



# Quadrant - Photodiode JQ 5P

- characteristics :**
- ◆ Si-PIN-photodiode
  - ◆ spectral range 400 - 1100 nm
  - ◆ active area 4 x 1,25 mm<sup>2</sup>
  - ◆ 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 :**

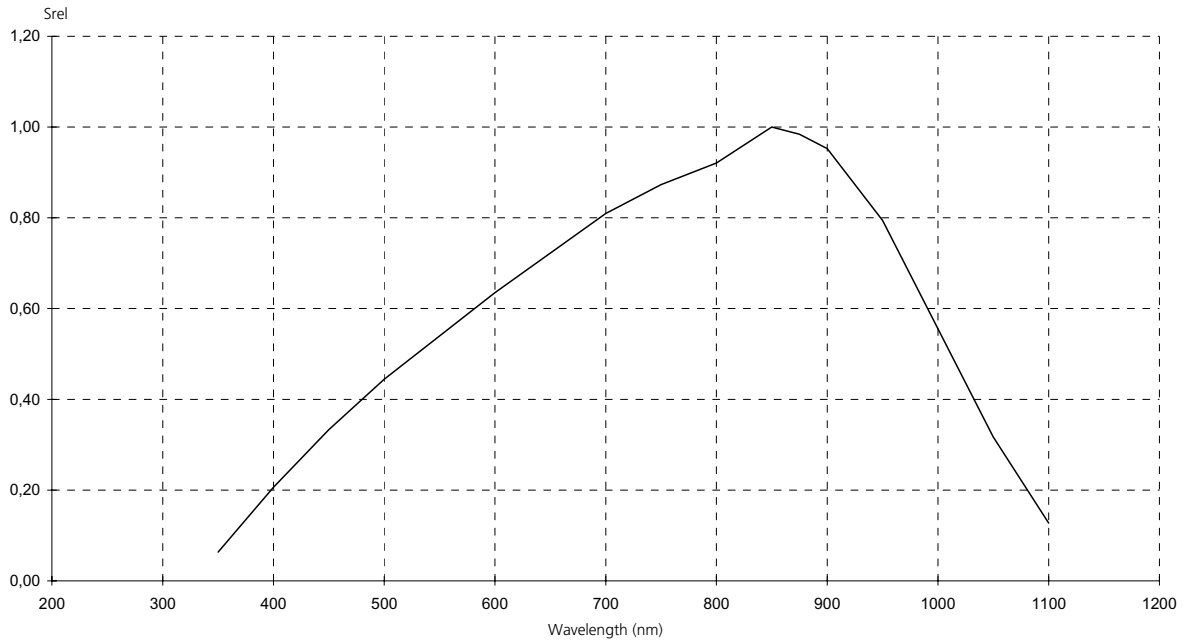
Common test conditions, as not otherwise specified:  $v_a = 25 \text{ °C}$   $V_R = 20 \text{ V}$

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

parameter	test condition	min	typ.	max	unit
active area			1,25		mm <sup>2</sup>
diameter of active area			2,523		mm
separation gap between elements			24		µm
maximum of spectral responsivity $S_{max}$ bei			850		nm
spectral range $\lambda_{max}$ $\lambda_{min}$	$S = 0,1 \times S_{max}$		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**

