

Radiation	Type	Technology	Case
Yellow-green	Standard	GaP/GaP	5 mm plastic lens

	Description Yellow-green LED in standard 5 mm package, with lens for optimal beam focusing, housing without standoff leads Note: Special packages with standoff available on request
	Applications Illumination, safety equipment, automation, optical sensors

Maximum Ratings

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	50	mA
Peak forward current	$(t_p \leq 50 \mu\text{s}, t_p/T = 1/2)$	I_{FM}	100	mA
Power dissipation		P_D	128	mW
Operating temperature range		T_{amb}	-20 to +80	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-30 to +100	$^{\circ}\text{C}$
Junction temperature		T_J	80	$^{\circ}\text{C}$
Soldering temperature	$t \leq 5 \text{ s}$, 3 mm from case	T_{sd}	260	$^{\circ}\text{C}$

Optical and Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		2.2	2.7	V
Forward voltage*	$I_F = 40 \text{ mA}$	V_F		2.4	3.0	V
Reverse voltage	$I_R = 10 \mu\text{A}$	V_F	5			V
Radiant power	$I_F = 20 \text{ mA}$	Φ_e	0,12	0,17		mW
Radiant intensity	$I_F = 20 \text{ mA}$	I_e	0,55	0,70		mW/sr
Luminous intensity	$I_F = 20 \text{ mA}$	I_v	270	350		mcd
Luminous intensity*	$I_F = 40 \text{ mA}$	I_v		700		mcd
Peak wavelength	$I_F = 20 \text{ mA}$	λ_p	560	572	580	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0,5}$		30		nm
Viewing angle	$I_F = 20 \text{ mA}$	φ		18		deg.
Switching time	$I_F = 20 \text{ mA}$	t_r, t_f			≤ 1	μs

*measured after 30s current flow

Note: All measurements carried out on *EPIGAP* equipment

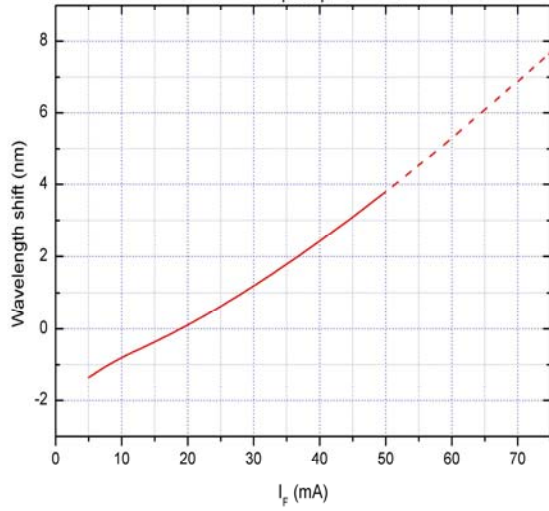
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Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

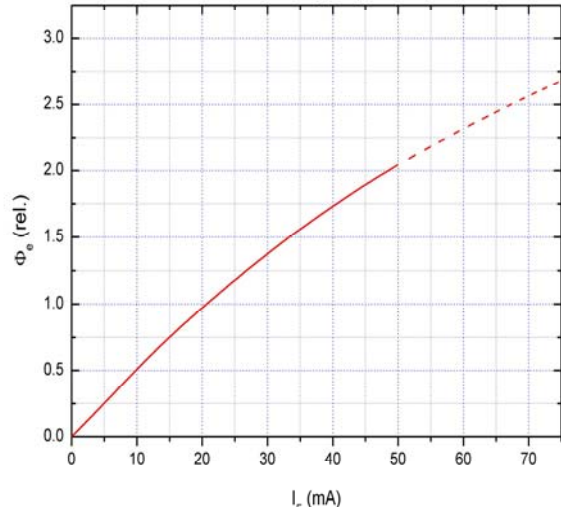
EPIGAP Optoelektronik GmbH, D-12555 Berlin, Köpenicker Str.325 b, Haus 201

Tel.: +49-30-6576 2543, Fax : +49-30-6576 2545

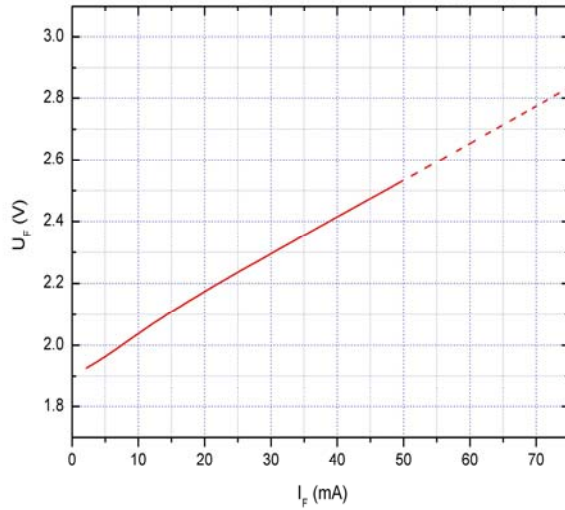
Typical wavelength shift vs. forward current
(rel. to λ_p @ $I_F = 20$ mA)



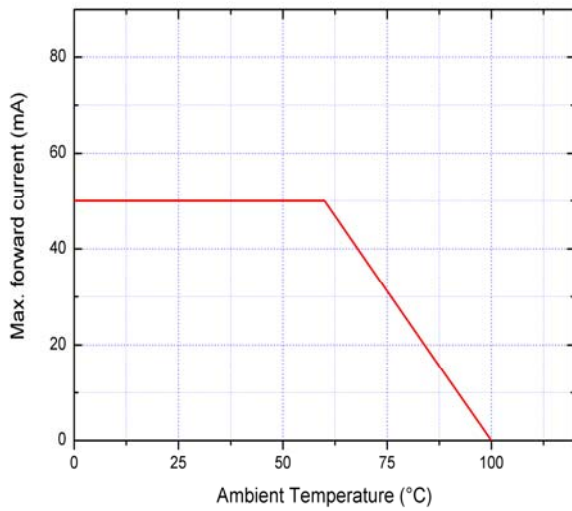
Radiant power vs. forward current (typical)
normalized to Φ_E @ $I_F = 20$ mA



Forward voltage vs. forward current (typical)



Ambient Temperature vs. maximal forward current



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