

Selective Photodiode

EPD-740-5/0,5

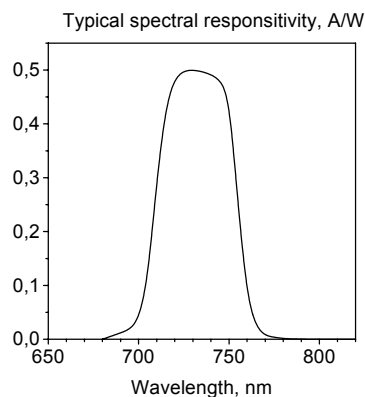
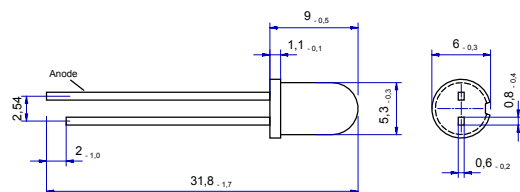
Spectral range	Type	Technology	Case
NIR	waterclear	AlGaAs/GaAs	5 mm plastic lens

Description

Narrow response range (740 nm peak),
Heterostructure with integrated filter

Applications

Optical communications, safety
equipment, automation, analytics



Maximum Ratings

Parameter	Value	Unit
Storage Temperature	- 40...+85	°C
Operating Temperature	- 40...+85	°C
Soldering Temperature	260	°C

Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Active area		A		0.13		mm ²
Peak sensitivity, typ.		λ_{Smax}	7000	740	780	nm
Spectral bandwidth at 50%		$\Delta\lambda_{0,5}$		80		nm
Acceptance angle at 50% S _λ				20		deg.
Responsivity at 660 nm	V _R = 0 V	S _λ		0.5		A/W
Short-circuit current*	V _R = 0, E _e =1 mW/cm ²	I _{SC}		1		μA
Dark current	V _R = 5 V, E _e =0	I _D		40	200	pA
Reverse voltage	I _R = 10 μA	V _R		10		V
Junction capacitance	V _R = 0, E _e =0	C		50		pF
Rise time	R _L = 50 Ω,	t _r		≤15		ns
Fall time	V _R = 5 V	t _f		≤30		ns

*Light source is an AlGaAs LED with a peak emission wavelength of 740 nm