UV 10.SL - Ultraviolet Detector

Extremely High Sensitivity



Description

UV 10.SL is made in **TO-5 housing** with lens. It includes the sensitive diode and the standard transmissive window characteristics. Optionally A2 window is available.

PerkinElmer Optoelectronics offers a range of selective sensors for ultraviolet radiation. This sensor series can be equipped with an integrated amplifier and is perfectly suited for the detection of any radiation ranging from 200 nm to 400 nm. High sensitivity, hermetic encapsulation, small dimension (TO-5) and low-cost structure provide suitability for both industrial and consumer applications.

UV detectors from PerkinElmer Optoelectronics are based on siliconcarbide, a material that offers new performance features at reasonable costs. Silicon-carbide provides a unique sensitivity in the spectral range from 200 nm to 400 nm (peak at 280 nm).

Applications

- Burner Controls
- Industrial Controls
- · Low-intensity Measurement

Features

- Extremely High Sensitivity
- Housing with Lens
- Solar Blind



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Figure 1. Timing Diagram

OUT

SENSOR

HOUSING

GND

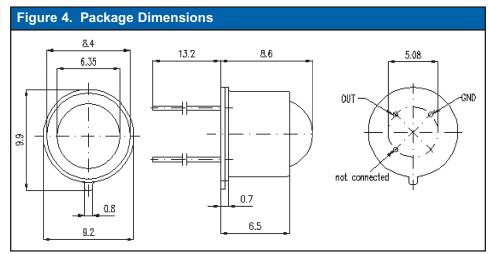
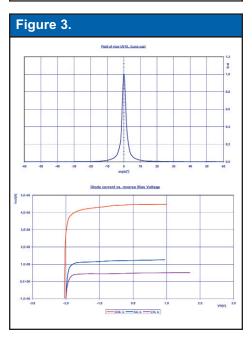


Figure 2. Spectral Curve							
	Availab	le Types' Spec	tral Respons	se			
1,2	uvc	UVE		UVA			
1-							
0,8							
0,4	Standard +	A2					
0,2							
200	220 240 ;	260 280 30 Wi[n		40 360 3	880 400		

Table 1. UV 10.SL Specifications							
Parameters	Typical	Units	Condition				
Radiant sensitivity	25	mA/W	standard window				
Spectral response	210-380	nm	5% of peak				
Wavelength of pk response	280	nm					
Sensitive area	12.5	mm²	with lens				
Selectivity	>10 ⁻⁵		4002000 nm				
Dark current	0.2	fA					
Junction capacitance	21	pF					
Temperature coefficient	-1	%/°C					
Storage temperature	-20 to 80	°C	non permanent				
Operating temperature	-20 to 80	°C	non permanent				
Window transparency	>210	nm					



For more information e-mail us at opto@perkinelmer.com or visit our website at www.perkinelmer.com/optoelectronics

All values are nominal; specifications subject to change without notice.

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