



# TOCON\_C2

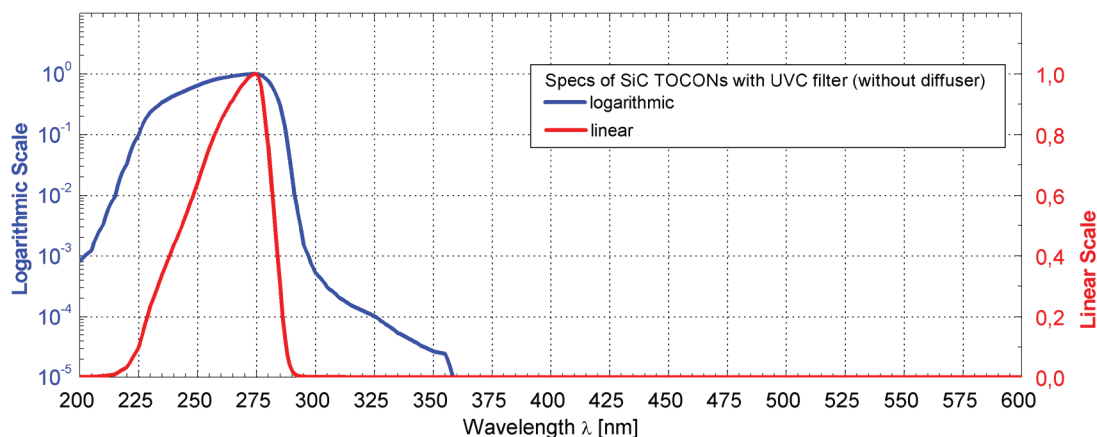
UVC-only SiC based UV photodetector with integrated amplifier



## SPECIFICATIONS

Parameter	Symbol	Value	Unit
<b>Spectral Characteristics</b>			
Typical Responsivity at Wavelength 254 nm	$S_{max}$	28	mV/nW/cm <sup>2</sup>
Wavelength of max. Spectral Responsivity	$\lambda_{max}$	275	nm
Responsivity Range ( $S=0,1*S_{max}$ )	–	225 ... 287	nm
Visible Blindness ( $S_{max}/S_{>405nm}$ )	VB	$> 10^{10}$	–
<b>General Characteristics (T=25°C, V<sub>supply</sub> =+5 V)</b>			
Supply Voltage	V <sub>Supply</sub>	2,5 ... 5	V
Saturation Voltage	V <sub>Sat</sub>	V <sub>Supply</sub> - 5%	V
Dark Offset Voltage	V <sub>Offset</sub>	50	µV
Temperature Coefficient at Peak	T <sub>c</sub>	< -0,3	%/K
Current Consumption	I	150	µA
Bandwidth (-3 dB)	B	15	Hz
Risetime (10-90%)	t <sub>rise</sub>	0,075	s
<i>(other risetimes on request)</i>			
<b>Maximum Ratings</b>			
Operating Temperature	T <sub>opt</sub>	-25 ... +85	°C
Storage Temperature	T <sub>stor</sub>	-40 ... +100	°C
Soldering Temperature (3s)	T <sub>sold</sub>	300	°C

## NORMALIZED SPECTRAL RESPONSIVITY

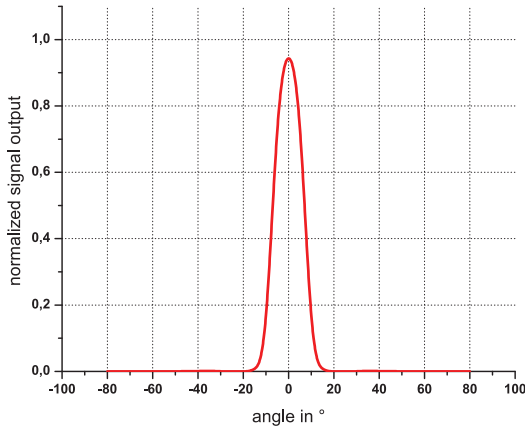


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## FIELD OF VIEW

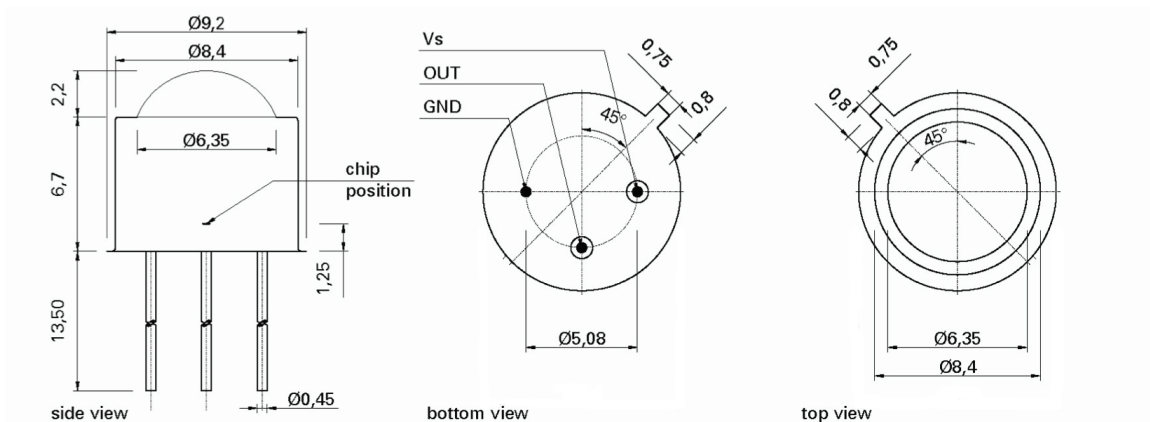


Measurement Setup:

- lamp aperture diameter: 10 mm
- distance lamp aperture to second aperture: 17 mm
- second aperture diameter: 10 mm
- distance second aperture to detector: 93 mm

pivot level = top surface of the detector window

## DRAWING



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## APPLICATION NOTE FOR TOCONS

The TOCONS need a supply voltage of  $V_{\text{supply}} = 2,5 \dots 5V_{\text{DC}}$  and can be directly connected to a controller or voltmeter. Please note that the theoretic maximum signal output is always a little less (approx. 5%) than the supply voltage. To learn more about perfect use of the TOCONS please refer to the TOCON FAQ list published at [www.sglux.com](http://www.sglux.com).

**CAUTION!** Wrong wiring leads to destruction of the device.

For easy setup of the device please ask for a TOCON starter kit.



### Miniature steel housing with M12x1 thread for the TOCON series

- Optional feature for all TOCON detectors
- Robust stainless steel M12x1 thread body, length 32 mm
- Integrated sensor connector (Binder 4-Pin plug) with 2m connector cable
- Easy to mount and to connect



### Plastic probes

- Optional feature for all TOCON detectors
- UV probes in small plastic housings with a TOCON inside
- Customized housings available
- Easy to mount and to connect
- Integrated sensor connector (Binder 4-Pin plug)
- Cable available