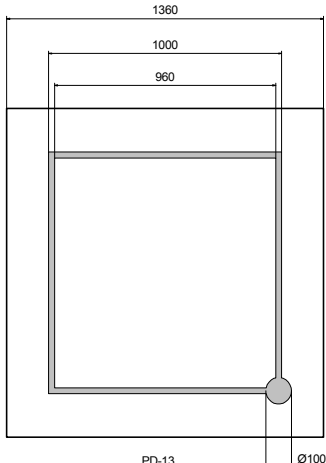


| Wavelength range | Type              | Technology | Electrodes   |
|------------------|-------------------|------------|--------------|
| Green, selective | Integrated filter | GaP        | P (anode) up |

|   |  |  |
|---|--|--|
|  | typ. dimensions (µm)   |  |
|   | typ. thickness<br>270 (±20) µm<br><br>anode<br>gold alloy, 1.5 µm<br><br>cathode<br>gold alloy, 0.5 µm | <b>Description</b><br>Narrow bandwidth and high spectral sensitivity in the range of max. eye responsivity (480...560 nm), low cost chip<br><br><b>Applications</b><br>Nearly $V_{\lambda}$ matched detection, measurement systems, daylight sensors |

## Miscellaneous Parameters

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

| Parameter                              | Test conditions                     | Symbol           | Value       | Unit            |
|--|-------------------------------------|------------------|-------------|-----------------|
| Active area                            |                                     | A                | 1.79        | mm <sup>2</sup> |
| Operating temperature range            |                                     | $T_{amb}$        | -40 to +125 | °C              |
| Storage temperature range              |                                     | $T_{stg}$        | -40 to +125 | °C              |
| Temperature coefficient of $I_D$       | $T = -40 \dots 120^{\circ}\text{C}$ | $TC_{ID}$        | 4.7         | %/K             |
| Temperature coefficient of $I_{PH}$    | $T = -40 \dots 120^{\circ}\text{C}$ | $TC_{IPH}$       | 0.25        | %/K             |
| Temperature coefficient of $\lambda_c$ | $T = -40 \dots 120^{\circ}\text{C}$ | $TC_{\lambda_c}$ | 0.15        | nm/K            |

## Optical and Electrical Characteristics

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

| Parameter                                | Test conditions     | Symbol                | Min  | Typ  | Max  | Unit |
|--|---------------------|-----------------------|------|------|------|------|
| Spectral range at 0.5 max.               | $V_R = 0 \text{ V}$ | $\lambda_{0.5}$       | 480  |      | 560  | nm   |
| Responsivity at 525 nm <sup>1</sup>      | $V_R = 0 \text{ V}$ | $S_{\lambda}$         | 0.04 | 0.08 | 0.15 | A/W  |
| Responsivity at 525 nm <sup>2</sup>      | $V_R = 0 \text{ V}$ | $S_{\lambda}$         | 0.15 | 0.25 | 0.38 | A/W  |
| Spectral bandwidth at 50%                | $V_R = 0 \text{ V}$ | $\Delta\lambda_{0.5}$ |      | 75   |      | nm   |
| Dark current ( $E_e = 0 \text{ W/m}^2$ ) | $V_R = 5 \text{ V}$ | $I_D$                 |      | 5    | 30   | pA   |
| Central sensitivity wavelength           | $V_R = 0 \text{ V}$ | $\lambda_c$           | 510  | 525  | 535  | nm   |

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

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

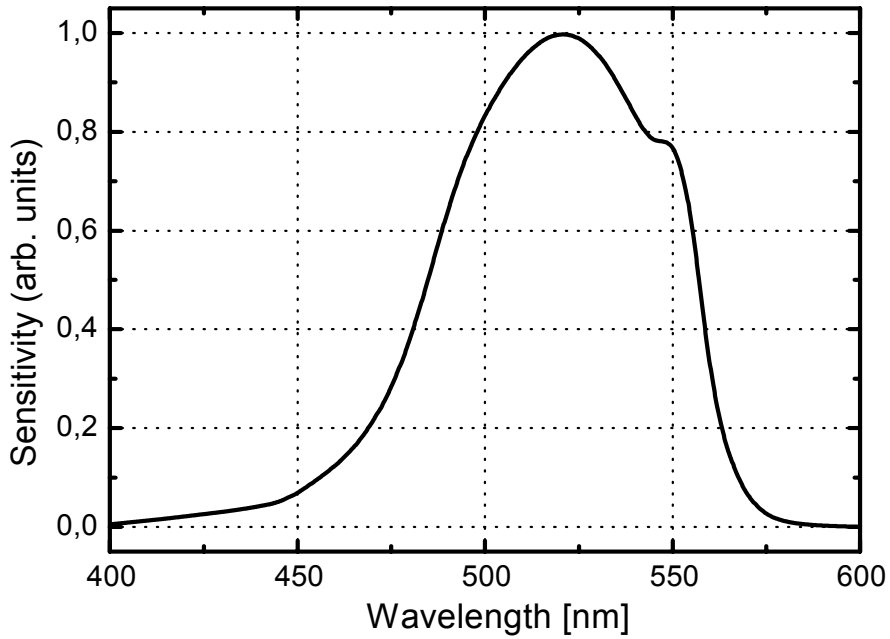
## Labeling

| Type        | Typ. $I_D$ [pA] | Typ. $S_{\lambda}$ [A/W] | Lot N° | Quantity |
|-------------|-----------------|--------------------------|--------|----------|
| EPC-525-1.4 |                 |                          |        |          |

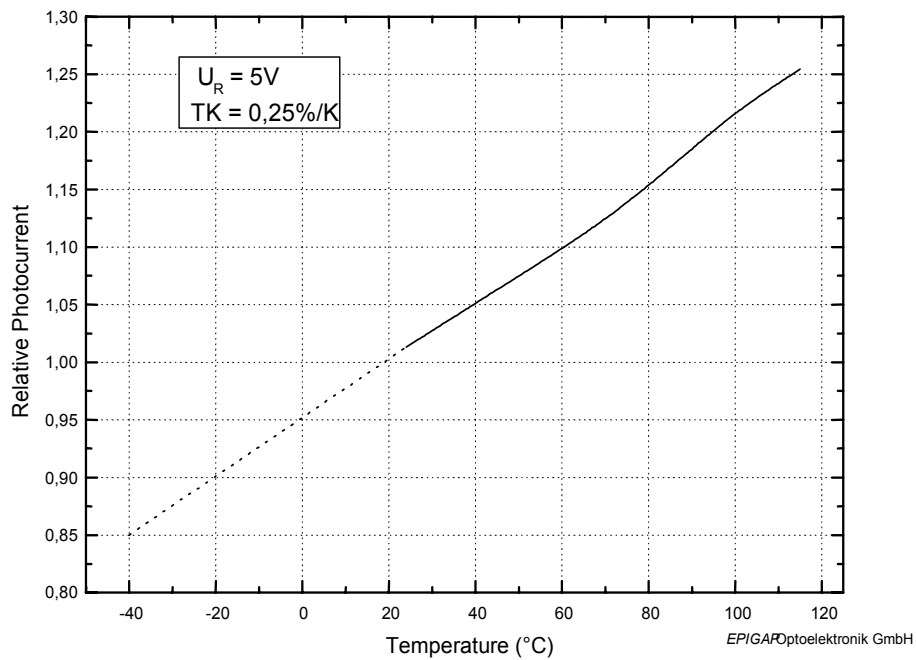
**Packing:** Chips on adhesive film with wire-bond side on top

\*Note: All measurements carried out with *EPIGAP* equipment

Responsivity spectrum



Relative Photocurrent vs. Temperature of EPC-525-1.4



Dark Current vs. Temperature of EPC-525-1.4

