

Multi channel pyroelectric Infrared detector

LVF442 series

Description

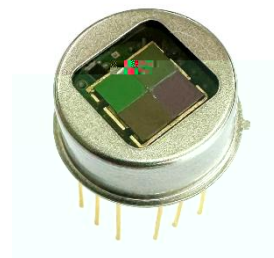
TO8

JFET

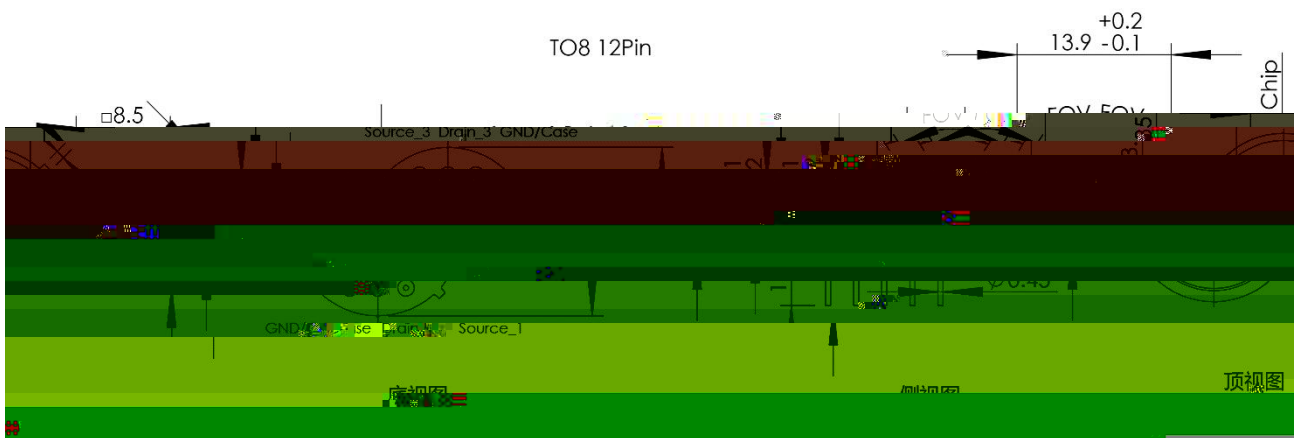
quad channel TO8 housing Large FOV
thermal compensation Low microphone
single power supply JFET
voltage mode

Application

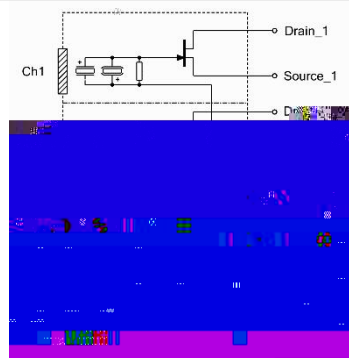
Flame Detection



Housing

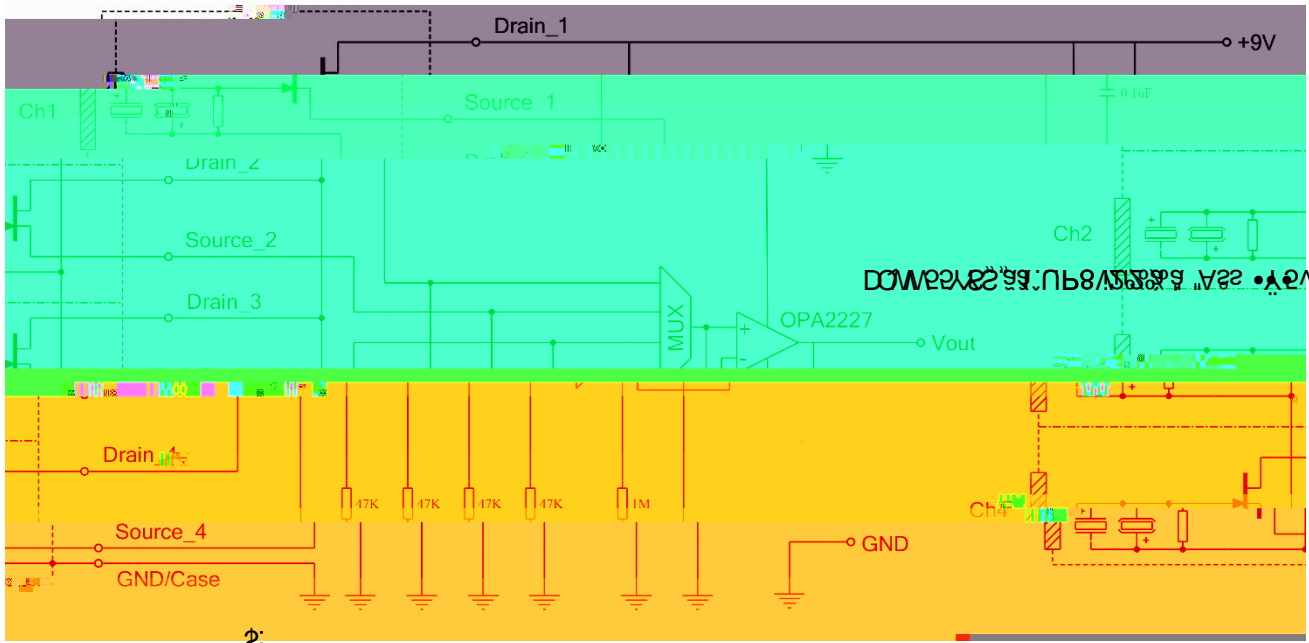


Pin Assignment



MEMS

Test circuit



Parameters

Vol tage responsi vi ty(rms) @500 K 10 Hz 25 without filter/window	mi n	200V/W
Noi se densi ty (rms) @10 Hz BW1 Hz 25	max	130nV/ Hz
Detecti vi ty @500 K 10 Hz BW1 Hz 25 without filter/window	typ	4E+08 cm Hz/W

Aperture size	nom	8.5mm
/		2mm
El ement si ze/type	nom	l i thi um tantal ate
Thermal ti me constant	typ	150ms



Offset voltage Source @25 GND	-	0.4 1.5V
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/ Operating/Storage temperature	nom	-25 +85
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Filter sizes	nom	3mm
Aperture window/Sizes	nom	Sapphire 12.7mm
1 IR filter Ch1	nom	CWL 5.3μ m HPB 180nm Si
2 IR filter Ch2	nom	CWL 4.48μ m HPB 450nm Si
3 IR filter Ch3	nom	CWL 3.85μ m HPB 180nm Si
4 IR filter Ch4	nom	CWL 2.7μ m HPB 180nm Si
FOV	min	65°

Note: Due to technological progress and process improvement, the above parameters are subject to change without prior notice.

