

Si - Photodioden

JE 5
JE 10



- characteristics :**
- ◆ spectral range 400 ... 1080 nm
 - ◆ active area ø 2,52 mm or ø 3,57 mm
 - ◆ Si-PIN-photodiode
 - ◆ low dark current, high shuntresistant and high spectral response
 - ◆ hermestic TO39 – package
 - ◆ components are in conformity with RoHS and WEEE

- application :**
- ◆ detector for application in visual range and near IR range
 - ◆ measurement of light parameters, colour measurement and analysis
 - ◆ X-ray dosimeter

absolute maximum ratings :

- ◆ reverse voltage 20 V
- ◆ operation temperature range -25 °C ... +85°C
- ◆ storage temperature range -40 °C ... +100 °C
- ◆ welding temperature (3s) 260 °C

technical data :

common test conditions, as not otherwise specified: $T_A = 25^\circ\text{C}$, $V_R = 0 \text{ V}$
typ. values, maximum ratings in brackets

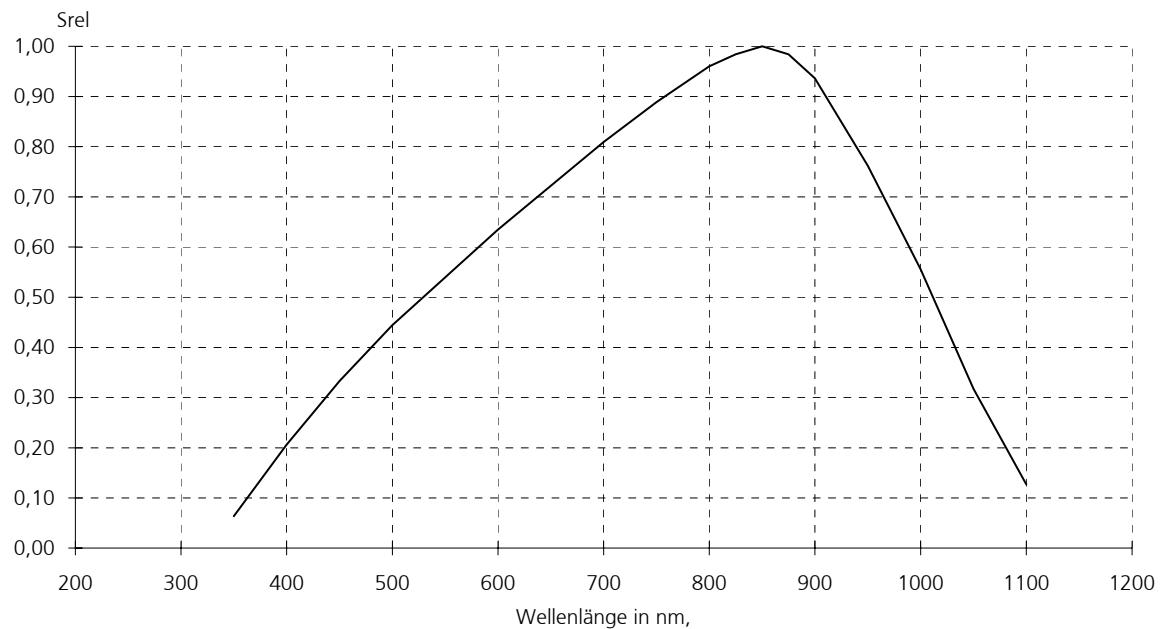
parameter	test condition	JE 5	JE 10	unit
active area A		5	10	mm^2
maximum of spectral responsivity S_{\max} at		900	900	nm
spectral range	$S = 0,1 * S_{\max}$		400 1080	nm nm
λ_{\min}				
λ_{\max}				
absolute spectral responsivity	$\lambda = 900 \text{ nm}$	0,62	0,62	A/W
dark current I_R	$V_R = 5V$ $E = 0 \text{ lx}$	1 (10)	2 (20)	nA
risetime of photocurrent	$R_L=50 \Omega$, $\lambda = 850\text{nm}$ $V_R = 0V$ $V_R = 10V$	2 15	2 20	μs ns
N.E.P	$\lambda = 850 \text{ nm}$	$1,5 * 10^{-14}$	$2,9 * 10^{-14}$	$\text{W}/\text{Hz}^{1/2}$
capacity	$V_R = 0V$ $V_R = 10V$	90 10	150 18	pF pF

rev. 1 (8/2009)

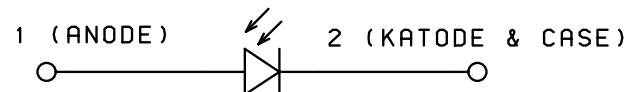
D
A
T
A

S
H
E
E
T

relative spectral responsivity



internal circuit



package dimension

