



Features

- Two insulated pins
- Broad Band UVA-UVB-UVC Photodiode
- Optimally suited for UVC high radiation control
- Silicon Carbide based chip for extreme irradiation hardness
- Intrinsic visible blindness due to wide-bandgap semiconductor material
- TO-18 metal package with 0,054 mm² active chip area
- The chip is manufactured by Cree Research Inc., U.S.A.

Eigenschaften

- Beide Anschlüsse zur Gehäusemasse isoliert
- Breitband UVA-UVB-UVC Photodiode
- Optimale Eignung für Messung starker UVC-Strahlung
- Siliziumcarbid-Chip garantiert extreme Strahlungsfestigkeit
- hohe intrinsische Unempfindlichkeit gegenüber dem sichtbaren Licht durch Halbleitermaterial mit hoher Bandlücke
- TO-18 Metallgehäuse mit 0,054 mm² aktiver Chipfläche
- Chiphersteller: Cree Research Inc., U.S.A.

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Maximum Ratings

Parameter	Symbol	Value	Unit
Operating temperature range	T_{opt}	-25 ... +70	°C
Reverse voltage	V_{Rmax}	20	V

General Characteristics

($T_a = 25\text{ °C}$)

Parameter	Symbol	Value	Unit
Active area	A	0.054	mm ²
Dark current at 1 V reverse bias	I_d	1	fA
Capacitance	C	21	pF
Short circuit current at bright sun	I_0	ca. 70	nA

Spectral Characteristics

($T_a = 25\text{ °C}$)

Ultraviolet selective SiC based UV sensor

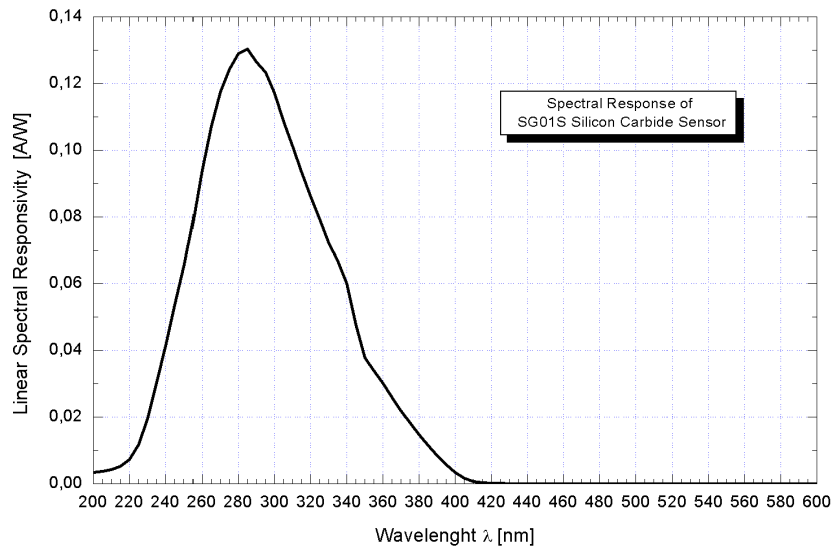


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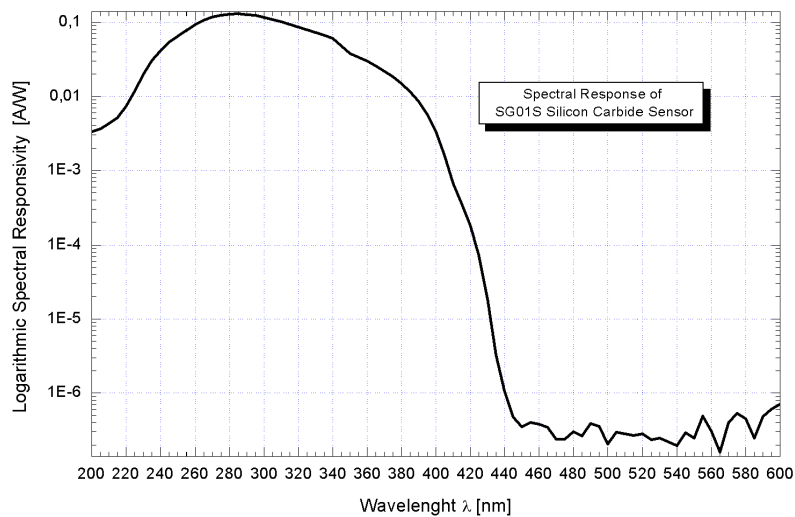
Parameter	Symbol	Value	Unit
Max. spectral sensitivity	S_{\max}	0,13	$A W^{-1}$
Wavelength of max. spectral sensitivity	$\lambda_{S_{\max}}$	285	nm
Range of spectral sensitivity ($S=0.1*S_{\max}$)	-	210 - 380	nm

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Linear Spectral Response

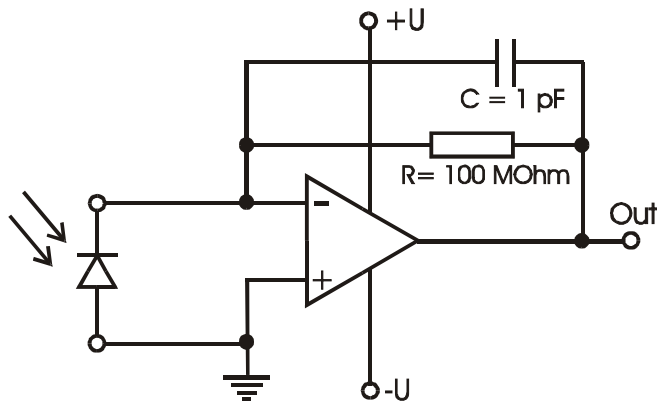


Logarithmic Spectral Response



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Application Example



Pin Layout