

# Selective Photodiode

EPD-660-5

## Preliminary data

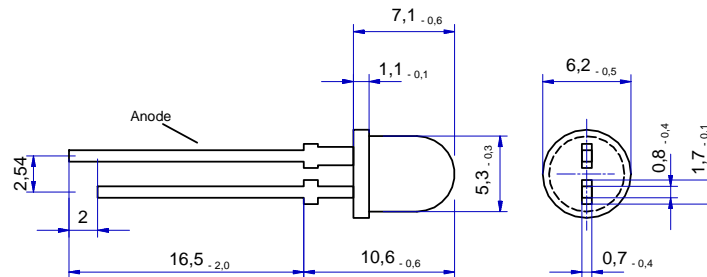
Spectral range	Type	Technology	Case
Visible-red	EPD-660-5	AlGaAs/AlGaAs/GaAs	5 mm plastic lens

### 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

$T_{amb} = 25^{\circ}\text{C}$ , unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Active area		A		0.13		mm <sup>2</sup>
Peak sensitivity		$\lambda_{Smax}$	620	660	700	nm
Spectral bandwidth at 50%		$\Delta\lambda_{0,5}$		25		nm
Acceptance angle at 50% $S_{\bar{e}}$				40		deg.
Responsivity at 660 nm	$V_R = 0 \text{ V}$	$S_{\bar{e}}$		0.42		A/W
Short-circuit current*	$V_R = 0, E_e = 1 \text{ mW/cm}^2$	$I_{SC}$		0.85		$\mu\text{A}$
Dark current	$V_R = 5 \text{ V}, E_e = 0$	$I_D$		40	200	pA
Reverse voltage	$I_R = 10 \mu\text{A}$	$V_R$		10		V
Junction capacitance	$V_R = 0, E_e = 0$	$\tilde{N}$		40		pF
Rise time	$R_L = 50 \text{ } \Omega$	$t_r$		15		ns
Fall time	$V_R = 5 \text{ V}$	$t_f$		30		ns

\*Light source is an AlGaAs LED with a peak emission wavelength of 660 nm

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