

**Data sheet**

**Infrared LED**

**EOLD-1550-525**

Radiation	Type	Case
Infrared	InGaAs/InP, MQW	5 mm plastic lens

Description:	
High-power, high-speed infrared LED in standard 5 mm package, housing without standoff leads  For optical communications, safety equipment and automation  All dimensions in 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	t <sub>p</sub> ≤ 50 μs, t <sub>p</sub> / T = 1/2	I <sub>FM</sub>	200	mA
Power dissipation		P <sub>D</sub>	100	mW
Operating temperature range		T <sub>amb</sub>	-20 to +80	°C
Storage temperature range		T <sub>stg</sub>	-55 to +85	°C
Lead soldering temperature	t < 5 s, 3 mm from case	T <sub>slg</sub>	260	°C

**Optical and Electrical Characteristics**

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

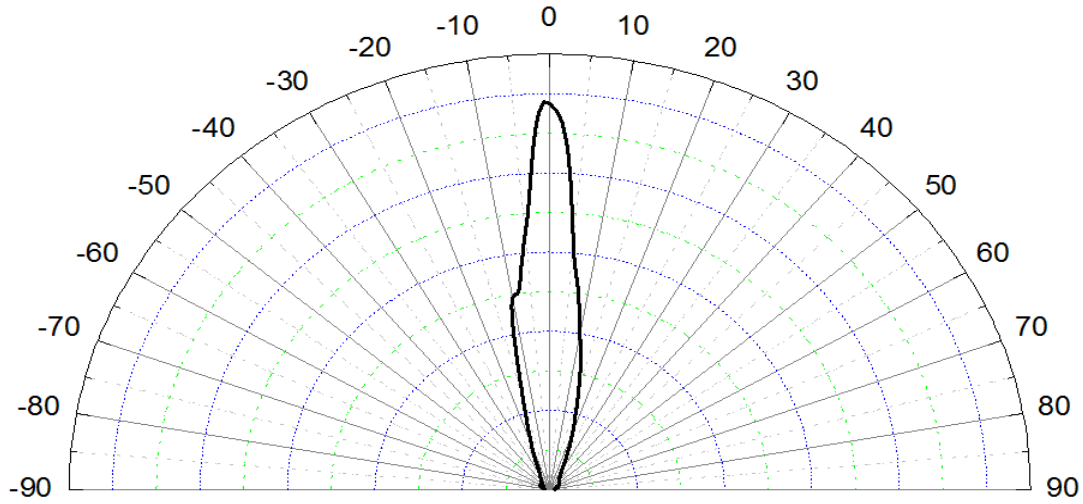
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 20 mA		0.75	0.9	V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 100 mA		0.85	1	V
Reverse voltage	V <sub>R</sub>	I <sub>R</sub> = 10 μA	5			V
Radiant power	Φ <sub>e</sub>	I <sub>F</sub> = 20 mA		0.9		mW
Radiant power	Φ <sub>e</sub>	I <sub>F</sub> = 100 mA		3.3		mW
Radiant intensity	I <sub>e</sub>	I <sub>F</sub> = 20 mA		2.2		mW/sr
Radiant intensity	I <sub>e</sub>	I <sub>F</sub> = 100 mA		11		mW/sr
Peak wavelength	λ <sub>p</sub>	I <sub>F</sub> = 20 mA	1530	1550	1570	nm
FWHM	Δλ <sub>0,5</sub>	I <sub>F</sub> = 20 mA		130		nm
Viewing angle	φ	I <sub>F</sub> = 20 mA		20		deg.
Switching time	t <sub>r</sub> , t <sub>f</sub>	I <sub>F</sub> = 20 mA		10		ns



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Typical radiation pattern

Art. No. 430 033



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.