



Quadrant - Photodiode JQ 20P

- characteristics :**
- ◆ Si-PIN-photodiode
 - ◆ spectral range 400 - 1100 nm
 - ◆ active area 4 x 5 mm²
 - ◆ hermetic sealed TO-8 package

- application :**
- ◆ position sensing of laser beams
 - ◆ autokollimators
 - ◆ xy - coordinate measurement
 - ◆ position sensing applications

absolute maximum ratings:

reverse voltage	20	V
operating temperature	- 25 °C ... 80	°C
storage temperature	- 40 °C ... 100	°C
welding temperature (3s)	260	°C

technical data :

Common test conditions, as not otherwise specified: $v_a = 25 \text{ °C}$ $V_R = 20 \text{ V}$

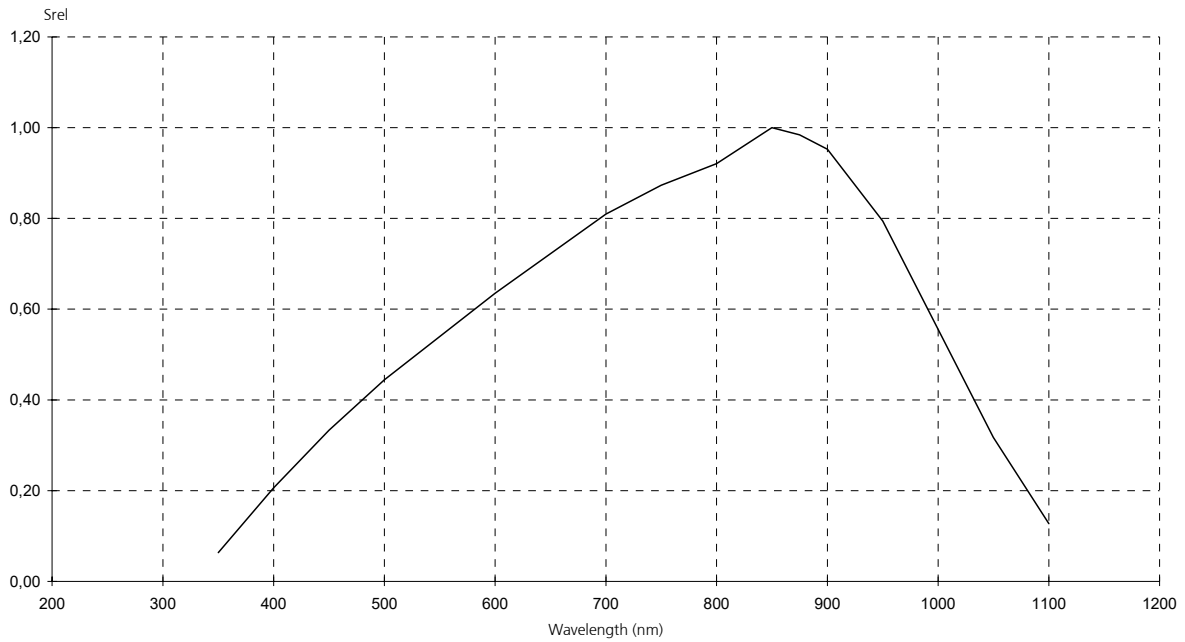
Parameters are valid for one single element, as not otherwise specified!

parameter	test condition	min	typ.	max	unit
active area			5,0		mm ²
diameter of active area			5,046		mm
separation gap between elements			50		µm
maximum of spectral responsivity S_{max} bei			850		nm
spectral range	$S = 0,1 \times S_{max}$		400 1100		nm
			λ_{max} λ_{min}		
absolute spectral responsivity	$\lambda = 850 \text{ nm}$		0,6		A/W
dark current I_R	$E = 0 \text{ lx}$		1	5	nA
risetime t_r of photocurrent	$R_L = 50 \text{ } \Omega$ $\lambda = 850 \text{ nm}$ $I_p = 10 \text{ } \mu\text{A}$		0,35		µs
capacitance	$F = 1 \text{ MHz}$ $E = 0 \text{ lx}$		10		pF

D
A
T
A

S
H
E
E
T

relative spectral responsivity



pin configuration

1, 3, 4, 6 anode quadrant 1 - 4
2 catode & case

package dimension

