

Radiation	Type	Technology	Electrodes
Green	Standard	InGaN/Al <sub>2</sub> O <sub>3</sub>	Both on top side

typ. dimensions in  $\mu\text{m}$  ( $\pm 20 \mu\text{m}$ )

typ. thickness  
90 ( $\pm 20$ )  $\mu\text{m}$

front side metalization  
Au-alloy, 0.5  $\mu\text{m}$

backside metalization  
Al-alloy, 1.5  $\mu\text{m}$

### Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		$I_F$	20	mA
Peak forward current	( $t_P \leq 50 \mu\text{s}$ , $t_P/T = 1/2$ )	$I_{FM}$	100	mA
Operating temperature range		$T_{\text{amb}}$	-40 to +85	°C
Storage temperature range		$T_{\text{stg}}$	-40 to +100	°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	$I_F = 20 \text{ mA}$	$V_F$		3.3	3.5	V
Reverse voltage	$I_F = 1 \mu\text{A}$	$V_R$	5			V
Luminous intensity <sup>1</sup>	$I_F = 20 \text{ mA}$	$I_v$	220	280		mcd
Dominant wavelength	$I_F = 20 \text{ mA}$	$\lambda_D$	480	490	500	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		25		nm
Switching time	$I_F = 20 \text{ mA}$	$t_r, t_f$		20		ns

<sup>1</sup>Measured on bare chip on TO-18 header with EPIGAP equipment

### Labeling

Type	Lot N°	$I_v(\text{typ})$ [mcd]	$V_F(\text{typ})$ [V]	Quantity
ELC-490-37				

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