

High precision red light LED - type L-30

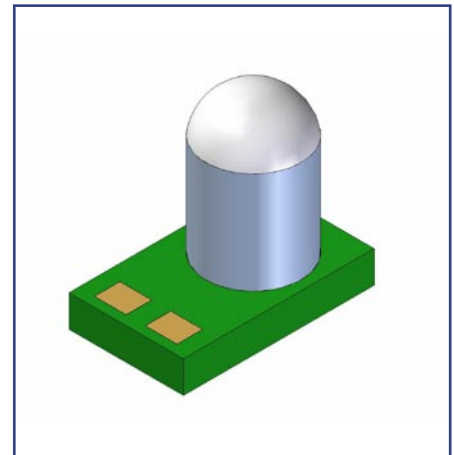


CHARACTERISTICS

- ▶ microSPOT is the latest LED technology by STM
- ▶ Integrated, coordinated high-efficiency optics
- ▶ No additional lenses required
- ▶ Sharply defined light spot
- ▶ Extremely small reception and squint angles
- ▶ 3mm model, metal housing

APPLICATION

- ▶ For all optical sensors
- ▶ Für precise lighting



micro ● SPOT®

▶ MAXIMUM RATINGS (T=25°C)

Parameter	Test conditions	typ. value	Unit
Operating temperature (T _{op})		-10 / + 60	°C
Forward current (I _F)		35	mA
Thermal resistance (R)	Junction/soldering pad	200	K/W
Surge current (I _{FM})	t _p =70µs, t _p /T=0,143	180 - 200	mA

▶ OPTICAL AND ELECTRONIC VALUES (T=25°C)

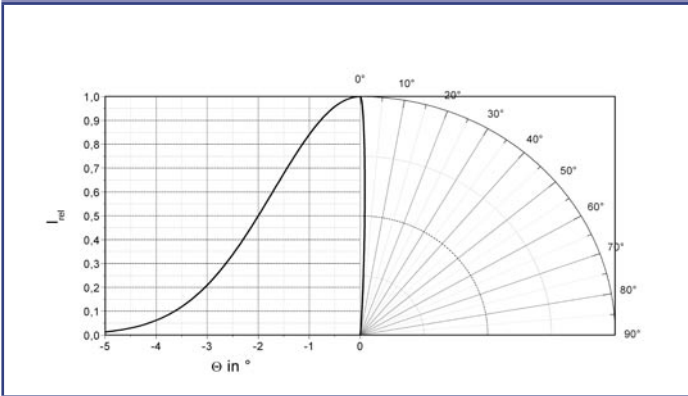
Parameter	Test conditions	typ. value	Unit
Peak wavelength (λ)	I _F =20 mA	655	nm
Radiant power (Φ _e)	I _F =20 mA	0,5	mW
Spectral range of sensitivity (by 50%) (Δλ)	I _F =20 mA	20	nm
Half power angle (θ)	I _F =60 mA, (t _p /T=1/12)	2	deg
Forward voltage (V _F)	I _F =20 mA	2,25	V
Reverse voltage (V _R)	I _R =100 µA	5	V



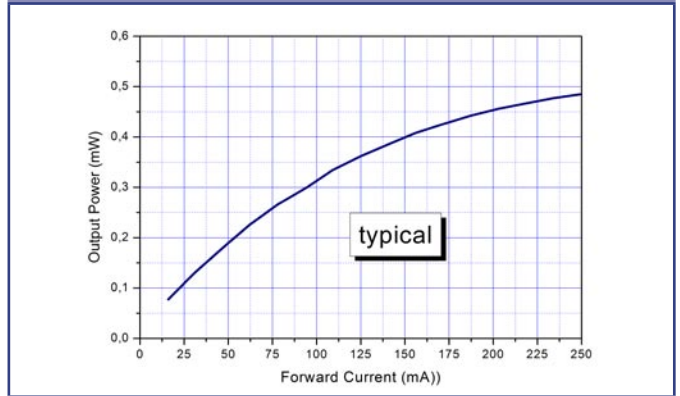
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► GRAPHS

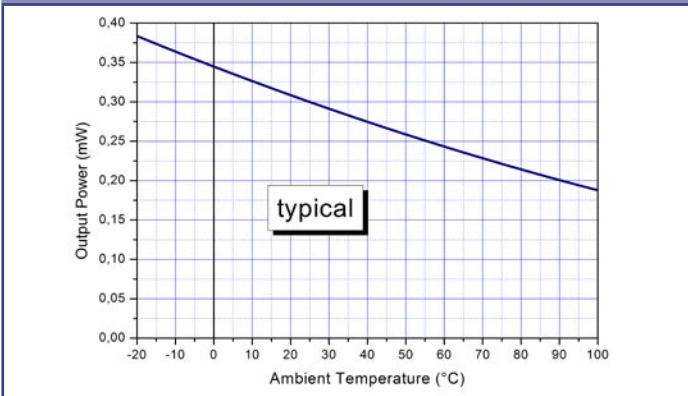
RADIATION CHARACTERISTIC : $I_{rel} = f(\theta)$



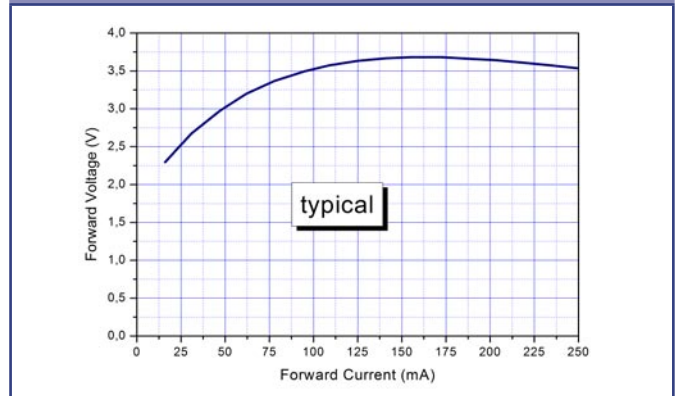
RADIANT OUTPUT POWER ($t_p=70\mu s, t_p/T=0,143, T=25^\circ C$)



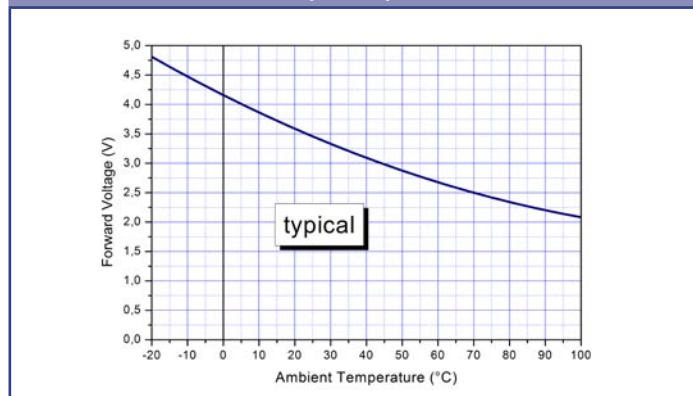
RADIANT OUTPUT POWER ($t_p=70\mu s, t_p/T=0,143, I=100mA$)



FORWARD VOLTAGE ($t_p=70\mu s, t_p/T=0,143, T=25^\circ C$)



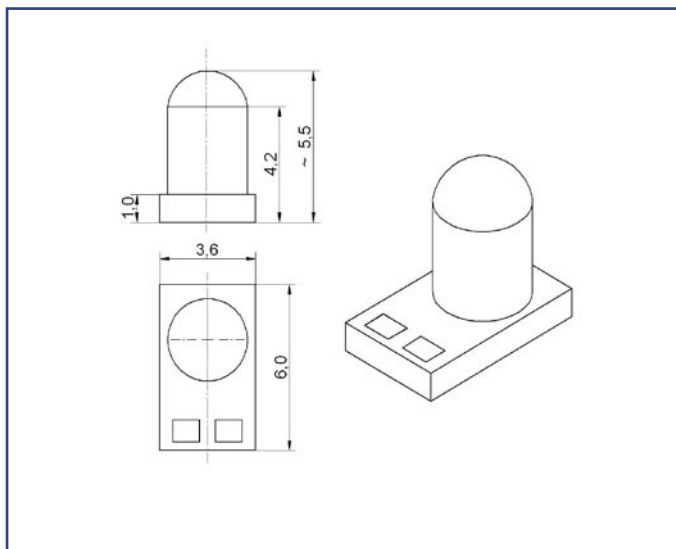
FORWARD VOLTAGE ($t_p=70\mu s, t_p/T=0,143, I=100mA$)



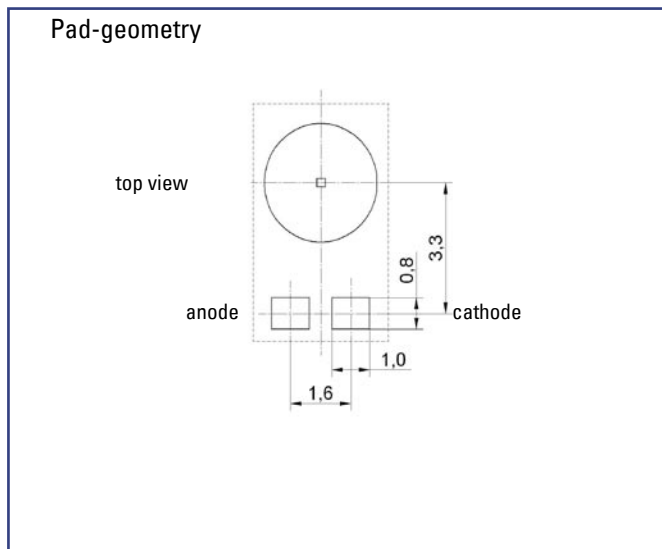


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► DIMENSIONS



► CONNECTOR PIN-ASSIGNMENT



PART DESIGNATION

OE-L-30-VA1-SL10-8-0117