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Data Sheet

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Selective photodiode

EOPD-525-1-0.9-1

Rev. 02, 2017

| Wavelength range | Type | Case |
|------------------|------|----------|
| green | GaP | SMD 3216 |

| Description: | |
|---|--|
| <p>Unit: mm Tolerance: $\pm 0,1$</p> <p>All sizes in mm</p> | |
| Applications: | |
| <p>Alarm systems, light barriers, daylight sensors, for nearly Vλ matched detectors.</p> | |

Maximum Ratings

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

| Parameter | Symbol | Value | Unit |
|--|-------------------|-------------|--------------------|
| Active area | A | 0.73 | mm ² |
| Temperature coefficient of I_D | TC(I_D) | 5 | %/K |
| Temperature coefficient of I_{PH} | TC(I_{PH}) | 0.25 | %/K |
| Temperature coefficient of λ_C | TC(λ_C) | 0.15 | nm/K |
| Operating temperature range | T_{amb} | -20 to +85 | $^{\circ}\text{C}$ |
| Storage temperature range | T_{stg} | -40 to +100 | $^{\circ}\text{C}$ |



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.

Data Sheet

Selective photodiode

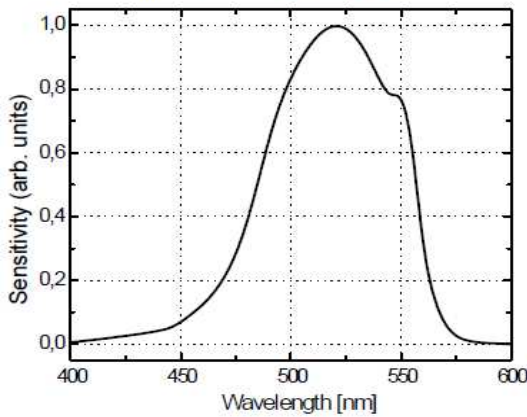
EOPD-525-1-0.9-1

Optical and Electrical Characteristics

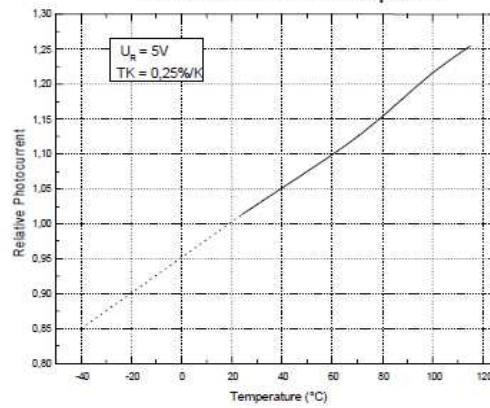
T_{amb}= 23°C, unless otherwise specified

| Parameter | Test conditions | Symbol | Min | Typ | Max | Unit |
|--|---------------------|-------------------------------------|-----|-----|-----|------|
| Dark current | V _R =5 V | I _D | | 5 | 30 | pA |
| Peak sensitivity wavelength | V _R =0 V | λ _p | | 525 | | nm |
| Responsivity at λ _p | V _R =0 V | S _λ | | 0.3 | | A/W |
| Sensitivity range at 1% | V _R =0 V | λ _{min} , λ _{max} | 410 | | 580 | nm |
| Spectral bandwidth at 50% | V _R =0 V | Δλ _{0,5} | | 70 | | nm |
| Junction capacitance | V _R =0 V | C _J | | 100 | | pF |
| Switching times (R _L =50 Ω) | V _R =1 V | t _r ; t _f | | 35 | | ns |

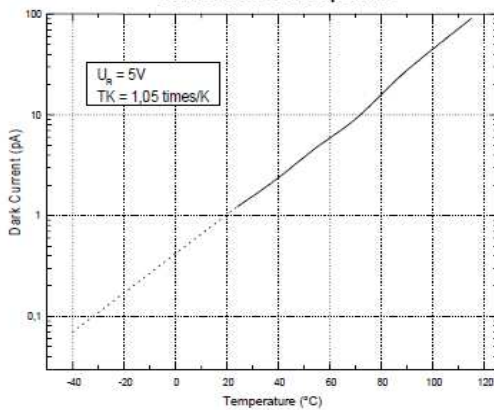
Optical responsivity (typically)



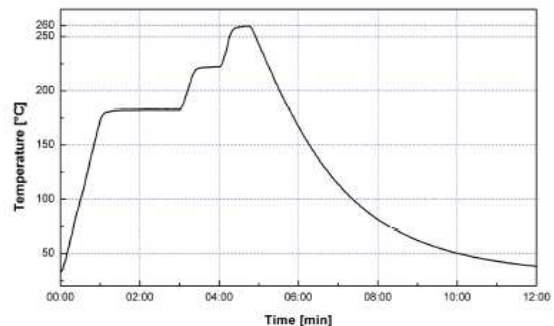
Relative Photocurrent vs. Temperature



Dark Current vs. Temperature



Allowable soldering profile



Art. No. 142 005



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