

Radiation	Type	Technology	Electrodes
Infrared	DDH	AlGaAs/AlGaAs	N (cathode) up

<p>LED-07</p>	typ. dimensions (μm)
	<p>typ. thickness 180 μm</p> <p><u>anode</u> gold alloy, 1.5 μm</p> <p><u>cathode</u> gold alloy, 0.5 μm structured, 25% covered</p>

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		1.2	1.4	V
Forward voltage	$I_F = 100 \text{ mA}$	V_F		1.45	1.8	V
Reverse voltage	$I_R = 100 \mu\text{A}$	V_R	5			V
Radiant power ¹	$I_F = 20 \text{ mA}$	Φ_e	2.5	3.5		mW
Radiant power ²	$I_F = 100 \text{ mA}$	Φ_e		17		mW
Radiant power ³	$I_F = 100 \text{ mA}$	Φ_e		35		mW
Radiant intensity ¹	$I_F = 20 \text{ mA}$	I_e	0.75	1.0		mW/sr
Peak wavelength	$I_F = 100 \text{ mA}$	λ_p	860	875	890	nm
Spectral bandwidth at 50%	$I_F = 100 \text{ mA}$	$\Delta\lambda_{0.5}$		45		nm
Switching time	$I_F = 100 \text{ mA}$	t_r, t_f		20		ns

¹Measured on bare chip on TO-18 header

²Measured on bare chip on TO-18 header and heat sink

³Measured on epoxy chip on TO-18 header and heat sink, 10s current flow (information only)

Labeling

Type	Lot N°	$\Phi_e(\text{typ})$ [mW]	$V_F(\text{typ})$ [V]	Quantity
ELC-875-22				

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

Note: All measurements carried out with JENOPTIK Polymer Systems 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 customer application by the customer.

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