



trinamiX

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PbSe near-infrared detector Double encapsulated TO-package

Features

- Double encapsulation (thin-film + TO)
- High durability for rugged operation
- Sapphire window

Applications

- Gas analysis
- Spectroscopy
- Process control
- Temperature control

Specification

Type No.	Package	Active area [mm x mm]	Operating temperature [°C]	Storage temperature [°C]
PbSe020020TO5	TO5	2 x 2	-30 to +90	-55 to +90

Electrical and optical characteristics

Type No.	Element temperature [°C]	Peak wave- length λ_p [μm]	20% cut-off wavelength λ_c [μm]	Peak responsivity S [V/W]@50V/mm	Peak D* (620 Hz, 1 Hz) [$\text{cm}\cdot\text{Hz}^{1/2}/\text{W}$]	Time Constant [μs]	Dark resistance R_D [M Ω]
				Min.	Min.	Typ.	
PbSe020020TO5	22	3.8	4.5	$1 \cdot 10^4$	$2 \cdot 10^9$	4	0.1 - 3

- Measured with 500K blackbody
- Measured in a voltage divider circuit with 50 V/mm
- Photo responsivity and detectivity are measured with constant load resistance ($R_L = 1 \text{ M}\Omega$) and calculated for matched resistance

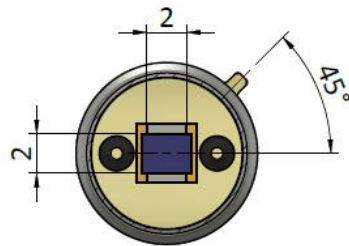
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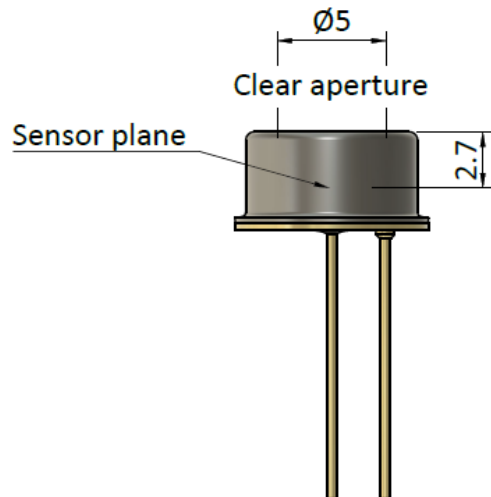
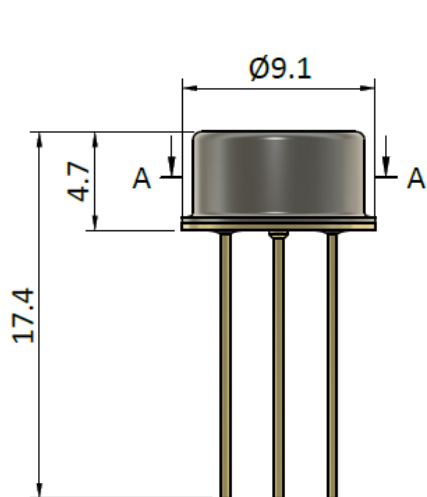
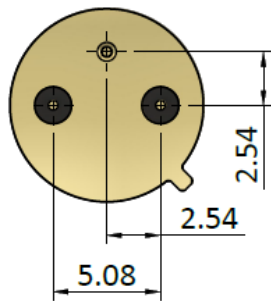


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Mechanical outline



Section A-A



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