

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:

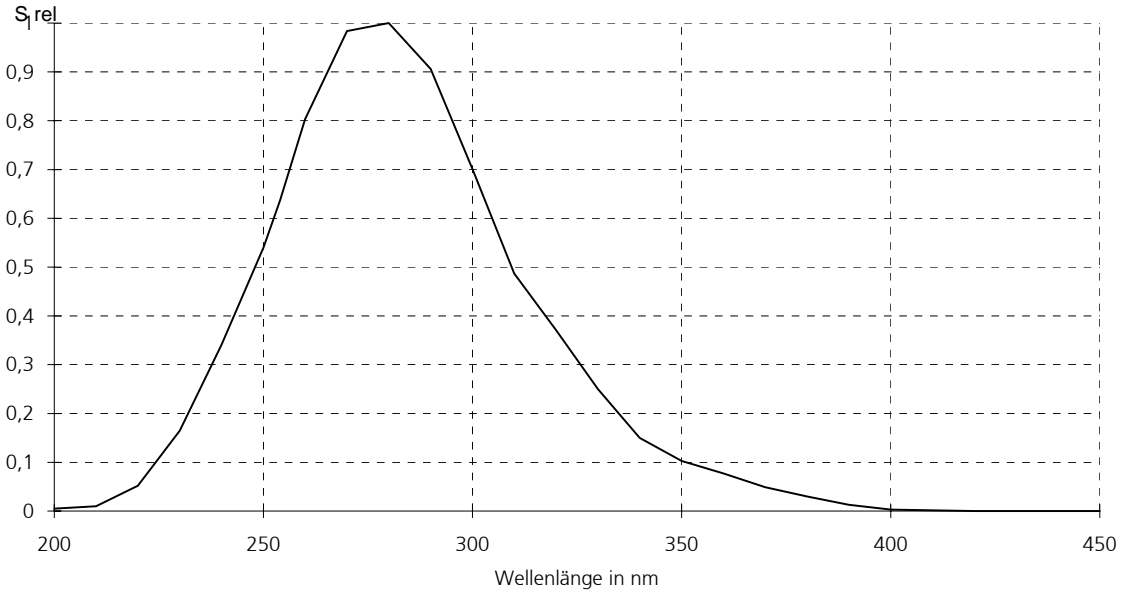
common test conditions, as not otherwise specified: $T_A = 25\text{ °C}$, $V_S = +5\text{ V}$

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	$\lambda = 280\text{ nm}$	0,1	6	V/mW/m ²
risetime		10	10	ms
bandwidth	- 3 dB	25	25	Hz
saturation voltage	$R_L = 2\text{ k}\Omega$	+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

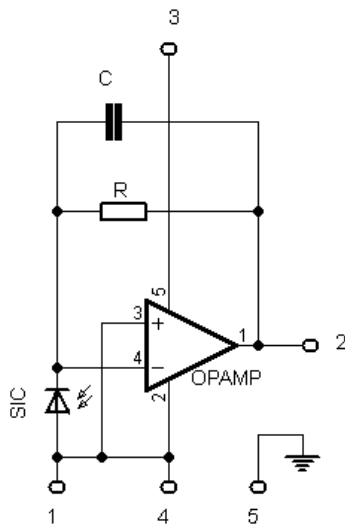
rev. 3 (03/2009)

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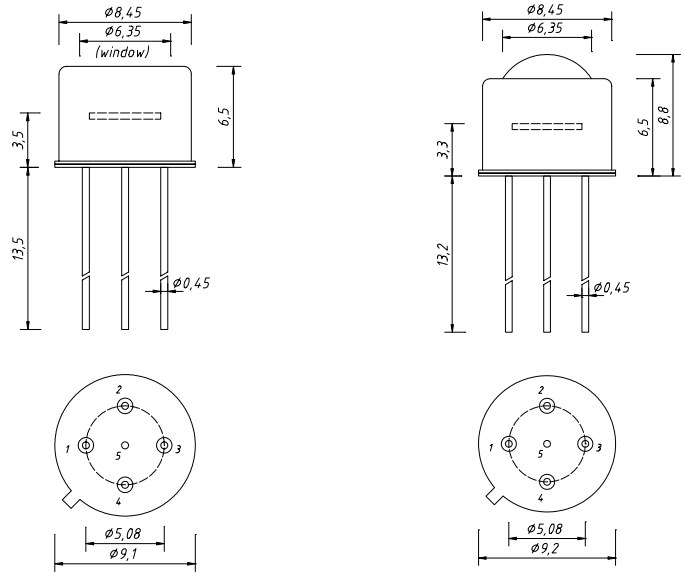
relative spectral responsivity



internal circuit



package dimension (bottom view)



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- 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.