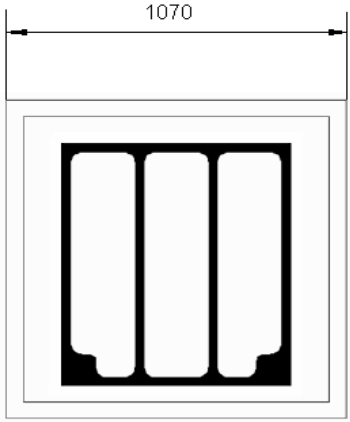


Radiation	Type	Technology	Electrodes
Violet	Special	InGaN	N (cathode) up

	typ. dimensions (± 50) μm
	<u>typ. thickness</u> 145 (± 15) μm <u>cathode</u> gold alloy, 2.5 μm <u>anode</u> gold alloy, 1.5 μm

Absolute Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
DC forward current		I_F	500	mA
Peak forward current	$t_p \leq 100 \mu\text{s}$, $D = 0.05$	I_{FM}	2	A
Operating temperature range		T_{amb}	-40 to +110	$^\circ\text{C}$
Storage temperature range		T_{stg}	-40 to +110	$^\circ\text{C}$
Junction temperature		T_j	125	$^\circ\text{C}$

Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		2.8	3.2	V
Forward voltage ¹	$I_F = 350 \text{ mA}$	V_F		3.1	3.5	V
Reverse voltage	$I_R = 10 \mu\text{A}$	V_R	5			V
Radiant power ¹	$I_F = 20 \text{ mA}$	Φ_e	10	14		mW
Radiant power ^{1,2}	$I_F = 350 \text{ mA}$	Φ_e		240		mW
Peak wavelength	$I_F = 350 \text{ mA}$	λ_p	410	420	430	nm
Spectral bandwidth at 50%	$I_F = 350 \text{ mA}$	$\Delta\lambda_{0.5}$		20		nm
Switching time	$I_F = 350 \text{ mA}$	t_r, t_f		30		ns

¹) Measured on bare chip on TO-66 header

²) only recommended on optimal heat sink

Labeling

Type	Lot N°	$\Phi_e(\text{typ})$ [mW]	$V_F(\text{typ})$ [V]	$\lambda_p(\text{typ})$ [nm]	Quantity
ELC-420-21					

Packing: Chips on adhesive film with wire-bond side on top

Note: All measurements carried out with *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 customer themselves.

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