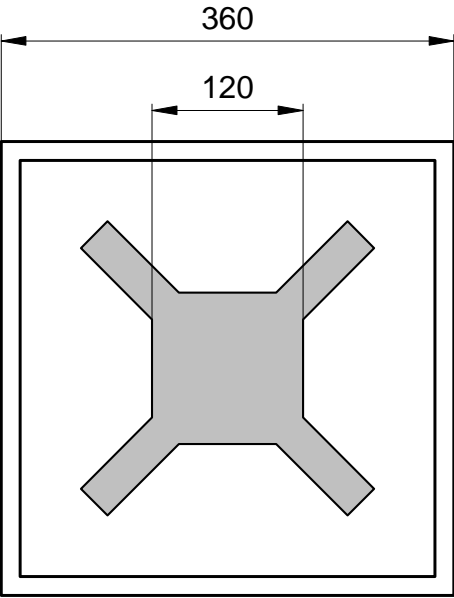


| Radiation | Type | Technology | Electrodes |
|-----------|------|-------------|----------------|
| Infrared | DH | AlGaAs/GaAs | N (cathode) up |

| | |
|---|---|
|  <p style="text-align: center;">LED-05</p> | typ. dimensions (μm) |
| | <u>typ. thickness</u> 260 (± 20) μm <u>cathode</u> gold alloy, 1.5 μm <u>anode</u> gold alloy, 0.5 μm |

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 | | 1.35 | 1.5 | V |
| Reverse voltage | $I_R = 100 \mu\text{A}$ | V_R | 5 | | | V |
| Radiant power ¹ | $I_F = 20 \text{ mA}$ | Φ_e | 1.0 | 2.0 | | mW |
| Radiant power ² | $I_F = 20 \text{ mA}$ | Φ_e | | 4.0 | | mW |
| Peak wavelength | $I_F = 20 \text{ mA}$ | λ_p | 860 | 875 | 890 | 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 | | 35 | | ns |

¹Measured on bare chip on TO-18 header with JENOPTIK Polymer Systems equipment

²Measured on epoxy covered chip on TO-18 header with JENOPTIK Polymer Systems equipment

Labeling

| Type | Lot N° | $\Phi_e(\text{typ})$ [mW] | $V_F(\text{typ})$ [V] | Quantity |
|--------------|--------|---------------------------|-----------------------|----------|
| ELC-870-27-1 | | | | |

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

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

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