

# OSA Opto Light GmbH

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## Product Data Sheet

### LED Lamp Infra Red

### EOLD-1020-525

Rev. 01 aus 2011

Radiation	Type	Case
Infra Red	MQW	5mm plastic lens

	<p><b>Description:</b></p> <p>High-power, high-speed infrared LED in standard 5mm package, housing without standoff leads</p> <p>for optical communications, safety equipment and automation</p>
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### 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>	150	mW
Operating temp. range		T <sub>amb</sub>	-20 to +80	°C
Storage temp. range		T <sub>stg</sub>	-55 to +100	°C
Lead soldering temp.	t < 5s, 3mm 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> = 20mA		1.15	1.40	V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 100mA		1.25	1.35	V
Reverse voltage	V <sub>R</sub>	I <sub>R</sub> = 10μA	5			V
Radiant Power	Φ <sub>e</sub>	I <sub>F</sub> = 20mA		4		mW
Radiant Power	Φ <sub>e</sub>	I <sub>F</sub> = 100mA		8		mW
Peak wavelength	λ <sub>p</sub>	I <sub>F</sub> = 20mA	1000	1020	1040	nm
Spectral bandwidth at 50%	Δλ <sub>0,5</sub>	I <sub>F</sub> = 20mA		50		nm
Viewing angle	φ	I <sub>F</sub> = 20mA		20		deg.
Switching time	t <sub>r</sub> , t <sub>f</sub>	I <sub>F</sub> = 20mA		20;40		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.