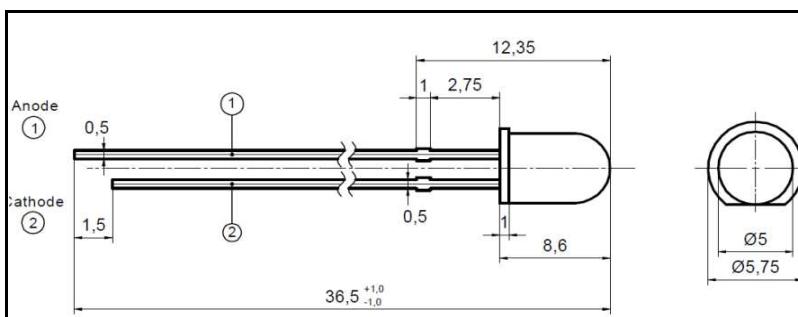
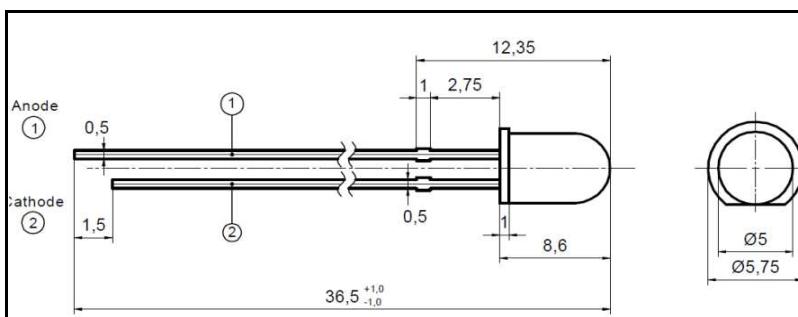


## Data sheet

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**Infrared LED**
**EOLD-780-525**

Rev. 04, 2017

Radiation	Type	Case
Infrared	AlGaAs/AlGaAs, DDH	5 mm plastic lens

		Description:
		High-power, high-speed infrared LED in standard 5 mm package, with lens for narrow beam focusing, housing optional with or without standoff leads
		Application:
		Optical communications, safety equipment, automation

All dimensions in mm

**Maximum Ratings**
 $T_{amb}$ = 25°C, unless otherwise specified

Parameter	Test Conditions	Symbol	Value	Unit
Forward current		I <sub>F</sub>	150	mA
Peak forward current	$t_p \leq 50 \mu s, t_p/T = 1/2$	I <sub>FM</sub>	200	mA
Power dissipation		P <sub>D</sub>	200	mW
Operating temperature range		T <sub>amb</sub>	-20 to +80	°C
Storage temperature range		T <sub>sig</sub>	-40 to +85	°C
Lead soldering temperature	$t < 5 s, 3 \text{ mm from case}$	T <sub>sig</sub>	260	°C
Junction temperature		T <sub>J</sub>	100	°C

**Optical and Electrical Characteristics**
 $T_{amb}$ = 25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 20 \text{ mA}$		1.4	1.6	V
Forward voltage	V <sub>F</sub>	$I_F = 100 \text{ mA}$		1.6	2	V
Reverse voltage	V <sub>R</sub>	$I_R = 10 \mu A$	5			V
Radiant power	$\Phi_e$	$I_F = 20 \text{ mA}$	7	11		mW
Radiant power	$\Phi_e$	$I_F = 100 \text{ mA}$		45		mW
Peak wavelength	$\lambda_p$	$I_F = 20 \text{ mA}$	765	780	790	nm
FWHM	$\Delta\lambda_{0.5}$	$I_F = 20 \text{ mA}$		40		nm
Viewing angle	$\varphi$	$I_F = 20 \text{ mA}$		20		deg.
Switching time	$t_r, t_f$	$I_F = 20 \text{ mA}$		35		ns

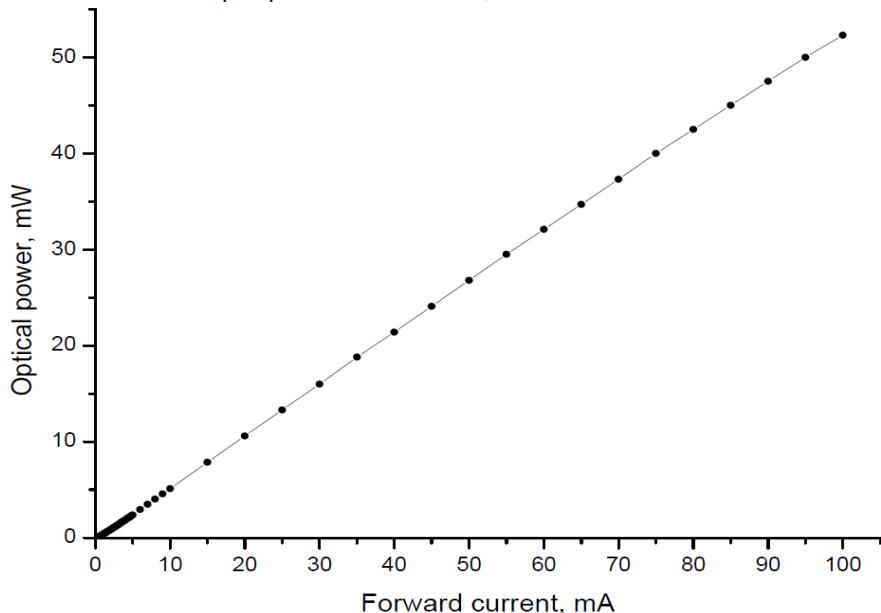


We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

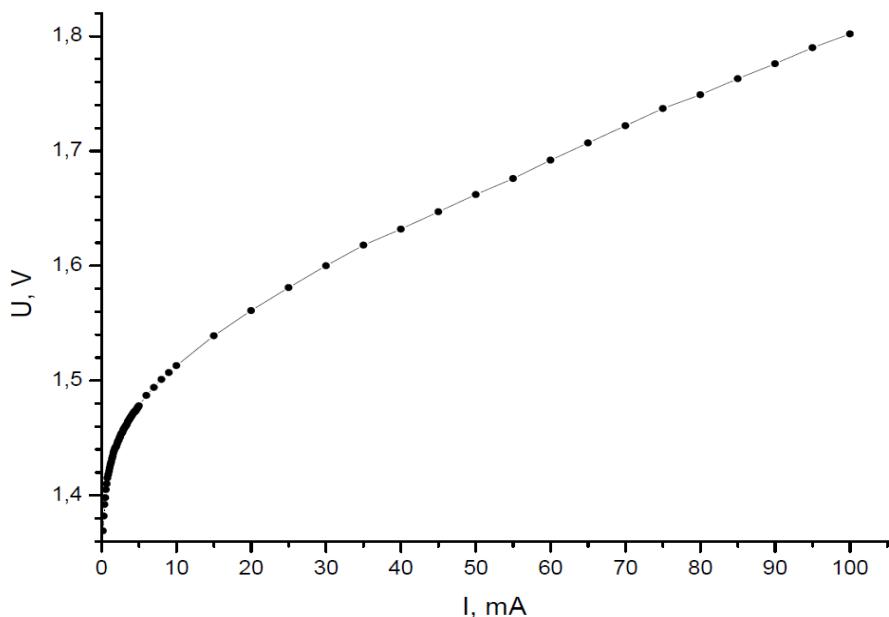
**Data sheet****Infrared LED****EOLD-780-525****Page 2 of 3**

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Output power vs. current, 780 nm 5 mm LED

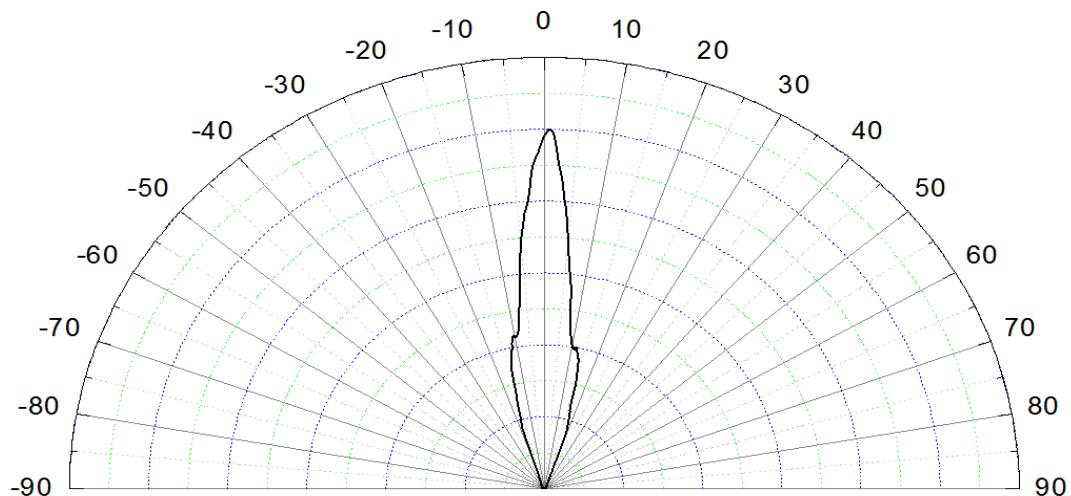


I-U curve, 780 nm 5 mm LED



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Typical radiation pattern

Art. No. 430 011



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