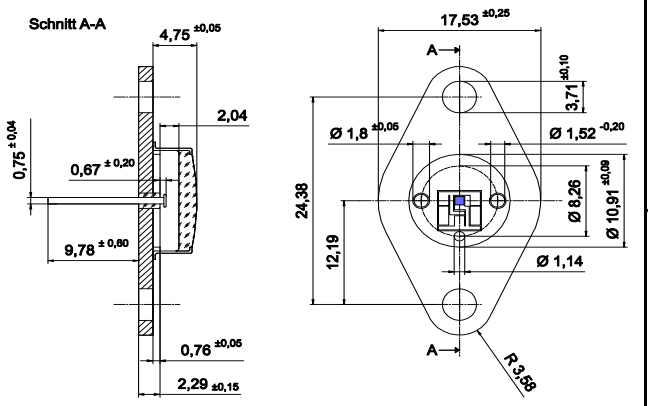
LED - Lamp

ELD-420-097

10.04.2008 rev. 01

Radiation	Type	Technology	Case
Violet	Standard	InGaN	TO-66



Description

High-power blue LED-Chip on TO-66 package

Note: Special packages without standoff available on request

Applications

Illumination, safety equipment, automation, biotechnology

Maximum Ratings

T_{amb} = 25℃, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	500	mA
Operating temperature range		T_{amb}	-40 to +85	℃
Storage temperature range		T_{stg}	-40 to +85	℃
Junction temperature		T_J	125	℃

Optical and Electrical Characteristics

T_{amb} = 25℃, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 350 mA	V_F		3.1	3.5	V
Forward voltage[1]	I_F = 500 mA	V_F		3.2		V
Reverse voltage	I_R = 100 µA	V_R	5			V
Radiant power	I_F = 350 mA	Φ_e	120	170		mW
Radiant power[1]	I_F = 500 mA	Φ_e		240		mW
Peak wavelength	I_F = 500 mA	λ_p	415	425	435	nm
Spectral bandwidth at 50%	I_F = 350 mA	$\Delta\lambda_{0.5}$		20		nm
Viewing angle	I_F = 350 mA	φ		115		deg.
Switching time	I_F = 350 mA	t_r, t_f		30		ns

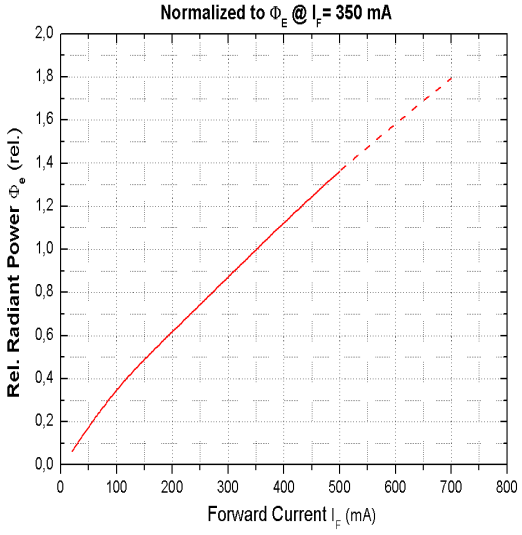
[1]for information only

Note: All measurements carried out on *EPIGAP* equipment

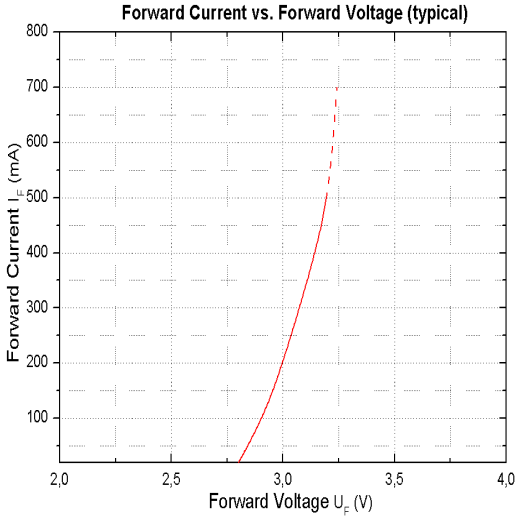
We reserve the right to make changes to improve technical design and may do so without further notice.
Parameters can vary in different applications. All operating parameters must be validated for each application by the customers themselves.

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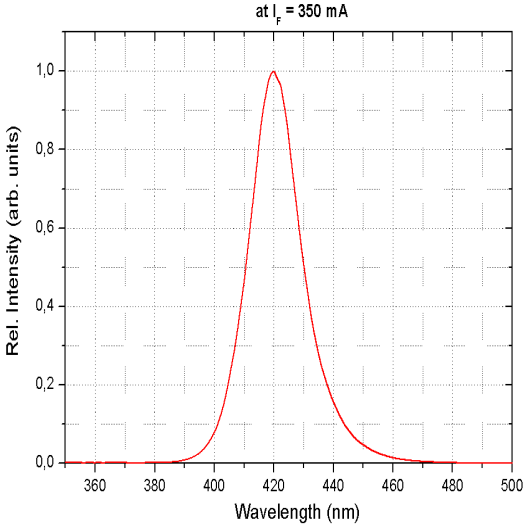
Radiant Power vs. Forward Current (typical)
Normalized to Φ_E @ I_F= 350 mA



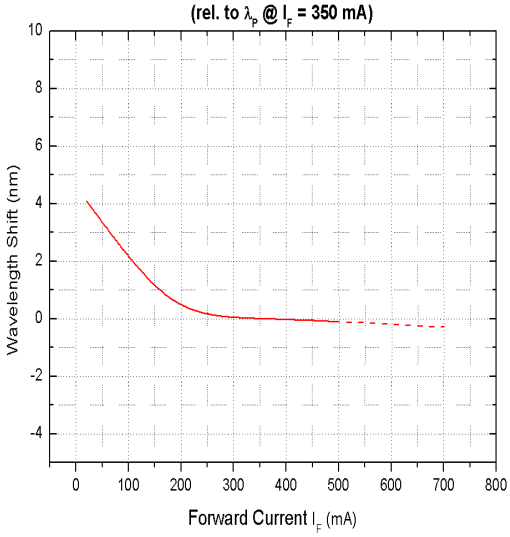
Forward Current vs. Forward Voltage (typical)



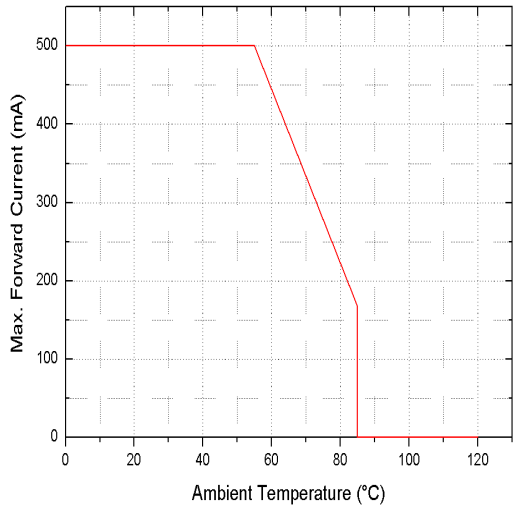
Spectral Power Distribution (typical)
at I_F = 350 mA



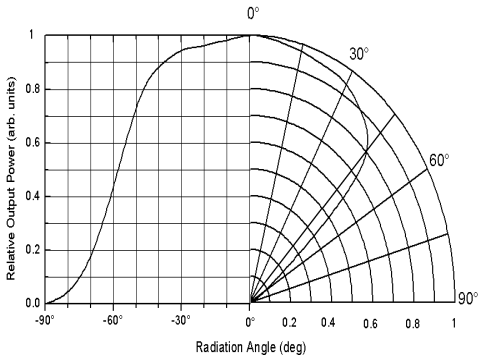
Typical Wavelength Shift vs. Forward Current
(rel. to λ_P @ I_F = 350 mA)



Ambient Temperature vs. Maximal Forward Current



Typical Radiant Pattern



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