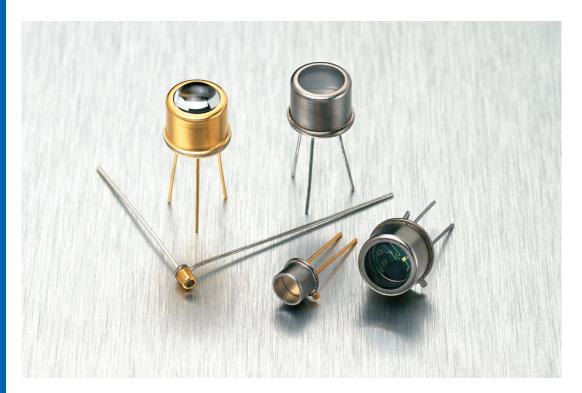
UV 10.T2E.10L - Ultraviolet Detector

Extremely High Sensitivity



Description

The UV 10.T2E.10L series is made in TO-5 housing, with built-in lens and amplifier. As for spectral response, standard and A2 types are 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

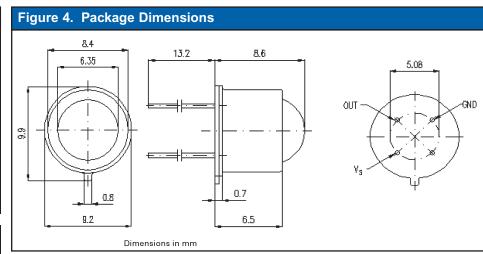
- Extremely High Sensitivity
- Housing with Lens
- Built-in Amplifier
- Solar Blind

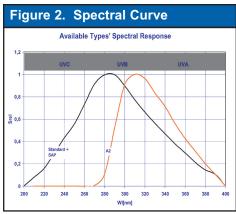


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Figure 1. Timing Diagram

OATE
RESISTOR
OUT
BEENSOR
HOUSING
GNC





200	220	240	260	280	300 Wi[nm]	320	340	360	380	400
igu	ire	3.								
			E	ield of view U	V10_ (Lens cap)				
										1,2 E 1,0
_										0,8
										0,6
										0,4
-50	-40	-30	-20			20	30	49	50	0,0
				-	19[7]					
			radiat	ion density	vs. output v	ltage				
	Power supp 3-200mm	hysv								
						/	1			
		/								
/										

Table 1. UV 10.T2E.10L Specifications								
Parameters	Typical	Units	Condition					
Radiant sensitivity	1	V/nW	standard window					
Responsivity	10	V/mW/m ²	standard window					
Spectral response	210-380	nm	5% of peak					
Wavelength of pk response	280	nm						
Sensitive area	12.56	mm ²	with lens					
Selectivity	>10 ⁻⁵		4002000 nm					
Operation voltage	2.55	V						
Signal output			Rail to Rail					
Temperature coefficient	>0.3	%/°C						
Dark offset voltage	>5	mV						
Rise time	10	ms	t (63%)					
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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