

General Features



Properties of the TOCON_mega

- Broad Band pre-amplified UV detector for very strong radiation
- Radiation hard steel attenuating mesh for long term stability
- Applications: UV hardening control & other high radiation sources
- 0.1W/cm² peak radiation results a voltage of approx. 500 mV

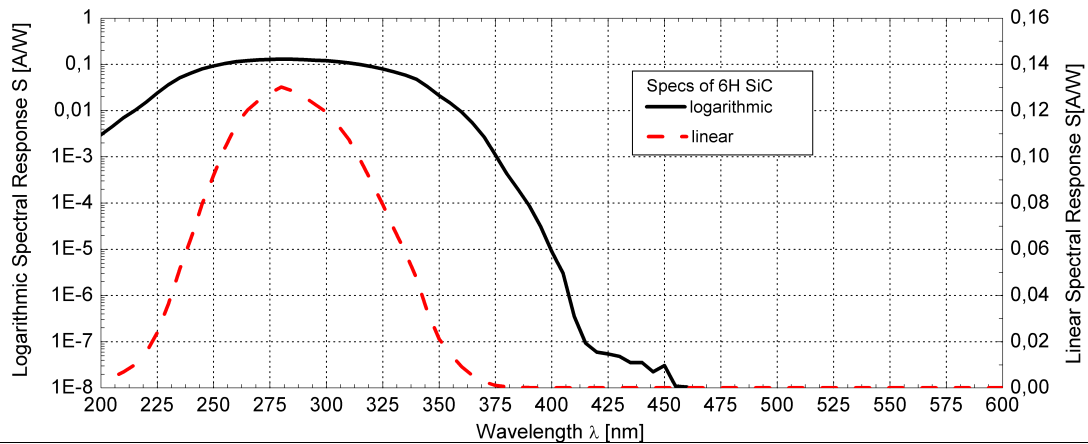
The TOCON pre-amplified UV photodetectors

The TOCON devices use modern hybrid technology to cancel unwanted signal disturbances caused by moisture or electromagnetic radiation. The stable 0...5V output voltage can be directly connected to a SPC controller or a voltage multimeter.

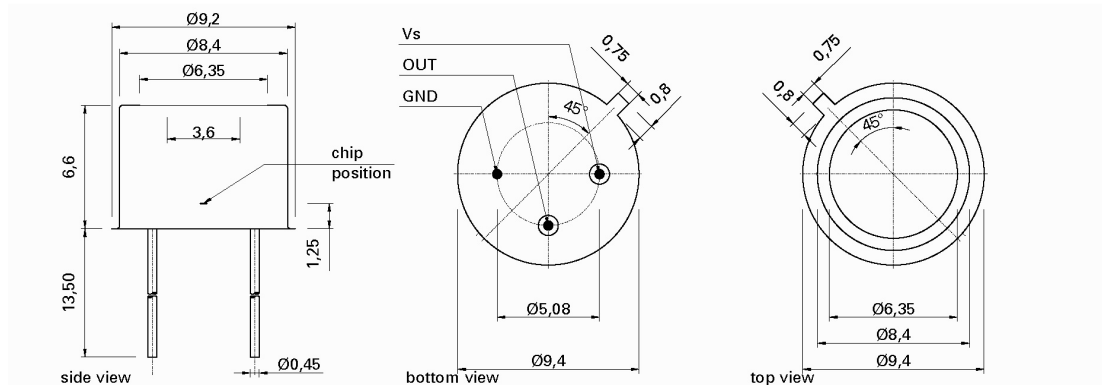
Specifications

Parameter	Symbol	Value	Unit
Maximum Ratings			
Operating Temperature Range	T_{opt}	-25 ... +85	°C
Storage Temperature Range	T_{stor}	-40 ... +100	°C
Soldering Temperature (3s)	T_{sold}	300	°C
General Characteristics (T=25°C)			
Chip area	A_{chip}	0.22	mm ²
Supply voltage	V_{supply}	2.5 ... 5.0	V
max. voltage	V_{max}	5.5	V
saturation voltage	V_{sat}	5.0	V
dark offset voltage	V_{offset}	0.5	mV
Temperature coefficient	TC	<-0.3	%/K
Current	I	0.8	mA
Bandwidth (-3 dB)	θ	15	Hz
risetime (63%)	t_{rise}	10	ms
Spectral Characteristics (T=25°C)			
Sensitivity at peak	S_{max}	5	V/W/cm ²
Wavelength of max. spectral sens.	λ_{max}	280	nm
Sensitivity range ($S=0,1 \cdot S_{max}$)	-	210 ... 380	nm
Visible blindness ($S_{max} / S_{>400nm}$)	VB	10^5	-

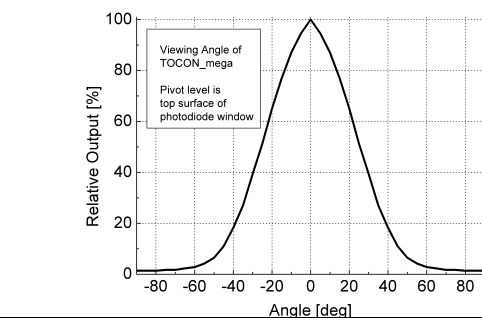
Spectral Response



Drawing



Viewing Angle



TOCON_mega

pre-amplified SiC UV Detector for very strong radiation

