

Selective Photodiode

EPD-660-3

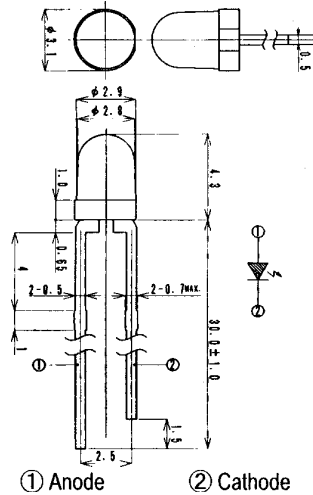
Spectral range	Type	Technology	Case
Red	waterclear	AlGaAs/GaAs	3 mm plastic lens

Description

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

Applications

Optical communications, safety equipment



Maximum Ratings

Parameter	Value	Unit
Storage Temperature	- 20...+85	°C
Operating Temperature	-30...+100	°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		0.09		mm ²
Peak sensitivity		λ_{Smax}	640	660	680	nm
Spectral bandwidth at 50%		$\Delta\lambda_{0,5}$		80		nm
Acceptance angle at 50% S _λ				60		deg.
Responsivity at 660 nm	V _R = 0 V	S _λ		0.42		A/W
Short-circuit current*	V _R = 0, E _e =1 mW/cm ²	I _{SC}		0.55		μA
Dark current	V _R = 5 V, E _e =0	I _D		40	200	pA
Shunt resistance	V _R = 10 mV	R _{SH}		10		GΩ
Reverse voltage	I _R = 10 μA	V _R		10		V
Junction capacitance	V _R = 0, E _e =0	C		50		pF
Junction capacitance	V _R = 5 V, E _e =0	C		30		pF
Rise time	R _L = 50 Ω,	t _r		≤15		ns
Fall time	V _R = 5 V	t _f		≤30		

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