



Quadrant - Photodiode JQ 5P

- characteristics :**
- ◆ Si-PIN-photodiode
 - ◆ spectral range 400 - 1100 nm
 - ◆ active area 4 x 1,25 mm²
 - ◆ hermetic sealed TO-5 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: $v_a = 25 \text{ °C}$ $V_R = 20 \text{ V}$

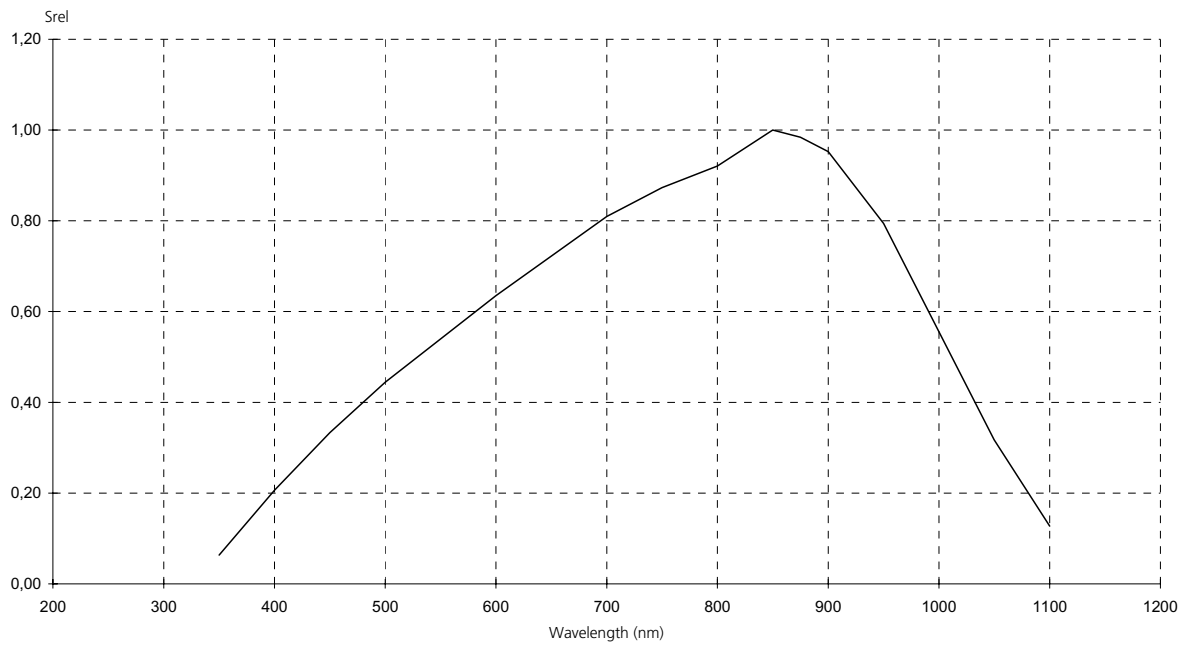
Parameters are valid for one single element, as not otherwise specified!

| parameter | test condition | min | typ. | max | unit |
|--|---|-----|-------------|-----|-----------------|
| active area | | | 1,25 | | mm ² |
| diameter of active area | | | 2,523 | | mm |
| separation gap between elements | | | 24 | | µm |
| maximum of spectral responsivity S_{max} bei | | | 850 | | nm |
| spectral range λ_{max} λ_{min} | $S = 0,1 \times S_{max}$ | | 400 1100 | | nm |
| absolute spectral responsivity | $\lambda = 633 \text{ nm}$ $\lambda = 850 \text{ nm}$ | | 0,42 0,6 | | A/W |
| dark current I_R | $E = 0 \text{ lx}$ | | 0,5 | 10 | nA |
| risetime t_r of photocurrent | $R_L = 50 \text{ } \Omega$ $\lambda = 850 \text{ nm}$ $I_p = 10 \text{ } \mu\text{A}$ | | 25 | | ns |
| capacitance | $F = 1 \text{ MHz}$ $E = 0 \text{ lx}$ | | 15 | | pF |

D
A
T
A

S
H
E
E
T

relative spectral responsivity



pin configuration

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

package dimension

