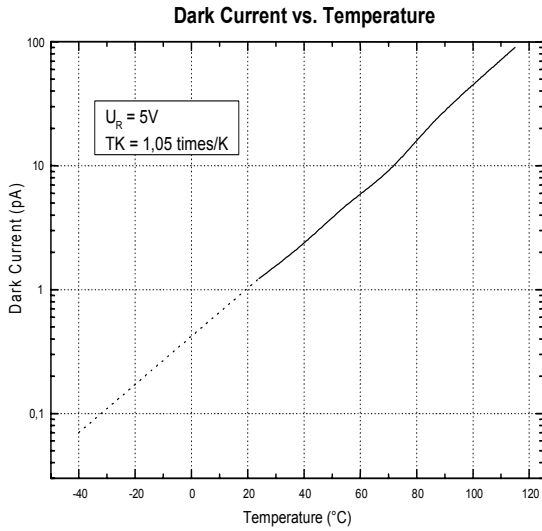
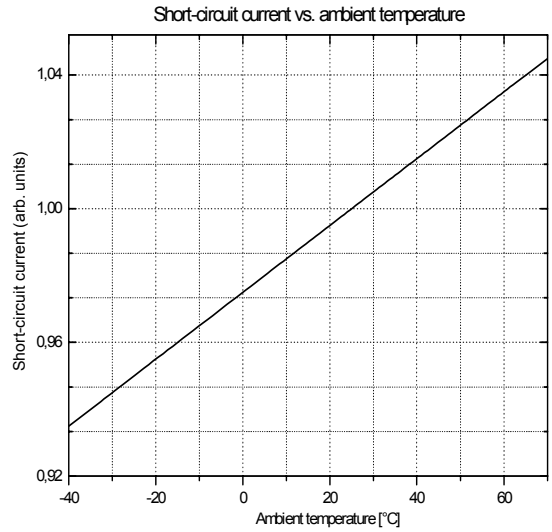
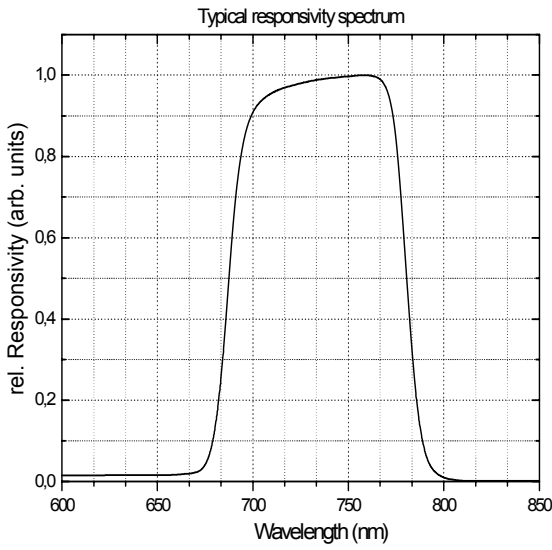
Labeling

Type	Lot N°	R _D (typ.) [GΩ]	Quantity
EPD-740-5-0.5			

Note: All measurements carried out with *EPIGAP* equipment

We reserve the right to make changes to improve technical design and may do so without further notice.

Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.



We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.