

# EPIGAP Optronik GmbH

Koepenicker Str. 325b  
 D-12555 Berlin  
 Fon: +49 (0)30 657637 60  
 Fax: +49 (0)30 657637 70  
 sales@epigap-optronic.de



## Data Sheet

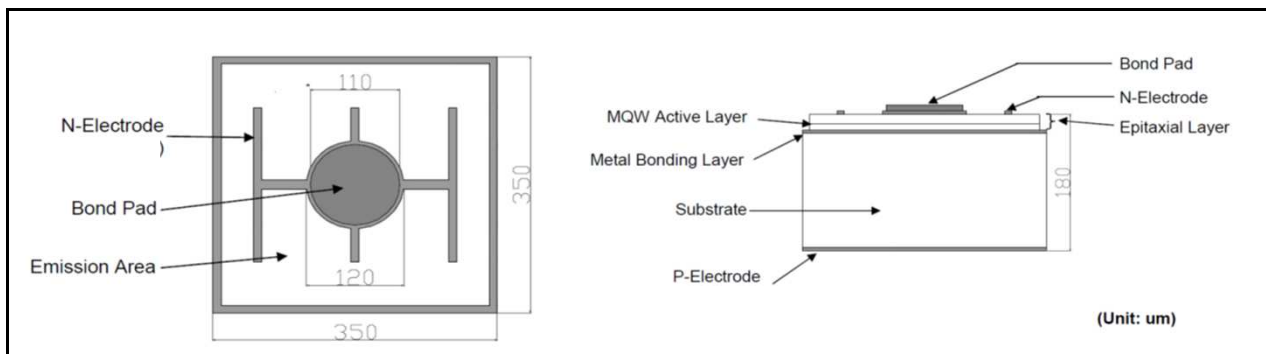
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### LED Chip Infrared

### EOLC-850-25-1D

Rev. 04, 2017

Radiation	Type	Electrodes
Infrared	InAlGaAs epitaxial layer, MQW / Si	n (cathode) up



### Optical and Electrical Characteristics

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

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	$V_F$		1.4		V
Forward voltage	$I_F = 70 \text{ mA}$	$V_F$		1.5		V
Forward voltage	$I_F = 100 \text{ mA}$	$V_F$		1.55		V
Reverse current	$V_R = 5 \text{ V}$	$I_R$			10	$\mu\text{A}$
Radiant power*	$I_F = 20 \text{ mA}$	$\Phi_e$	7.5	9	11	mW
Radiant power*	$I_F = 50 \text{ mA}$	$\Phi_e$		26		mW
Radiant power*	$I_F = 70 \text{ mA}$	$\Phi_e$		36		mW
Radiant power*	$I_F = 100 \text{ mA}$	$\Phi_e$		43		mW
Radiant power**	$I_F = 20 \text{ mA}$	$\Phi_e$		15		mW
Radiant power**	$I_F = 50 \text{ mA}$	$\Phi_e$		41		mW
Radiant power**	$I_F = 70 \text{ mA}$	$\Phi_e$		57		mW
Radiant power**	$I_F = 100 \text{ mA}$	$\Phi_e$		79		mW
Peak wavelength	$I_F = 20 \text{ mA}$	$\lambda_p$		850		nm
FWHM	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		25		nm

\*Measured on bare chip on TO-18 header; \*\*Measured on epoxy covered chip on TO-18 header

### Packing

Dice on adhesive film with wire bond side up.



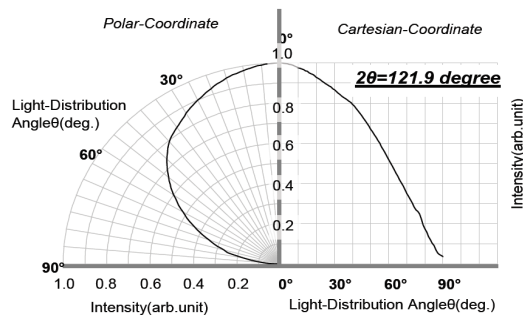
We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

**Data Sheet**

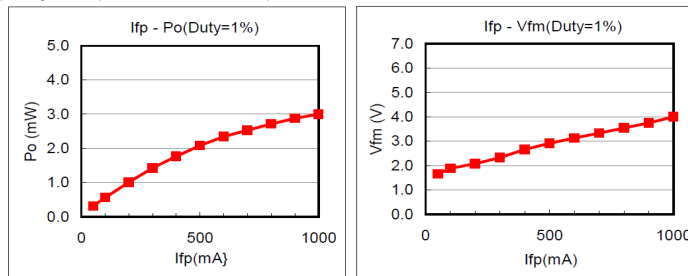
**LED Chip Infrared**

**EOLC-850-25-1**

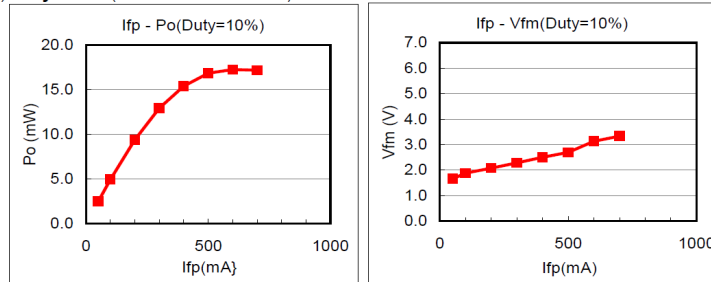
<Measurement condition>  
 LED-chip is mounted on TO-18 gold stem without resin coated )  
 If=10mA  
 Distance: 200mm  
 Ta=R.T.



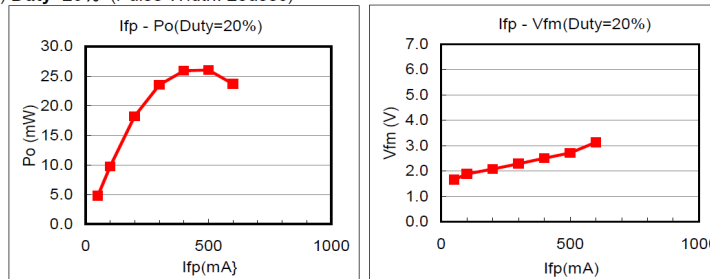
(1) **Duty=1%** (Pulse Width: 20usec)



(2) **Duty=10%** (Pulse Width: 20usec)



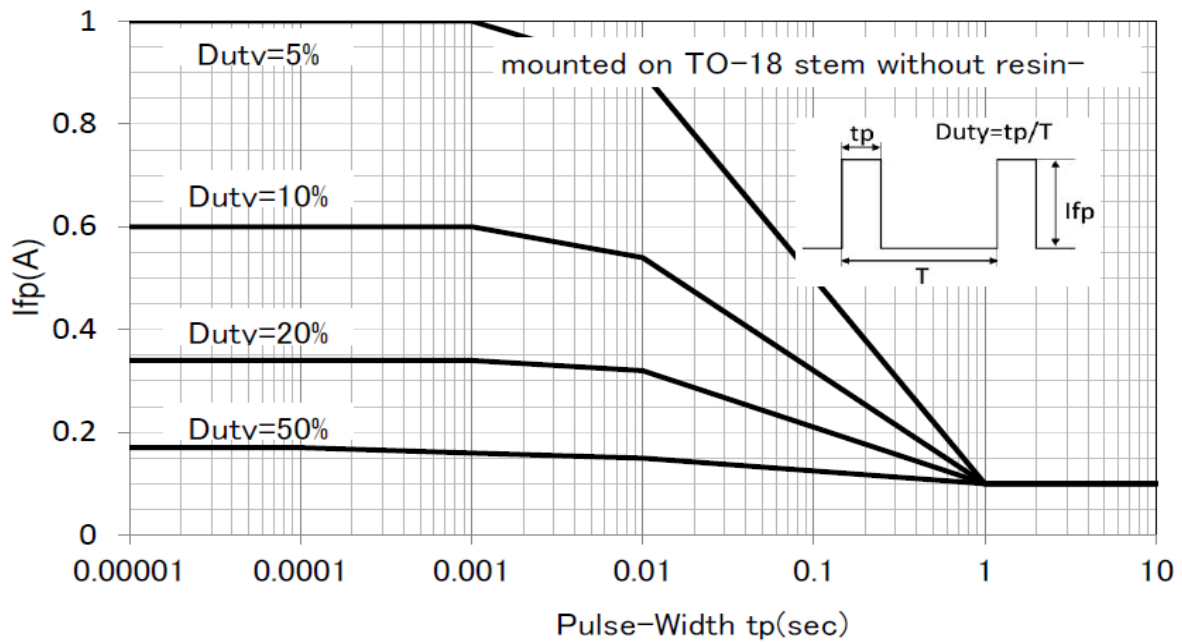
(3) **Duty=20%** (Pulse Width: 20usec)



**Data Sheet**

**LED Chip Infrared**

**EOLC-850-25-1**



Permissible pulse handling capability at 25 °C.

Art. No. 113 046



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