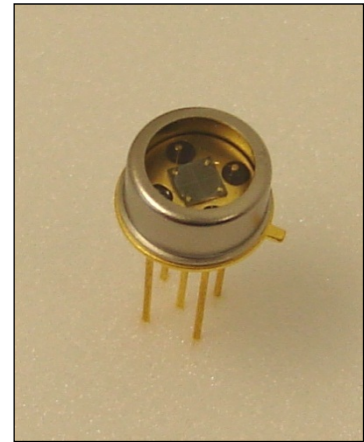


preliminary data sheet

characteristics :

- ◆ monolithic SiC-quadrant-photodiode with common cathode
- ◆ active area: 4 x 1,25 mm²
- ◆ spectral range: 215 ... 360 nm
- ◆ high UV responsivity: 0,16 A/W
- ◆ hermetically sealed TO39-package
- ◆ component is ROHS and WEE 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 :

test conditions, as not otherwise specified: $T_A = 25\text{ °C}$, $V_R = 10\text{ V}$
values are valid for one quadrant, as not otherwise specified !

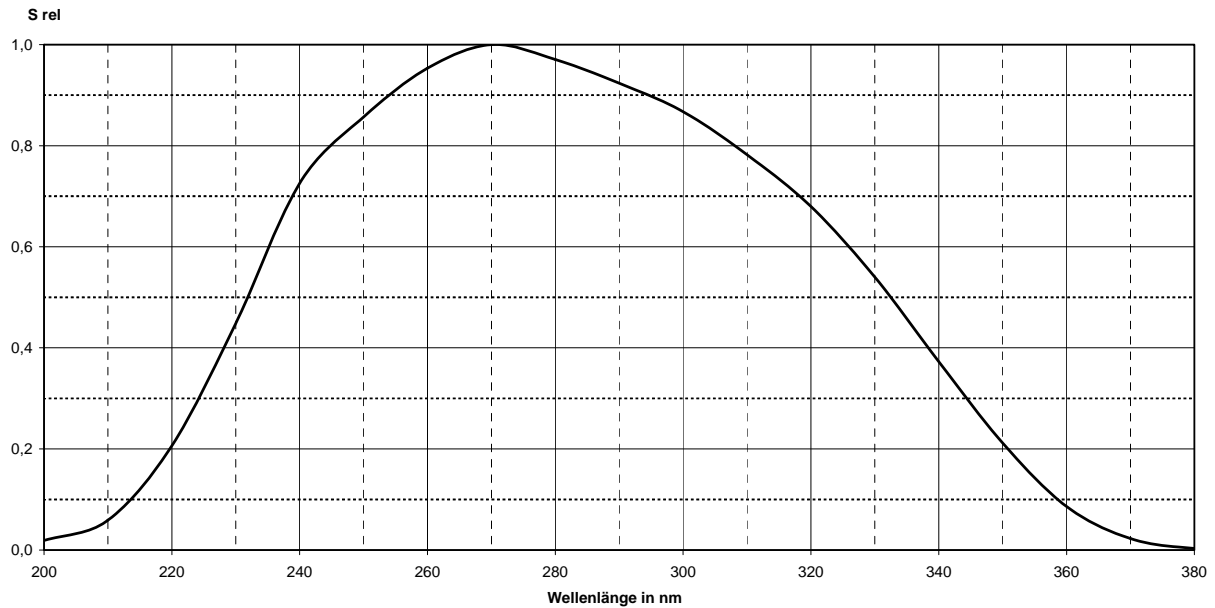
parameter	test condition	min.	typ.	max.	unit
active area			1,25		mm ²
diameter of active area			2,525		mm
separation gap			32		µm
maximum of spectral responsivity S_{max} at			270		nm
spectral range	$S = 0,1 \times S_{max}$		215 360		nm
absolute spectral responsivity	$\lambda = 254\text{ nm}$		0,14		A/W
dark current I_R	$E = 0\text{ lx}$		100		fA
risetime t_r of photo current	$R_L = 50\ \Omega$ $\lambda = 254\text{ nm}$ $I_P = 10\ \mu\text{A}$		tbc		ns

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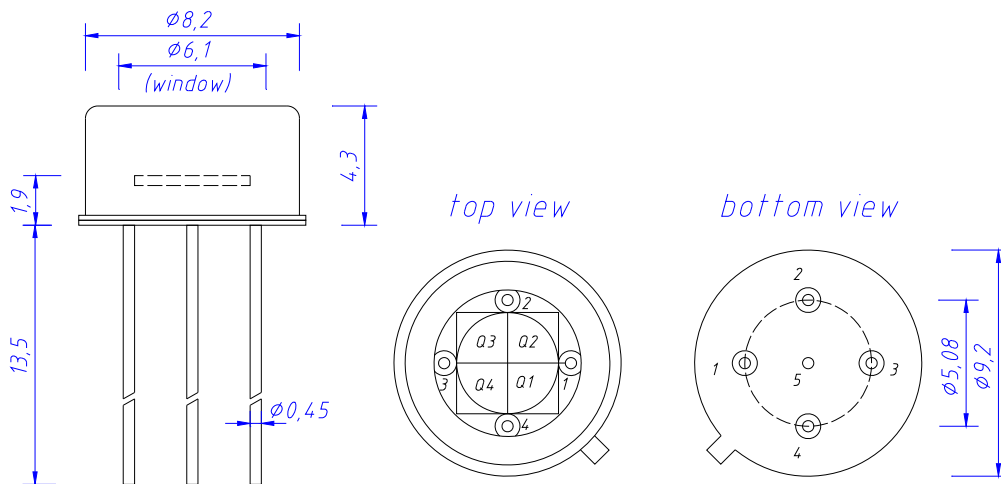
capacitance	F = 1 MHz E = 0 lx		250		pF
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SiC-quadrant-photodiode JQC5R

relative spectral responsivity



package dimension



pin configuration

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