

Selective Photodiode

EPD-660-5

Preliminary data

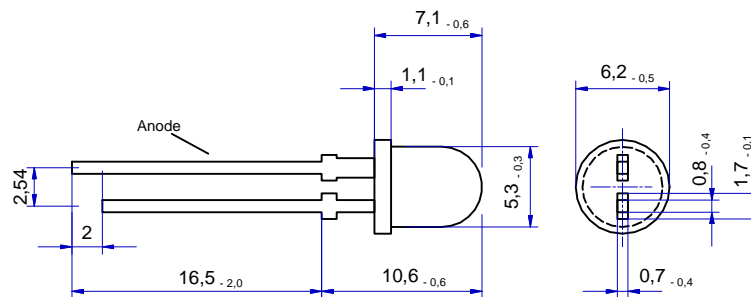
Spectral range	Type	Technology	Case
Visible-red	EPD-660-5	AlGaAs/AlGaAs/GaAs	5 mm plastic lens

Description

Narrow response range (660 nm peak), single heterostructure on the substrate

Applications

Optical communications, safety equipment



Maximum Ratings

Parameter	Value	Unit
Storage Temperature	- 40...+90	°C
Operating Temperature	-40...+85	°C
Soldering Temperature	240	°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		λ_{Smax}	620	660	700	nm
Spectral bandwidth at 50%		$\Delta\lambda_{0,5}$		25		nm
Acceptance angle at 50% S _e				40		deg.
Responsivity at 660 nm	V _R = 0 V	S _e		0.42		A/W
Short-circuit current*	V _R = 0, E _e =1 mW/cm ²	I _{SC}		0.85		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	\tilde{N}		40		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 660 nm