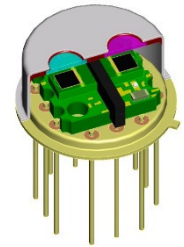


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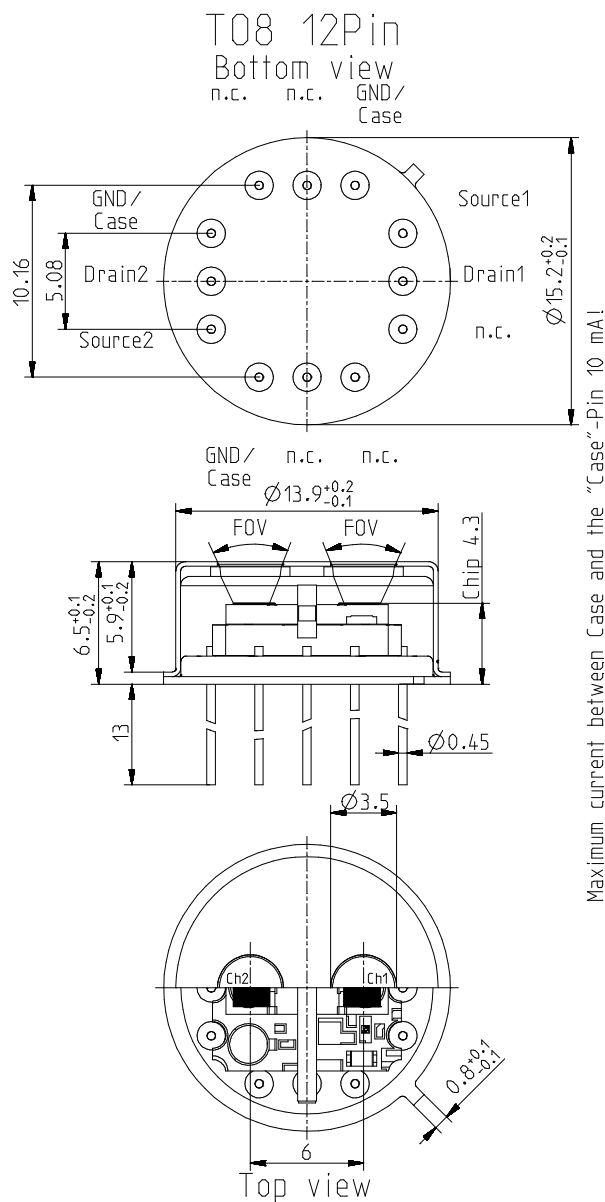
Planar multi channel pyroelectric detector

Description:

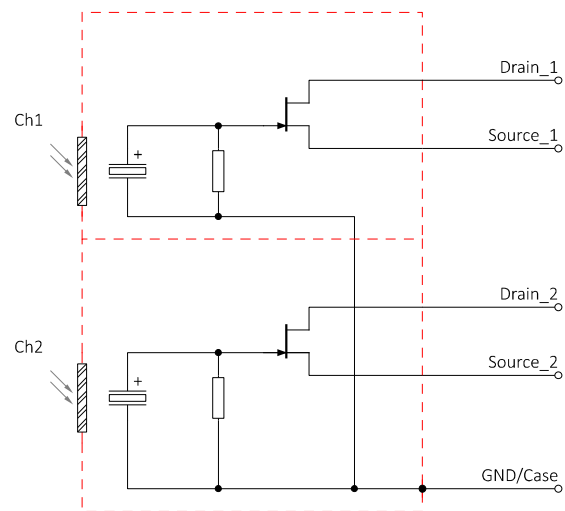
dual channel; TO8 housing; medium chip size;
JFET; voltage mode;



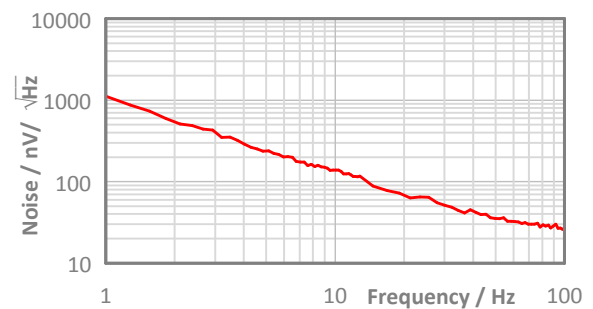
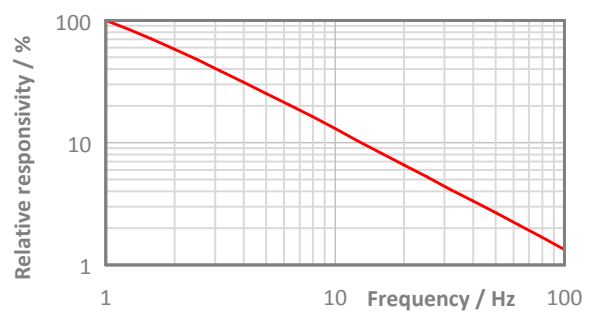
Housing:



Pin Assigment:



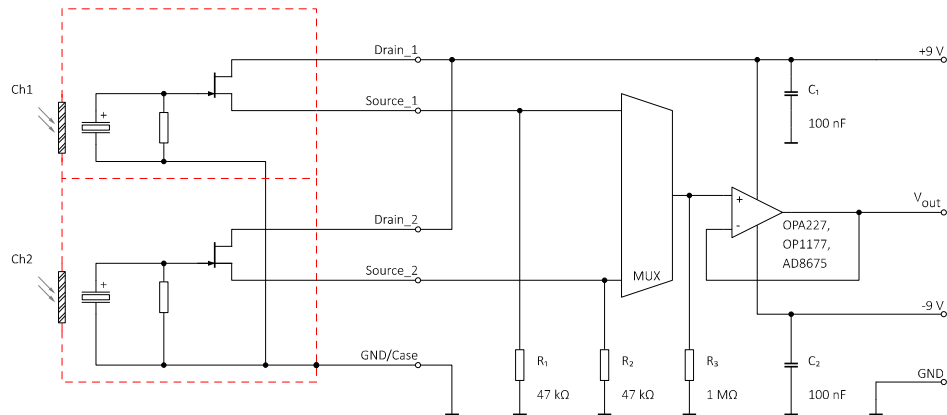
Frequency Response:



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Planar multi channel pyroelectric detector

Test Circuit:



Parameters:

| | | |
|--|-----|--|
| Aperture size | nom | ø9.5 mm, single channel ø3.5 mm |
| Element size / type | nom | 2.0 × 2.0 mm ² lithium-tantalate with black layer |
| Thermal time constant | typ | 100 ms |
| Electrical time constant | typ | 5 s |
| Polarity | nom | Positive signal by positive IR flux change |
| Voltage responsivity (rms) {500 K, 10 Hz, 25 °C, without filter/window} | min | 350 V/W |
| Noise density (rms) {10 Hz, BW 1 Hz, 25 °C} | max | 160 nV/√Hz |
| Detectivity {500 K, 10 Hz, 1 Hz, 25 °C, without filter/window} | typ | 5.9E+08 cmVHz/W |
| Offset voltage {opt. Drain current = 10 ... 100 μA} | nom | 0.4 ... 1.5 V |
| Drain source voltage | max | 18 V |
| Operating / Storage temperature | nom | -25 ... +85 °C |
| IR window | | Combinations of all InfraTec standard narrow band pass filters are available. Customized filters upon request. |
| Filter sizes | nom | Rectangular filters: (4.20 × 4.20) mm ±0.1 mm Circular filters: not applicable Standard thickness: 0.50 mm +0.2/-0.1 mm Thickness range 0.70 ... 1.10 mm on request |
| Field of View | min | Silicon substrate; 0.5 mm thick: 45° |

InfraTec reserves the right to change these specifications at any time without notification.