

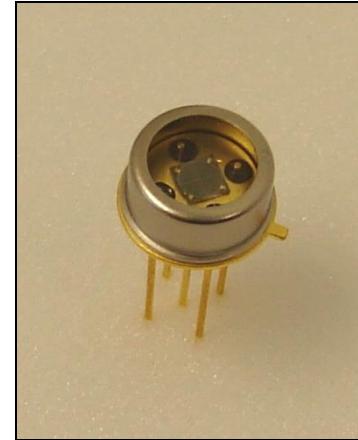


## SiC-quadrant-photodiode JQA5

### preliminary data sheet

#### characteristics :

- ◆ monolithic SiC-quadrant-photodiode with common cathode
- ◆ active area: 4 x 1,25 mm<sup>2</sup>
- ◆ spectral range: 215 ... 360 nm
- ◆ high UV responsivity: 0,16 A/W
- ◆ hermetically sealed TO39-package
- ◆ component is ROHS, REACH and WEEE conform



#### applications :

- ◆ center detection of laser beams
- ◆ high resolution autocollimators
- ◆ xy – coordinate measuring machines
- ◆ fibre optical acceleration- and angle sensors
- ◆ application with need of high position resolution

#### maximum ratings :

- |                               |                    |
|-------------------------------|--------------------|
| ◆ reverse voltage             | 20 V               |
| ◆ operating temperature range | - 40 °C ... 100 °C |
| ◆ storage temperature range   | - 40 °C ... 100 °C |
| ◆ soldering temperature (3s)  | 260 °C             |

#### technical data :

parameter	test condition	min.	typ.	max.	unit
active area		1,25			mm <sup>2</sup>
diameter of active area		2,525			mm
separation gap		32			μm
maximum of spectral responsivity S <sub>max</sub> at		270			nm
spectral range	λ <sub>max</sub> λ <sub>min</sub>	S = 0,1 · S <sub>max</sub>	215 360		nm
absolute spectral responsivity		λ = 254 nm	0,14		A/W
dark current I <sub>R</sub>		E = 0 lx	100		fA
risetime t <sub>r</sub> of photo current		R <sub>L</sub> = 50 Ω λ = 254 nm I <sub>P</sub> = 10 μA	tbc		ns
capacitance		F = 1 MHz E = 0 lx	250		pF

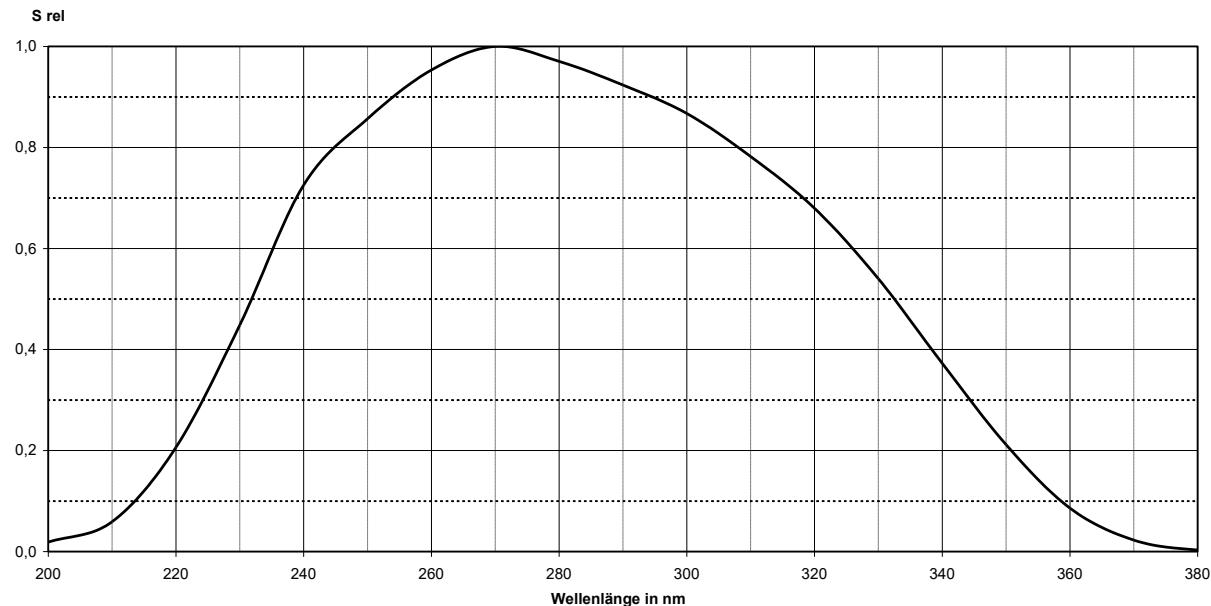
test conditions, as not otherwise specified: T<sub>A</sub> = 25 °C , V<sub>R</sub> = 10 V

values are valid for one quadrant, as not otherwise specified !

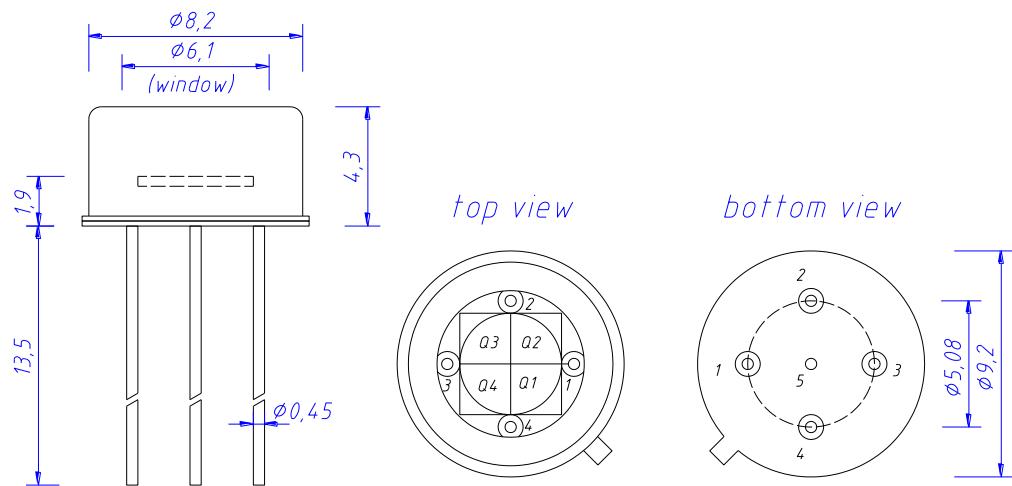
# SiC-quadrant-photodiode

JQA5

## relative spectral responsivity



## package dimension



## pin configuration

- 1 anode quadrant 1
- 2 anode quadrant 2
- 3 anode quadrant 3
- 4 anode quadrant 4
- 5 cathode & case