

Datasheet - Standard Product

LME-501-#

pyroelectric detector

Description:

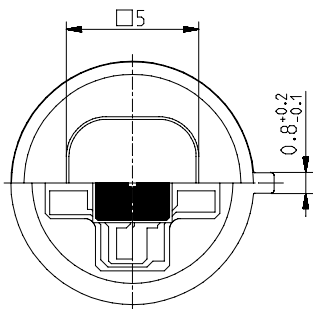
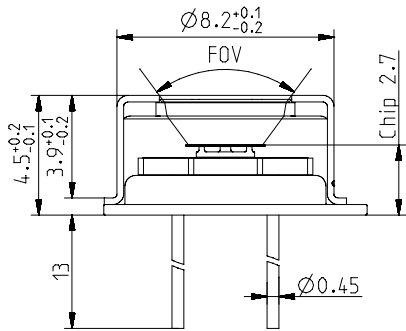
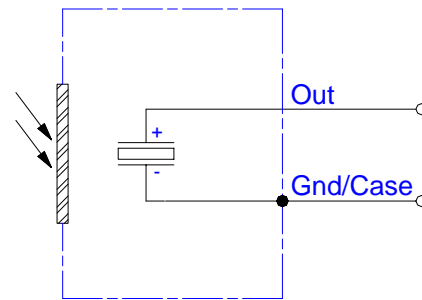
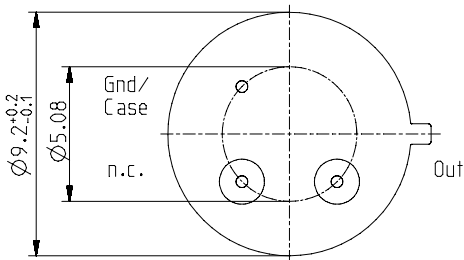
single channel; TO39 housing; large chip size; low Micro; current mode;



HOUSING:

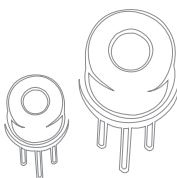
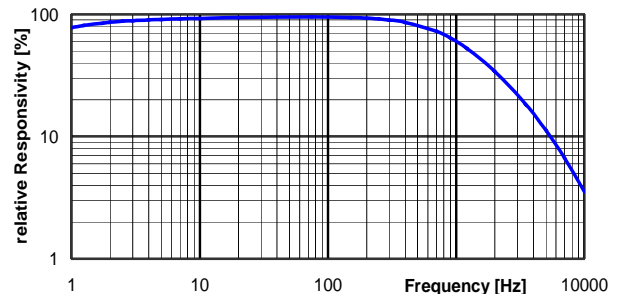
PIN ASSIGNMENT:

TO39 3Pin
Bottom view



Top view

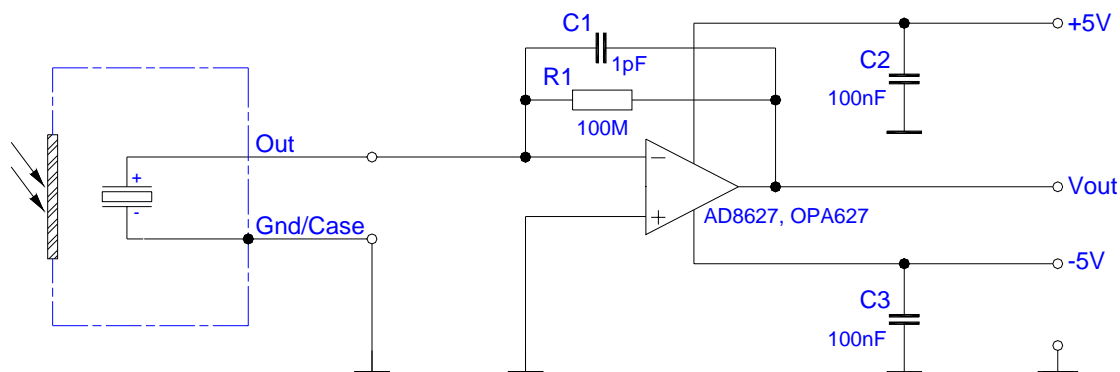
FREQUENCY RESPONSE:



LME-501-#

pyroelectric detector

TEST CIRCUIT:



PARAMETERS:

Aperture size	nom	5.0 mm sq.
Element size / type	nom	3.0x3.0 mm ² lithium-tantalate with black layer
Thermal time constant	typ	200 ms
Polarity	nom	positive signal by positive IR flux change
Current responsivity (rms) {500K, 10 Hz, 25 °C, without window}	min	1.5 μA/W
Element capacitance {1 kHz, 1 V, 25 °C}	typ	120 pF
Element dielectric loss {1 kHz, 1 V, 25 °C}	max	0.001
Operating / Storage temperature	nom	-25 ... +85°C
IR window		All InfraTec windows and filters are available (except KBr and CsI). Customized filters upon request.
Filter sizes	nom	rectangular filters: (5.25 x 5.25) mm +0/-0.05 mm circular filters: ø6.5 mm ±0.1 mm standard thickness: 0.50 mm +0.2/-0.1 mm thickness range 0.70 ... 1.10 mm on request
Field of View	min	CaF ₂ or BaF ₂ ; 0.4 mm thick: 60° Silicon substrate; 0.5 mm thick: 70°