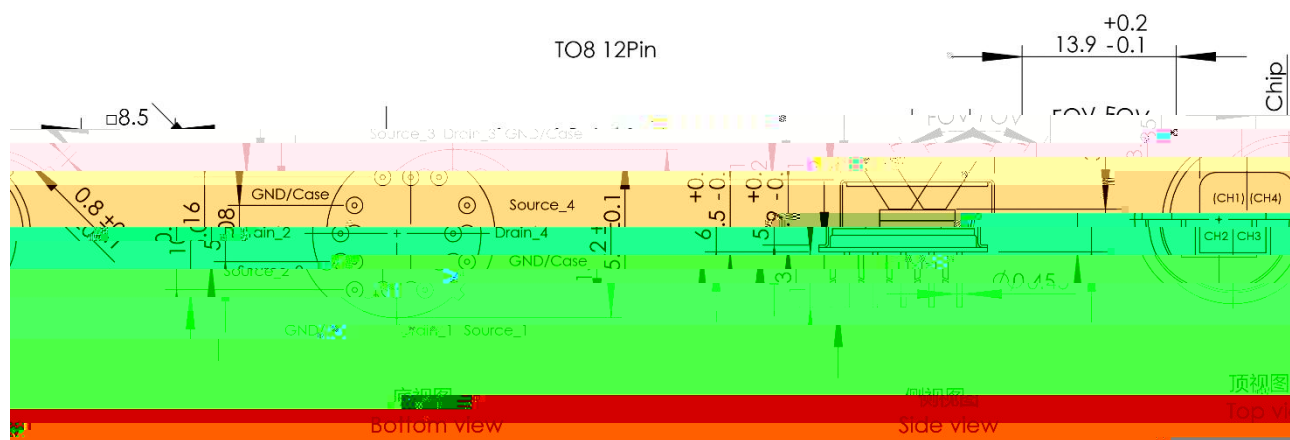


## LVF442 series

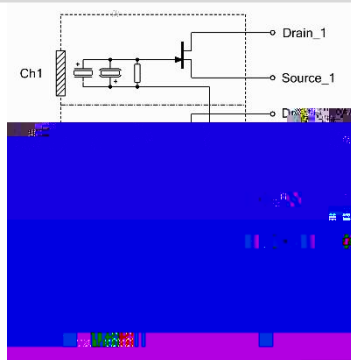
## Application

## Flame Detection

## Housing

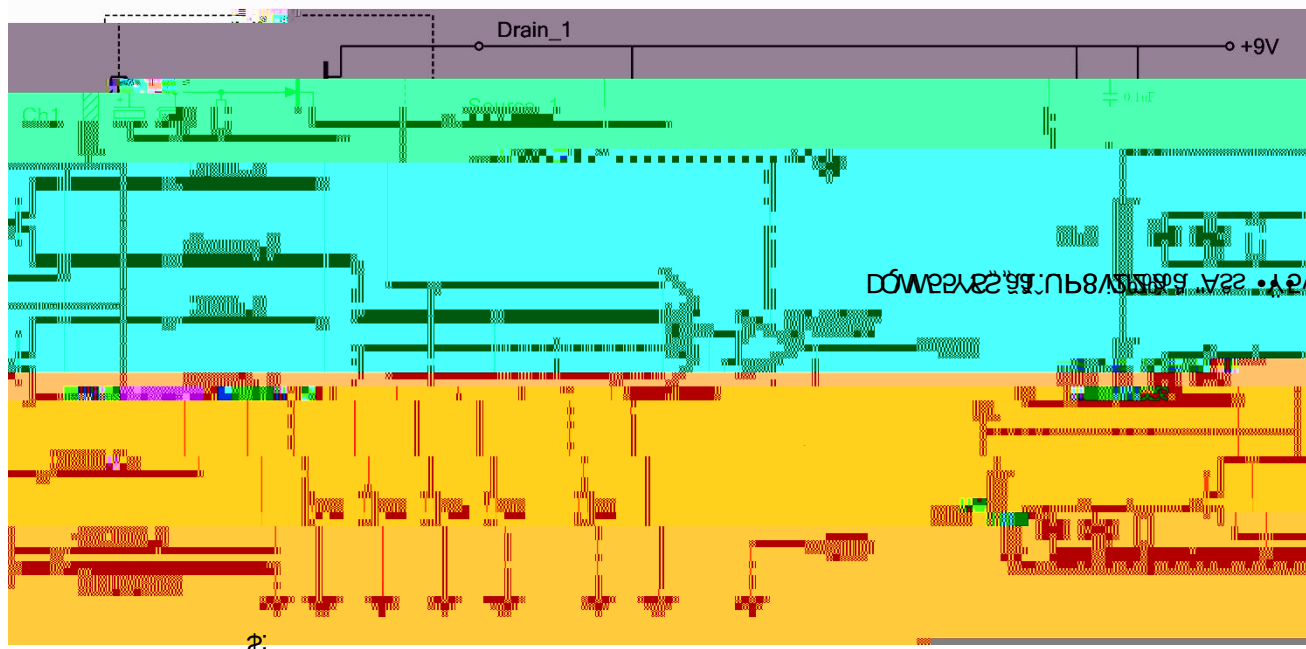


## Pin Assignment





Test Suit



⌘:

|                           |         |         |                       |                       |     |                                             |
|---------------------------|---------|---------|-----------------------|-----------------------|-----|---------------------------------------------|
| Voltage responsivity(rms) |         |         |                       |                       | min | 200V/W                                      |
| @500 K                    | 10 Hz   | 25      | without filter/window |                       |     |                                             |
| Noise density (rms)       |         |         |                       |                       | max | 130nV/ $\sqrt{\text{Hz}}$                   |
| @10 Hz                    | BW 1 Hz | 25      |                       |                       |     |                                             |
| Detectivity               |         |         |                       |                       | typ | 4E+08 $\text{cm} \sqrt{\text{Hz}}/\text{W}$ |
| @500 K                    | 10 Hz   | BW 1 Hz | 25                    | without filter/window |     |                                             |

|                       |     |                   |
|-----------------------|-----|-------------------|
| Aperture size         | nom | □ 8.5mm           |
| /                     |     | □ 2mm             |
| Element size/type     | nom | lithium-tantalate |
| Thermal time constant | typ | 150ms             |



|                                       |   |               |
|---------------------------------------|---|---------------|
| Offset voltage Source      GND<br>@25 | - | 0.4      1.5V |
|---------------------------------------|---|---------------|

|                                    |     |              |
|------------------------------------|-----|--------------|
| /<br>Operating/Storage temperature | nom | -25      +85 |
|------------------------------------|-----|--------------|

|                       |     |                                 |
|-----------------------|-----|---------------------------------|
| Filter sizes          | nom | □ 3mm                           |
| Aperture window/Sizes | nom | Sapphire 12.7mm                 |
| 1<br>IR filter Ch1    | nom | CWL 5.3 μ m<br>HPB 180nm<br>Si  |
| 2<br>IR filter Ch2    | nom | CWL 4.48 μ m<br>HPB 450nm<br>Si |
| 3<br>IR filter Ch3    | nom | CWL 3.85 μ m<br>HPB 180nm<br>Si |
| 4<br>IR filter Ch4    | nom | CWL 2.7 μ m<br>HPB 180nm<br>Si  |
| FOV                   | min | 65 °                            |

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

|  |                                                                                   |
|--|-----------------------------------------------------------------------------------|
|  |                                                                                   |
|  | <a href="https://www.nysenba.com">https://www.nysenba.com</a>                     |
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