

| Radiation | Type         | Technology   | Electrodes     |
|-----------|--------------|--------------|----------------|
| Red       | Point Source | AlInGaP/GaAs | N (cathode) up |

|              |   |  |
|--------------|---|--|
| <p>PS-03</p> | typ. dimensions ( $\mu\text{m}$ )                       |  |
|              | <u>typ. thickness</u><br>250 ( $\pm 20$ ) $\mu\text{m}$ |  |
|              | <u>cathode</u><br>gold alloy, 1.5 $\mu\text{m}$         |  |
|              | <u>anode</u><br>gold alloy, 0.5 $\mu\text{m}$           |  |

### Maximum Ratings

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

| Parameter            | Test conditions | Symbol | Min | Typ | Max | Unit |
|----------------------|-----------------|--------|-----|-----|-----|------|
| Forward current (DC) |                 | $I_F$  |     |     | 35  | mA   |

### Optical and Electrical Characteristics

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

| Parameter                 | Test conditions        | Symbol                | Min | Typ   | Max | Unit          |
|---------------------------|------------------------|-----------------------|-----|-------|-----|---------------|
| Forward voltage           | $I_F = 5 \text{ mA}$   | $V_F$                 |     | 1.85  | 2.4 | V             |
| Reverse voltage           | $I_R = 10 \mu\text{A}$ | $V_R$                 | 5   |       |     | V             |
| Radiant power*            | $I_F = 5 \text{ mA}$   | $\Phi_e$              | 100 | 200   |     | $\mu\text{W}$ |
| Luminous intensity*       | $I_F = 5 \text{ mA}$   | $I_V$                 | 5   | 7     |     | mcd           |
| Peak wavelength           | $I_F = 5 \text{ mA}$   | $\lambda_p$           | 645 | 655   | 665 | nm            |
| Spectral bandwidth at 50% | $I_F = 5 \text{ mA}$   | $\Delta\lambda_{0.5}$ |     | 20    |     | nm            |
| Switching time            | $I_F = 5 \text{ mA}$   | $t_r, t_f$            |     | 40/30 |     | ns            |

\*Measured on bare chip on TO-18 header with *EPIGAP* equipment

### Labeling

| Type          | Lot N° | $I_V(\text{typ})$ [mcd] | $V_F(\text{typ})$ [V] | Quantity |
|---------------|--------|-------------------------|-----------------------|----------|
| ELC-650-29-50 |        |                         |                       |          |

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