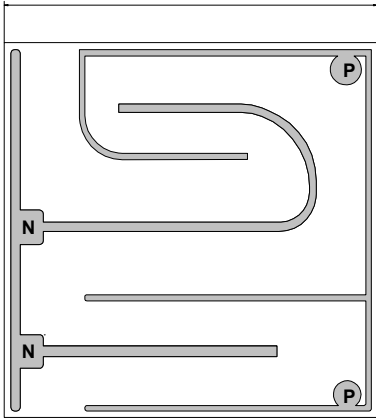


| Radiation | Type     | Technology                           | Electrodes       |
|-----------|----------|--------------------------------------|------------------|
| Blue      | Standard | InGaN/Al <sub>2</sub> O <sub>3</sub> | Both on top side |

|                                                                                   |                                                                                                                                                                                                      |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | typ. dimensions ( $\pm 25$ ) $\mu\text{m}$                                                                                                                                                           |  |
|                                                                                   | <u>typ. thickness</u><br>90 ( $\pm 10$ ) $\mu\text{m}$<br><br><u>contact metalization</u><br>gold alloy, 1.5 $\mu\text{m}$<br><br><u>backside metalization</u><br>aluminium alloy, 1.0 $\mu\text{m}$ |  |

### Optical and Electrical Characteristics

T<sub>amb</sub> = 25°C, unless otherwise specified

| Parameter                        | Test conditions                   | Symbol                          | Min  | Typ  | Max | Unit |
|----------------------------------|-----------------------------------|---------------------------------|------|------|-----|------|
| Forward voltage                  | I <sub>F</sub> = 20 mA            | V <sub>F</sub>                  |      | 2.7  | 3.0 | V    |
| Forward voltage <sup>1)</sup>    | I <sub>F</sub> = 350 mA           | V <sub>F</sub>                  |      | 3.24 | 3.7 | V    |
| Reverse voltage                  | I <sub>R</sub> = 10 $\mu\text{A}$ | V <sub>R</sub>                  | 5    |      |     | V    |
| Radiant power                    | I <sub>F</sub> = 20 mA            | $\Phi_e$                        | 8.8  | 11.5 |     | mW   |
| Radiant power <sup>1,2)</sup>    | I <sub>F</sub> = 350 mA           | $\Phi_e$                        |      | 150  |     | mW   |
| Luminous intensity <sup>1)</sup> | I <sub>F</sub> = 350 mA           | I <sub>V</sub>                  | 6000 | 6500 |     | mcd  |
| Peak wavelength                  | I <sub>F</sub> = 350 mA           | $\lambda_P$                     |      | 467  |     | nm   |
| Dominant wavelength              | I <sub>F</sub> = 350 mA           | $\lambda_P$                     | 465  | 470  | 475 | nm   |
| Spectral bandwidth at 50%        | I <sub>F</sub> = 350 mA           | $\Delta\lambda_{0.5}$           |      | 35   |     | nm   |
| Switching time                   | I <sub>F</sub> = 20 mA            | t <sub>r</sub> , t <sub>f</sub> |      | 60   |     | ns   |

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

<sup>2)</sup> information only

### Labeling

| Type         | Lot N° | $\Phi_e(\text{typ})$ [mW] | V <sub>F</sub> (typ) [V] | Quantity |
|--------------|--------|---------------------------|--------------------------|----------|
| ELC-470-31-1 |        |                           |                          |          |

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

Note: All measurements carried out with *EPIGAP* equipment