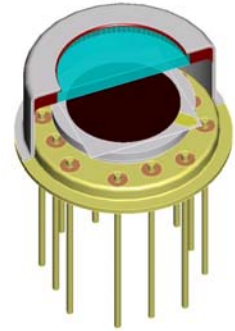


LIE-329-#

high performance pyroelectric detector

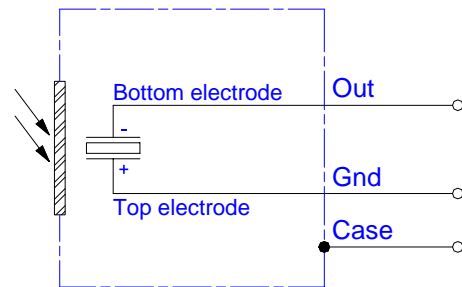
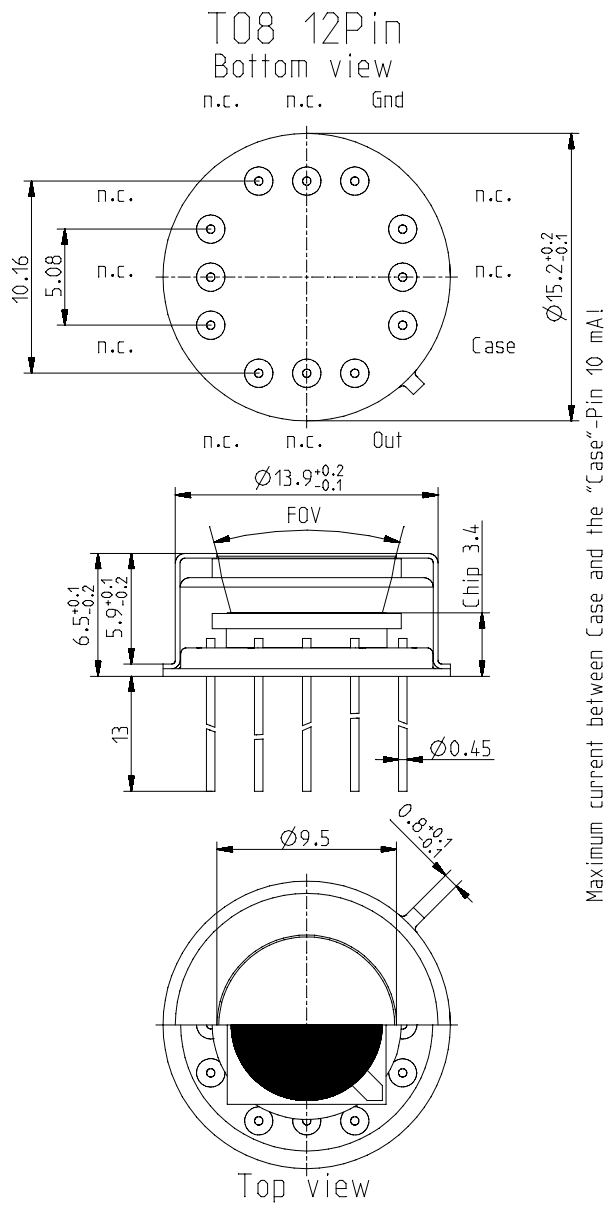
Description:

single channel; TO8 housing; large chip size; current mode;

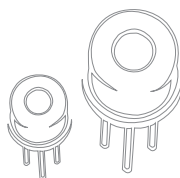
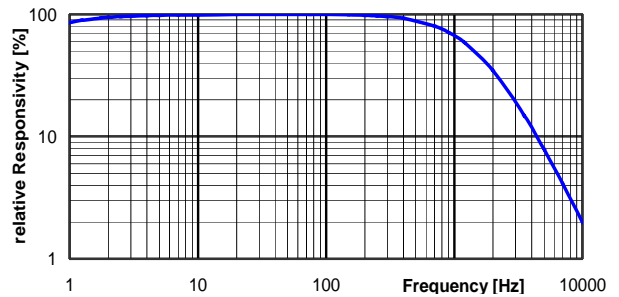


HOUSING:

PIN ASSIGNMENT:



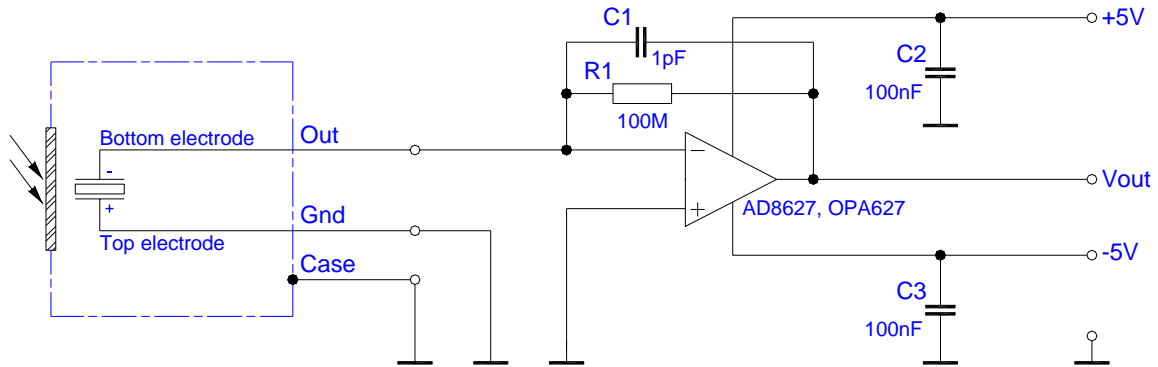
FREQUENCY RESPONSE:



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high performance pyroelectric detector

TEST CIRCUIT:



PARAMETERS:

Aperture size	nom	ø9.5 mm
Element size / type	nom	ø8.0 mm lithium-tantalate with polymer black layer
Thermal time constant	typ	100 ms
Polarity	nom	negative signal by positive IR flux change
Current responsivity (rms) {500K, 10 Hz, 25 °C, without window}	min	1.0 µA/W
Modulation frequency	max	4 kHz
Element capacitance {1 kHz, 1 V, 25 °C}	min	600 pF
Element dielectric loss {1 kHz, 1 V, 25 °C}	max	0.003
Potential of detector case	nom	selectable potential between -24 ... +24V to Ground {EMC requires low-impedance coupling}
Operating / Storage temperature	nom	-25 ... +85°C
IR window		CaF ₂ , BaF ₂ , customized filters upon request.
Filter sizes	nom	rectangular filters: not applicable circular filters: ø10.0 mm ±0.1 mm standard thickness: 1.0 mm ±0.1 mm
Field of View	min	CaF ₂ or BaF ₂ ; 1.0 mm thick: 20°