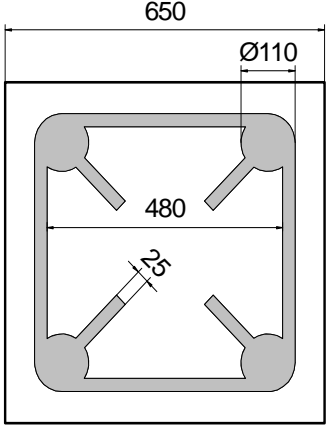


Radiation	Type	Technology	Electrodes
Infrared	DDH	AlGaAs/AlGaAs	P (anode) up

 <p style="text-align: center;">LED-07</p>	typ. dimensions ( $\mu\text{m}$ )	
	<u>typ. thickness</u> 180 $\mu\text{m}$  <u>anode</u> gold alloy, 1.5 $\mu\text{m}$  <u>cathode</u> gold alloy, 0.5 $\mu\text{m}$ structured, 25% covered	

### Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	$V_F$		1.3	1.6	V
Forward voltage <sup>3</sup>	$I_F = 300 \text{ mA}$	$V_F$		1.6		V
Reverse voltage	$I_R = 100 \mu\text{A}$	$V_R$	5			V
Radiant power <sup>1</sup>	$I_F = 20 \text{ mA}$	$\Phi_e$	2.8	3.7		mW
Radiant power <sup>2</sup>	$I_F = 20 \text{ mA}$	$\Phi_e$		7.0		mW
Radiant power <sup>3</sup>	$I_F = 300 \text{ mA}$	$\Phi_e$		50		mW
Radiant intensity <sup>1</sup>	$I_F = 20 \text{ mA}$	$I_e$	0.75	1.0		mW/sr
Radiant intensity <sup>3</sup>	$I_F = 300 \text{ mA}$	$I_e$		13.5		mW/sr
Peak wavelength	$I_F = 20 \text{ mA}$	$\lambda_p$	860	870	880	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		45		nm
Switching time	$I_F = 20 \text{ mA}$	$t_r, t_f$		10/25		ns

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

<sup>2</sup>Measured on epoxy covered chip on TO-18 header

<sup>3</sup>Measured on bare chip on TO-18 header and heat sink, 10s current flow (information only)

Note: All measurements carried out with JENOPTIK Polymer Systems equipment

### Labeling

Type	Lot N°	$\Phi_e(\text{typ})$ [mW]	$V_F(\text{typ})$ [V]	Quantity
ELC-870-12				

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

Environmental		Symbol	Min	Typ	Max	Unit
Storage Temperature	on Blue Tape	$T_{\text{STG}}$	15		30	$^{\circ}\text{C}$
Storage Relative Humidity	on Blue Tape	$\text{RH}_{\text{STG}}$	40		75	% RH
Storage Time	on Blue Tape	$t_{\text{STG}}$			1	year

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.

JENOPTIK Polymer Systems GmbH, D-12555 Berlin, Köpenicker Str.325 b, Haus 201

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