



## UV – Photodiode with integrated amplifier

**JIC 119-22**  
**JIC 119-22L**



- characteristics :**
- ◆ spectral range 210...390 nm
  - ◆ active area 0,055 mm<sup>2</sup>
  - ◆ 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

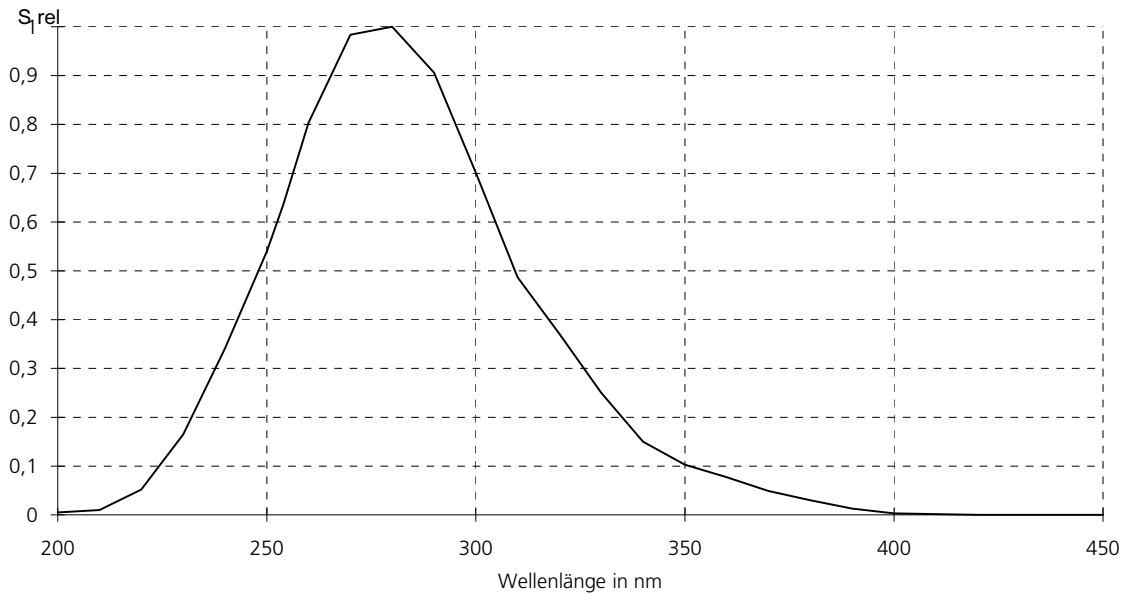
**technical data:**

common test conditions, as not otherwise specified: T<sub>A</sub> = 25 °C, V<sub>S</sub> = +5 V

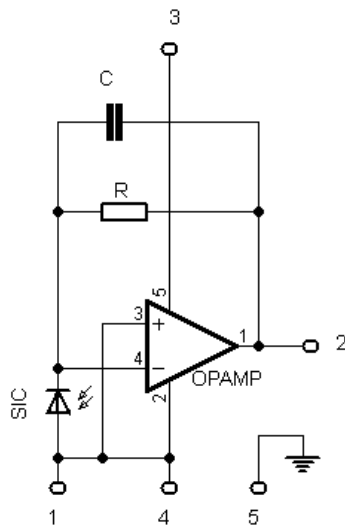
parameter	test condition	JIC 119-22	JIC 119-22L	unit
feedback resistor		22	22	GΩ
dark offset voltage	E = 0 lx	±0,5 (±2)	±0,5 (±2)	mV
noise voltage	B = 10 Hz	1	1	mV <sub>rms</sub>
max. spectral responsivity	λ = 280 nm	0,1	6	V/mW/m <sup>2</sup>
risetime		10	10	ms
bandwidth	- 3 dB	25	25	Hz
saturation voltage	R <sub>L</sub> = 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

# JIC 119-22, JIC 119-22L

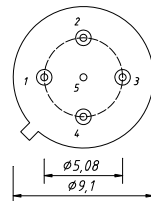
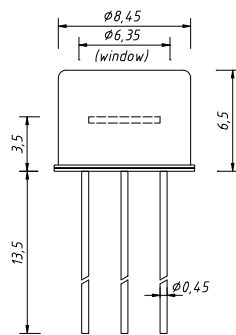
## relative spectral responsivity



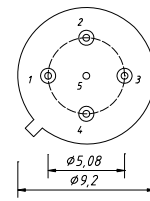
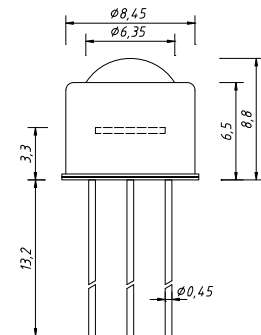
## internal circuit



## package dimension (bottom view)



JIC 119-22



JIC 119-22L

- 1 GND
- 2 Out
- 3 V<sub>s</sub>
- 4 GND
- 5 Case

## application hints:

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