

Data sheet

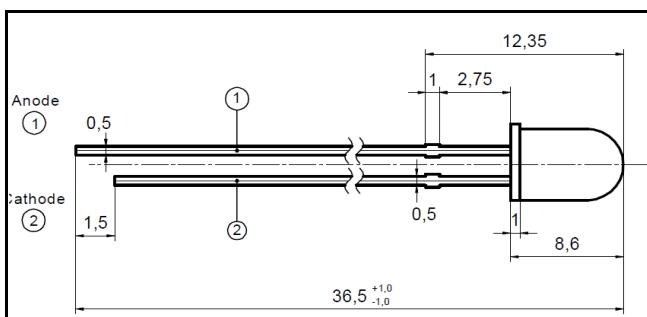
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Infrared LED

EOLD-760-524

Rev. 05, 2017

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

Description:	
	
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_F	50	mA
Peak forward current	$t_p \leq 50 \mu s, t_p/T = 1/2$	I_{FM}	100	mA
Power dissipation		P_D	100	mW
Operating temperature range		T_{amb}	-20 to +80	°C
Storage temperature range		T_{sig}	-55 to +85	°C
Junction temperature		T_J	100	°C
Lead soldering temperature	$t < 5 s, 3 \text{ mm from case}$	T_{sig}	260	°C

Optical and Electrical Characteristics

T_{amb} = 25°C, unless otherwise specified

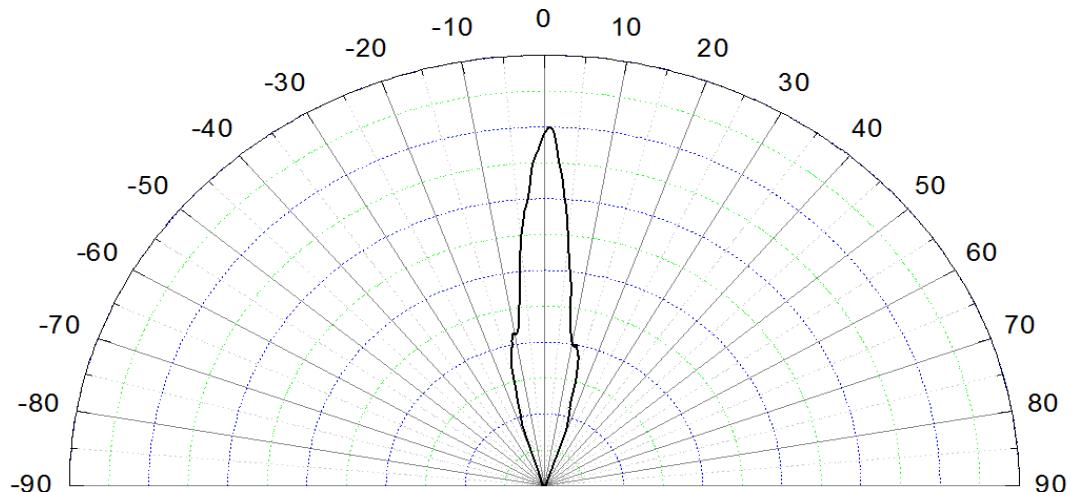
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 20 \text{ mA}$		1.7	2	V
Forward voltage	V_F	$I_F = 50 \text{ mA}$		2		V
Reverse voltage	V_R	$I_R = 100 \mu A$	5			V
Radiant power	Φ_e	$I_F = 20 \text{ mA}$	4	6		mW
Radiant power	Φ_e	$I_F = 50 \text{ mA}$		14		mW
Radiant intensity	I_e	$I_F = 20 \text{ mA}$	24	30		mW/sr
Radiant intensity	I_e	$I_F = 50 \text{ mA}$		70		mW/sr
Peak wavelength	λ_p	$I_F = 20 \text{ mA}$	750	760	775	nm
FWHM	$\Delta\lambda_{0.5}$	$I_F = 20 \text{ mA}$		30		nm
Temp. coefficient of λ	$\Delta\lambda/\Delta T$	$I_F = 20 \text{ mA}$		+0.22		nm/K
Current tuning coeff.	$\Delta\lambda/\Delta I$			+0.126		nm/mA
Viewing angle	φ	$I_F = 20 \text{ mA}$		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.

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Typical radiation pattern

Art. No. 430 049



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