

# Selective Photodiode

EPD-660-5

## Preliminary data

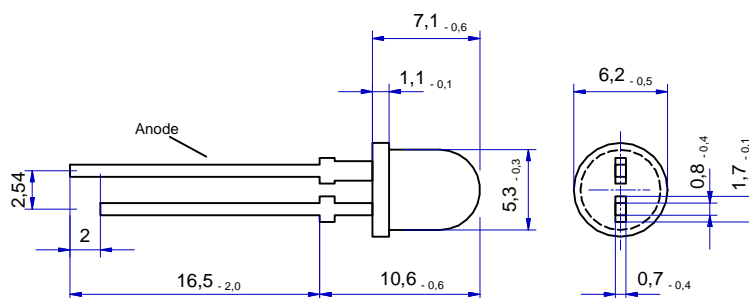
Spectral range	Type	Technology	Case
Visible-red	EPD-660-5	AlGaAs/AlGaAs/GaAs	5 mm plastic lens

### 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<sub>amb</sub> = 25°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 <sub>e</sub>				40		deg.
Responsivity at 660 nm	V <sub>R</sub> = 0 V	S <sub>e</sub>		0.42		A/W
Short-circuit current*	V <sub>R</sub> = 0, E <sub>e</sub> =1 mW/cm <sup>2</sup>	I <sub>SC</sub>		0.85		μA
Dark current	V <sub>R</sub> = 5 V, E <sub>e</sub> =0	I <sub>D</sub>		40	200	pA
Reverse voltage	I <sub>R</sub> = 10 μA	V <sub>R</sub>		10		V
Junction capacitance	V <sub>R</sub> = 0, E <sub>e</sub> =0	$\tilde{N}$		40		pF
Rise time	R <sub>L</sub> = 50 Ω	t <sub>r</sub>		15		ns
Fall time	V <sub>R</sub> = 5 V	t <sub>f</sub>		30		ns

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