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UV-TIAMO-BL High Sensitive pre-amplified SiC UV Photodetector

Properties of the UV-TIAMO-BL

- Broad Band pre-amplified UV photodetector for very low radiation
- Sensitive area A = 12,80mm^2 , 0,22 mm^2 SiC detector chip
- Applications: flame control and other low radiation measurements
- 1nW/cm^2 peak radiation results a voltage of approx. 280 mV

The UV-TIAMO pre-amplified UV photodetectors

The UV-TIAMO devices are using modern hybride 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*	℃
Storage Temperature Range	T_{stor}	*-40 … +100*	℃
Soldering Temperature (3s)	T_{sold}	*300*	℃
General Characteristics (*T*=25℃)			
Sensitive area	A_{sens}	*12,80*	*mm^2*
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℃)			
Sensitivity at peak	S_{max}	*280*	*mV/nW/cm^2*
Wavelength of max. spectral sens.	λ_{max}	*280*	*nm*
Sensitivity range (S=0,1*S_{max})	-	*210 … 380*	*nm*
Visible blindness (S_{max} / $S_{>400nm}$)	*VB*	*10^5*	-

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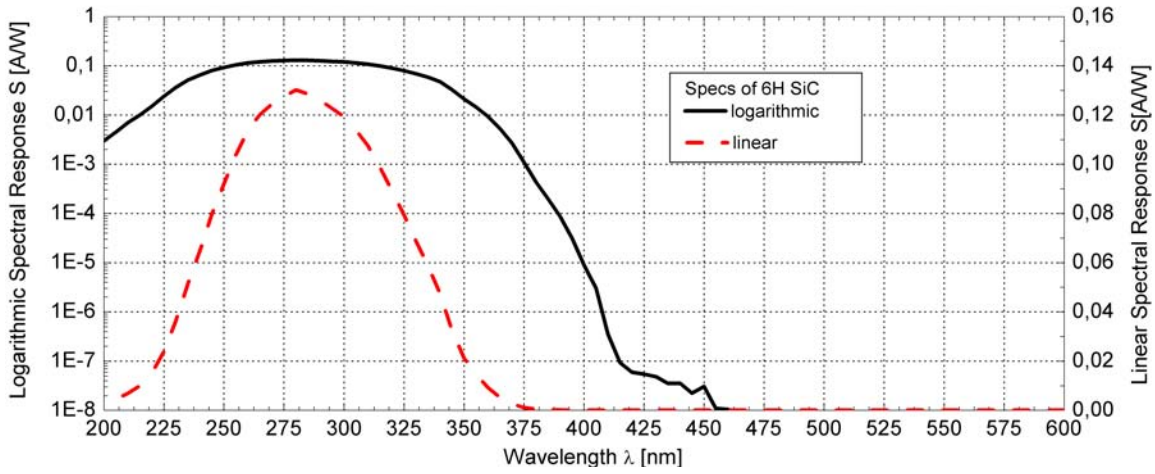
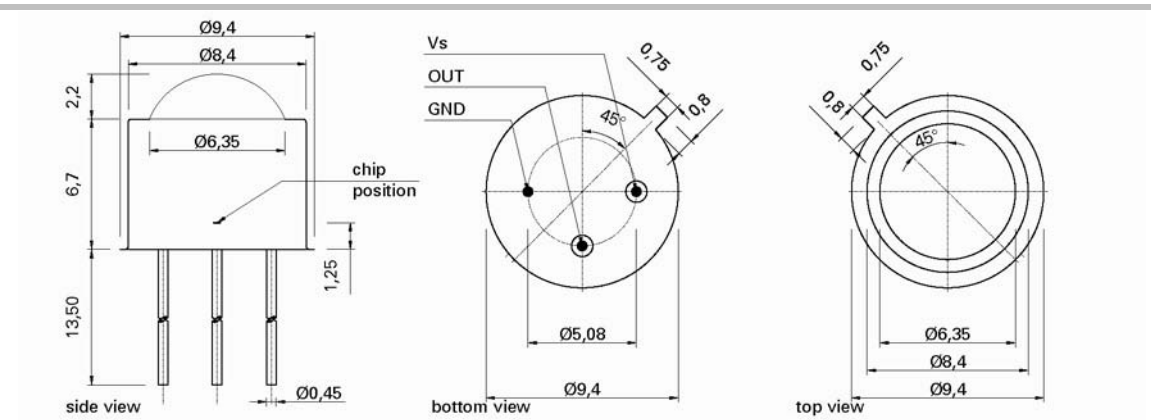
Spectral Response



Drawing



Viewing Angle