



# Quadrant - Photodiode JQ 50P



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- characteristics :**
- ◆ Si-PIN-photodiode
  - ◆ spectral range 400 - 1100 nm
  - ◆ active area 4 x 12,5 mm<sup>2</sup>
  - ◆ 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

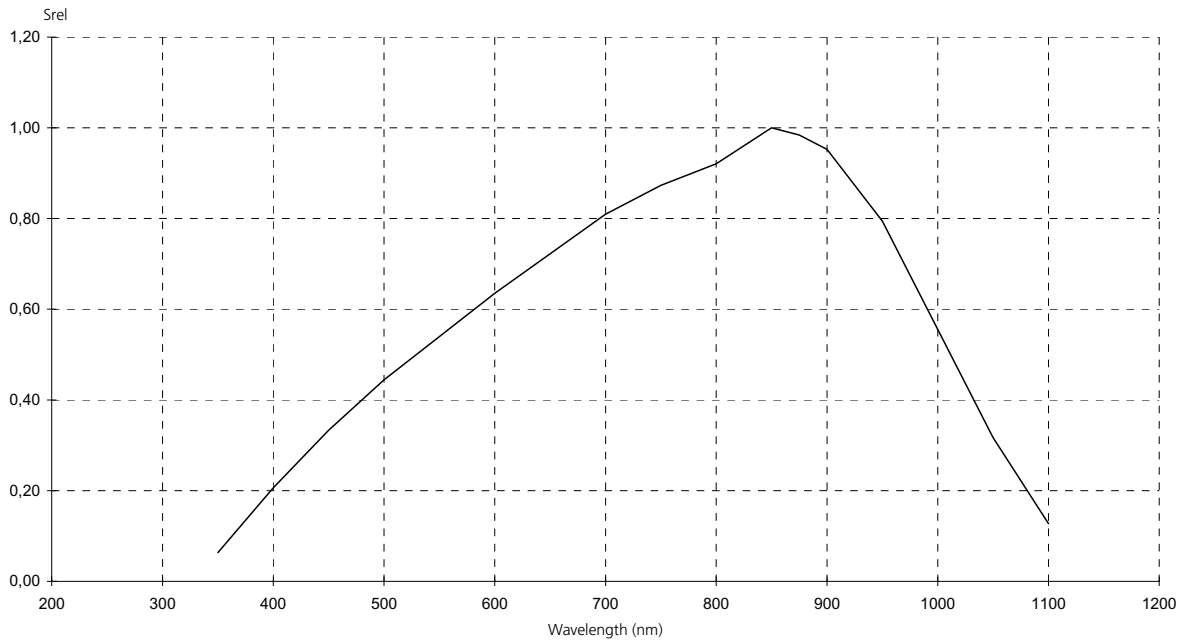
**technical data :**

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			12,5		mm <sup>2</sup>
diameter of active area			7,89		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
			$\lambda_{max}$ $\lambda_{min}$		
absolute spectral responsivity	$\lambda = 850\text{ nm}$		0,6		A/W
dark current $I_R$	$E = 0\text{ lx}$		2	10	nA
risetime $t_r$ of photocurrent	$R_L = 50\ \Omega$ $\lambda = 850\text{ nm}$ $I_p = 10\ \mu\text{A}$		0,4		µs
capacitance	$F = 1\text{ MHz}$ $E = 0\text{ lx}$		20		pF

## relative spectral responsivity



## pin configuration

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

## package dimension

