

UV – Photodiode with integrated amplifier

JIC 119-22
JIC 119-22L



- characteristics :**
- ◆ spectral range 210...390 nm
 - ◆ active area 0,055 mm²
 - ◆ optional version with lense cap (version -L)
 - ◆ very high UV-responsivity
 - ◆ integrated amplifier
 - ◆ single supply voltage
 - ◆ sensor assembly isolated to ground
 - ◆ full hermetically sealed glass/metall package
 - ◆ replacement for obsolete components UV10.T2E.10F and UV10.T2E.10L (PerkinElmer) (not pincompatible !)
 - ◆ components are in conformity with RoHS and WEEE

- applications :**
- ◆ flamedetection and -control in burners
 - ◆ UV-measurement
 - ◆ measurement of very low UV-levels

absolute maximum ratings :

| | | |
|---------------------------|-----------------|----|
| supply voltage | +5,5 | V |
| working temperature range | -25 °C ... +85 | °C |
| storage temperature range | -40 °C ... +100 | °C |
| welding temperature (5s) | 300 | °C |

technical data:

common test conditions, as not otherwise specified: T_A = 25 °C, V_S = +5 V

| parameter | test condition | JIC 119-22 | JIC 119-22L | unit |
|----------------------------|-----------------------|-------------|-------------|---------------------|
| feedback resistor | | 22 | 22 | GΩ |
| dark offset voltage | E = 0 lx | ±0,5 (±2) | ±0,5 (±2) | mV |
| noise voltage | B = 10 Hz | 1 | 1 | mV _{rms} |
| max. spectral responsivity | λ = 280 nm | 0,1 | 6 | V/mW/m ² |
| risetime | | 10 | 10 | ms |
| bandwidth | - 3 dB | 25 | 25 | Hz |
| saturation voltage | R _L = 2 kΩ | +4,95(+4,8) | +4,95(+4,8) | V |
| short current | | ± 50 | ± 50 | mA |
| operating voltage | | 2,5...5,0 | 2,5...5,0 | V |
| current consumption | | 0,55 (0,90) | 0,55 (0,90) | mA |

rev3 (03/2009)

For more information:

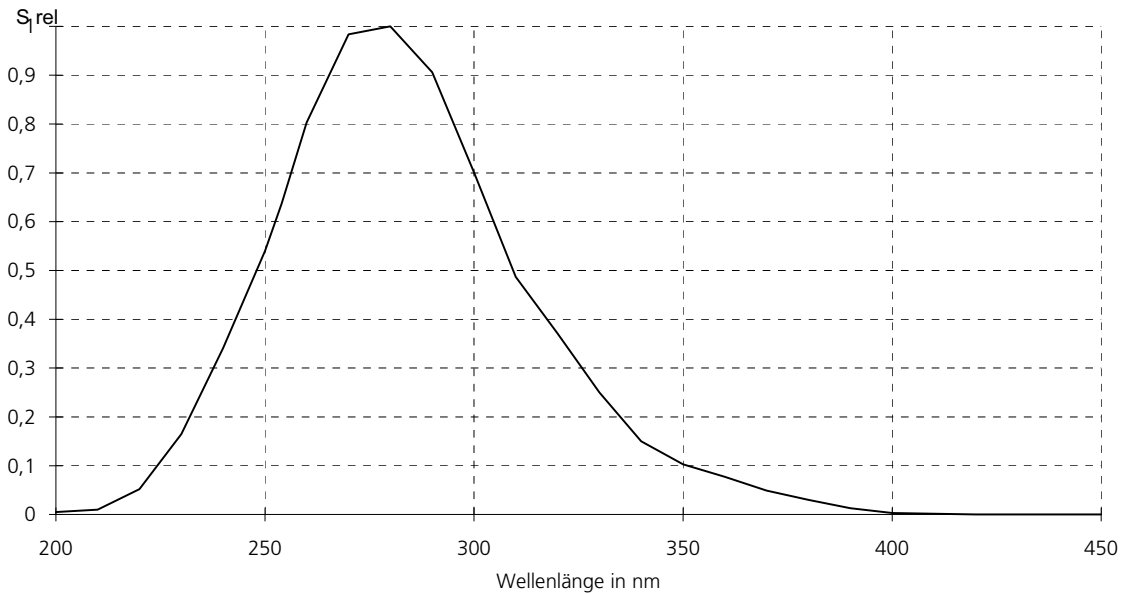
Electro Optical Components, 5460 Skyline Blvd., Santa Rosa, CA 95403
Phone: (707) 568-1642 | Fax: (707) 568-1652 | Email: info@eoc-inc.com

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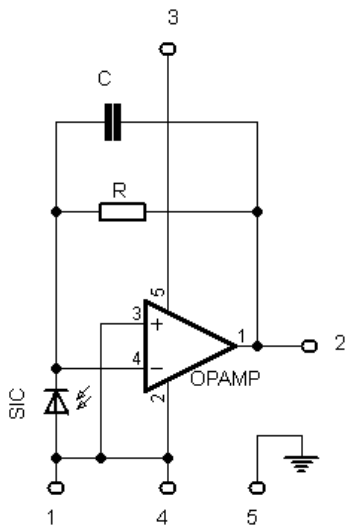
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JIC 119-22, JIC 119-22L

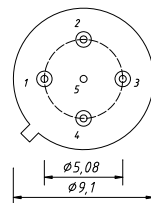
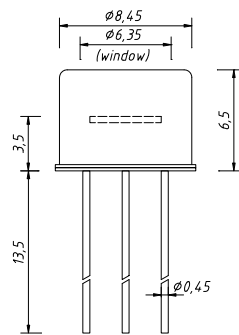
relative spectral responsivity



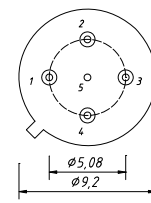
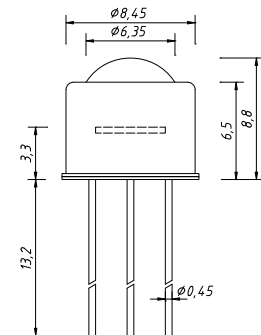
internal circuit



package dimension (bottom view)



JIC 119-22



JIC 119-22L

- 1 GND
- 2 Out
- 3 V_s
- 4 GND
- 5 Case

application hints:

- please make sure that length of connectors is as short as possible to reduce noise and capacitive interference.