ROITHNER LASERTECHNIK GmbH
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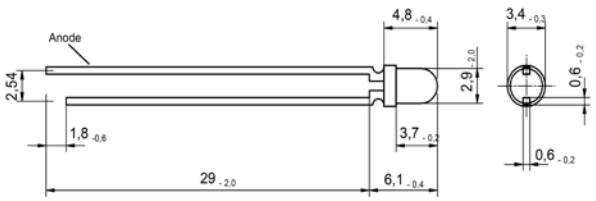
EPD-660-3-0.9

Wavelength	Type	Technology	Case
Red	water clear	AlGaAs/GaAs	3 mm plastic lens



Description

Selective photodiode mounted in standard 3 mm package without standoff . Narrow response range (660 nm peak) by means of integrated filter

Note: Special packages with standoff available on request

Applications

Optical communications, safety equipment, automation, analytics

Miscellaneous Parameters

T_{amb} = 25℃, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.62	mm²
Temperature coefficient of I_D		$T_C(I_D)$	5	%/K
Operating temperature range		T_{amb}	-20 to +85	℃
Storage temperature range		T_{stg}	-30 to +100	℃
Soldering Temperature	t ≤ 3 s, 3 mm from case	T_{sld}	260	℃
Acceptance angle at 50% S_λ		φ	60	deg.

Optical and Electrical Characteristics

T_{amb} = 25℃, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage[1)]	I_R = 10 µA	V_R	5			V
Dark current	V_R = 1 V	I_D		40	300	pA
Peak sensitivity wavelength	V_R = 0 V	λ_p		660		nm
Responsivity at λ_P	V_R = 0 V	S_λ		0.42		A/W
Sensitivity range at 1% [1)]	V_R = 0 V	λ_{min}, λ_{max}	605		705	nm
Spectral bandwidth at 50%	V_R = 0 V	$\Delta\lambda_{0.5}$		80		nm
Shunt resistance	V_R = 10 mV	R_{SH}	500	600		GΩ
Noise equivalent power	λ = 660 nm	NEP		8.5×10^{-15}		$W/\sqrt{Hz}$
Specific detectivity	λ = 660 nm	D*		9.2×10^{12}		$cm \cdot \sqrt{Hz} \cdot W^{-1}$
Junction capacitance	V_R = 0 V	C_J		160		pF
Switching time (R_L = 50 Ω)	V_R = 1 V	t_r, t_f		500		ns
Photo-current at illuminant A[1,2)]	V_R = 0 V E_v = 1000 lx	I_{Ph}		1.2		µA

[1)] for information only

[2)] Standard light source with a color temperature of 2856 K

Note: The above specifications are for reference purpose only and subjected to change without prior notice.

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