

# EPIGAP Optronik GmbH

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## Data sheet

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### Infrared LED

### EOLD-870-355

Rev. 03, 2017

Radiation	Type	Case
Infrared	AlGaAs/AlGaAs	3 mm diameter, water clear

	<b>Description:</b>  Round type With flange Solder leads without stand-off ROHS compliant
	<b>Applications:</b>  Optical communication, safety equipment, automation
	<b>Notes:</b>  1. All dimensions are in millimeter 2. Lead spacing is measured where the leads emerge from the package 3. The height from lower side of standoff to upper side of the plastic body is 5.3±0.2 mm

### Maximum Ratings

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test Conditions	Symbol	Value	Unit
Forward current		I <sub>F</sub>	100	mA
Peak forward current (pulse)	t=100 μs, T=1 ms	I <sub>FM</sub>	1	A
Reverse voltage		V <sub>R</sub>	5	V
Power dissipation		P <sub>D</sub>	100	mW
Operating temperature range		T <sub>amb</sub>	-40 to +85	°C
Storage temperature range		T <sub>stg</sub>	-40 to +85	°C
Lead soldering temperature	t < 3 s, 1.6 mm from case	T <sub>slg</sub>	260	°C



We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

**Data sheet**

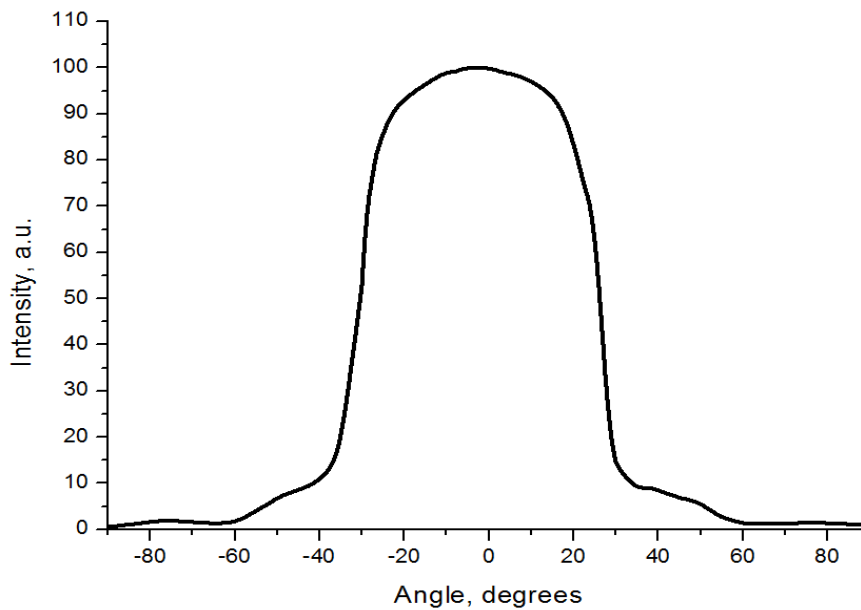
**Infrared LED**

**EOLD-870-355**

**Optical and Electrical Characteristics**

T<sub>amb</sub>= 25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 20 mA		1.35	1.55	V
Reverse current	V <sub>R</sub>	V <sub>R</sub> = 5 V	5		10	μA
Radiant power	Φ <sub>e</sub>	I <sub>F</sub> = 50 mA		22		mW
Radiant intensity	I <sub>e</sub>	I <sub>F</sub> = 50 mA		24		mW/sr
Peak wavelength	λ <sub>p</sub>	I <sub>F</sub> = 50 mA	855	870	885	nm
FWHM	Δλ <sub>0,5</sub>	I <sub>F</sub> = 20 mA		42		nm
Half int. beam angle	θ	I <sub>F</sub> = 50 mA		50		deg.
Switching time	t <sub>r</sub> , t <sub>f</sub>	I <sub>F</sub> = 20 mA		12; 6		ns



Typical radiation pattern

Art. No. 131 042



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