SiC - Photodiode JEC 0.1*

characteristics :

- SiC-Photodiode with integrated filter
- *-filter option for UV-C, UV-BC, UV-B and UV-A
- active area 0,055 mm^2
- TO 5-package
- components are in conformity with RoHS and WEEE

applications :

- UV-measurement only
- control of sterilization lamps
- flame detection
- sun measurement

absolute maximum ratings:

reverse voltage	20	V
operating temperature range	- 25 °C ... 70	°C
storage temperature range	-40 °C ... 100	°C
welding temperature (3s)	260	°C

technical data :

common test conditions, if not otherwise specified: γ_a = 25 °C, V_R = 0V

parameter	test-conditions	* - filter option					units
name of component		JE 0,1C	JEC 0,1BC	JEC0,1BC2	JEC 0,1B	JEC 0,1A	
active area		0,25 x 0,25					mm^2
spectral range λ_{min} λ_{max}	S=0,1 • S_{max}	 220 275	 230 305	 225 320	 280 325	 320 395	nm
maximum of spectral responsivity λ_p	S = S_{max}	265	285	280	315	330	nm
absolute spectral responsivity	$\lambda = \lambda_p$	0,1	0,12	0,12	0,08	0,06	A/W
dark current I_D	V_R = 1 V	1					fA
capacitance		21					pF
height of component H		4,5			6,8		mm

rev. 3 (06/2011)

DATA SHEET

For more information:
Electro Optical Components, 5460 Skyline Blvd., Santa Rosa, CA 95403
Phone: (707) 568-1642 | Fax: (707) 568-1652 | Email: info@eoc-inc.com

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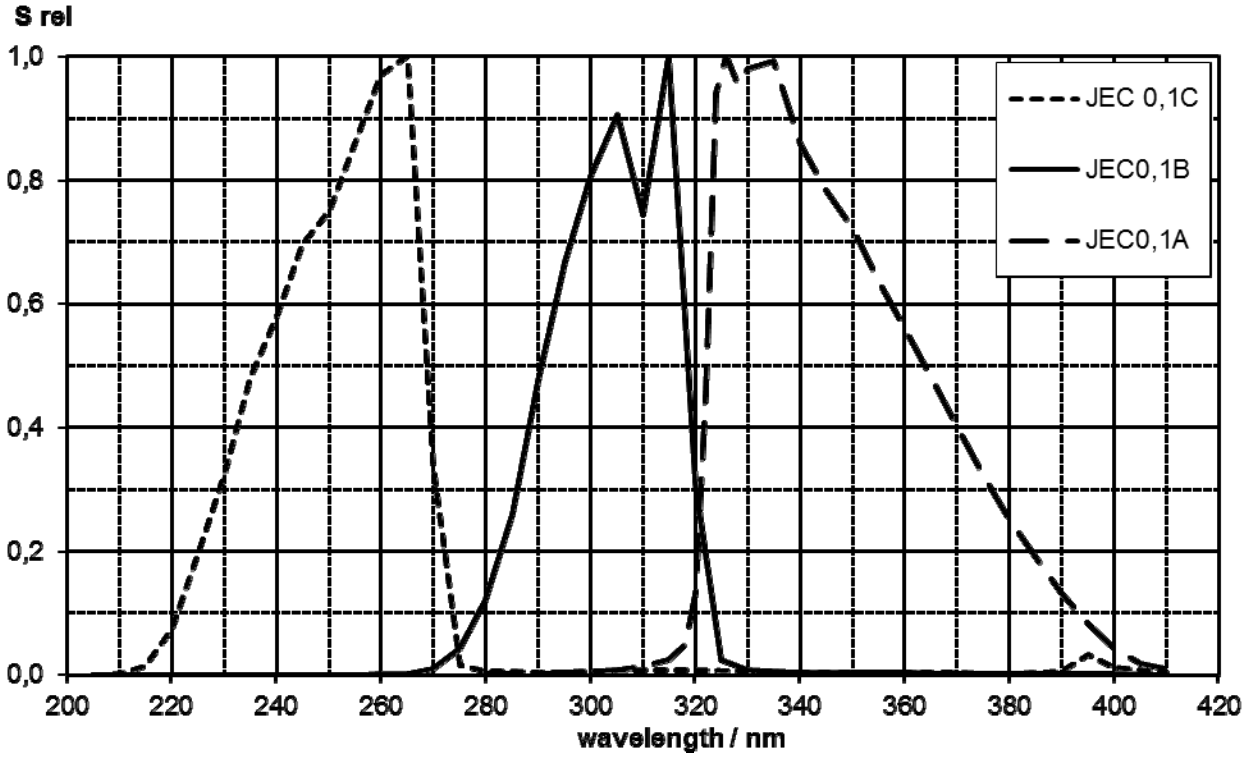
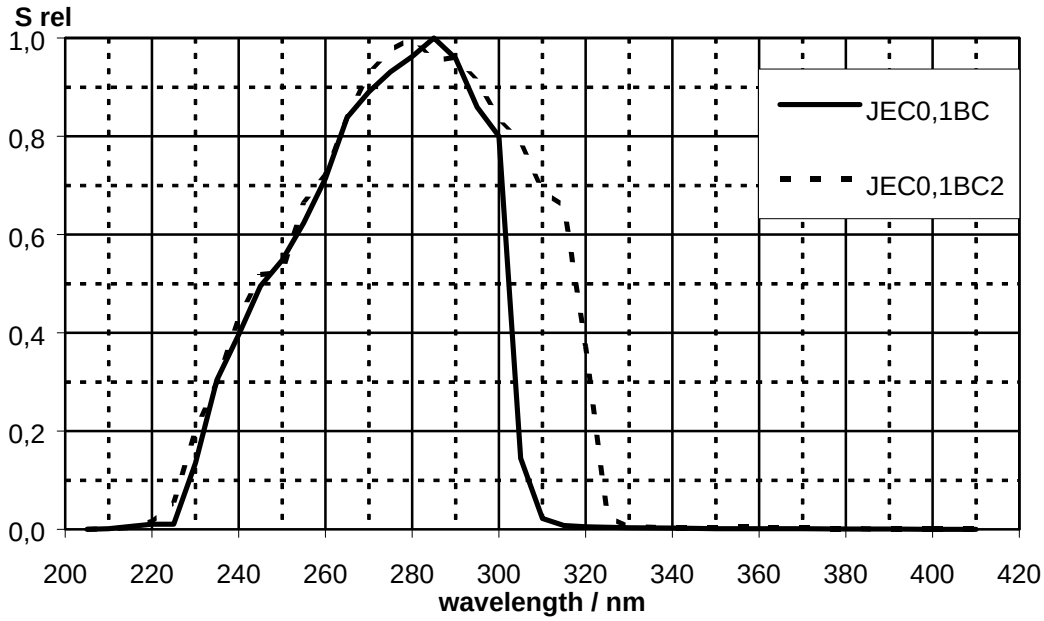
relative spectral response





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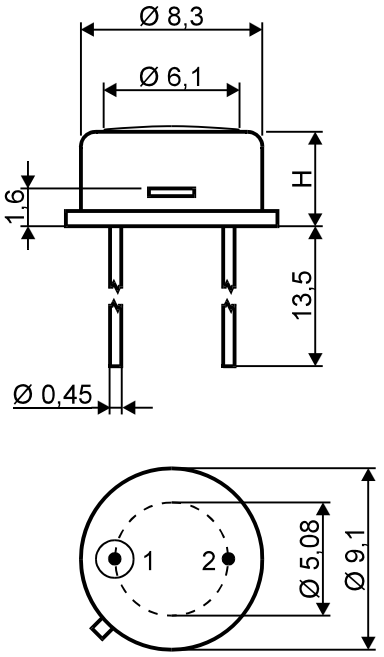
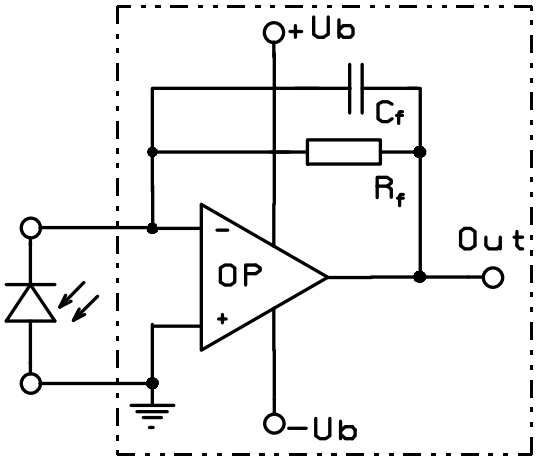
package dimensions



application example



1 Katode
2 Anode & Case

The application example shows a typical circut.. R_f is responsible for the gain of the circuit. C_f compensates the reverse junction capacitance of the photodiode and input capacitance of the OPA. The exact value of C_f depends on R_f, used OPA and capacitance of the circuit. A typical value is 1 pF.

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