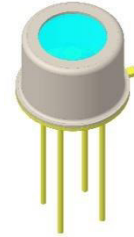


**DSV-7311-#**

PYRONEER® enhanced pyroelectric detector

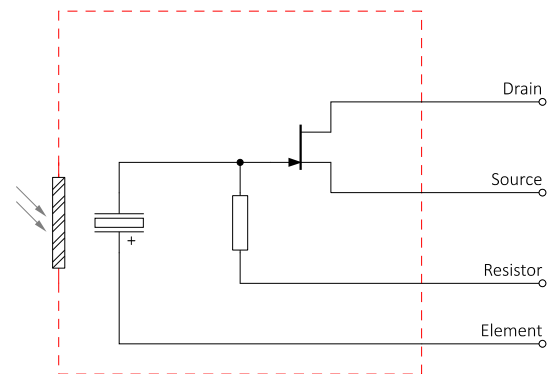
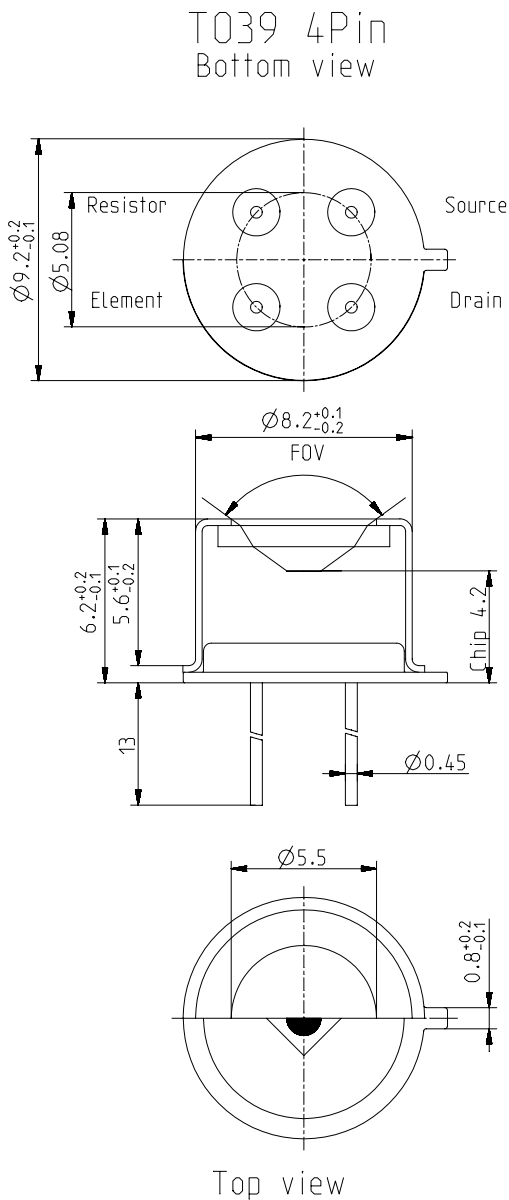
**Description:**

single channel; TO39 housing; small chip size;  
 JFET; voltage mode;  
 DLaTGS - Deuterated L-Alanine doped TriGlycine Sulphate;  
 short thermal time constant, metal black coating;

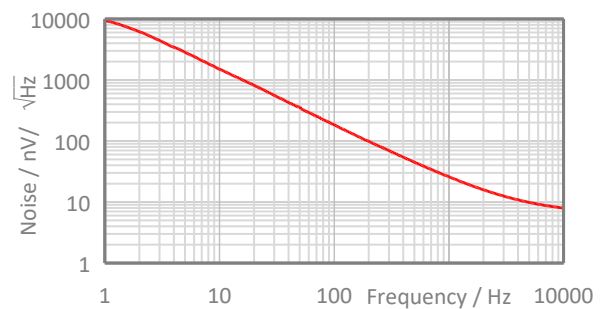
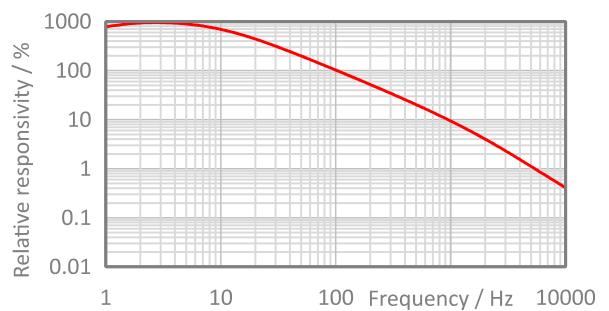


**Housing:**

**Pin Assignment:**



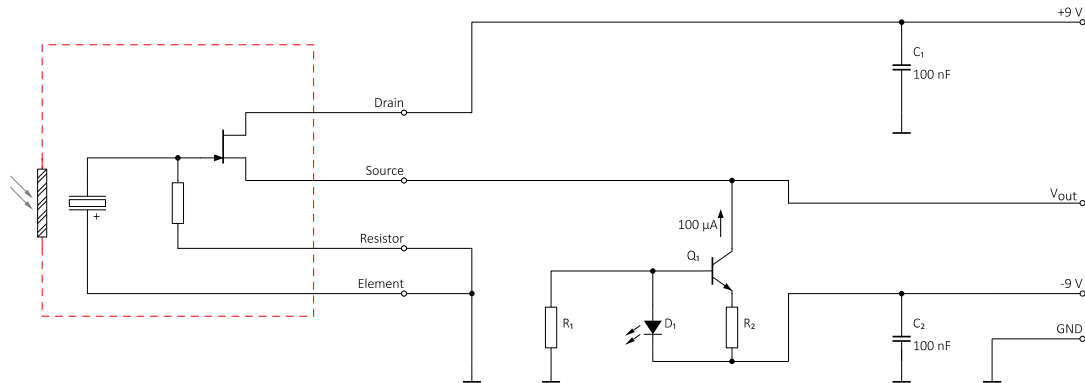
**Frequency Response:**



## DSV-7311-#

## PYRONEER® enhanced pyroelectric detector

## Test Circuit:



## Parameters:

Aperture size	nom	ø 5.5 mm
Element size / type	nom	ø1.3 mm DLATGS with metal black layer
Thermal time constant	typ	12 ms
Electrical time constant	typ	200 ms
Polarity	nom	Negative signal by positive IR flux change
Voltage responsivity (rms) {500 K, 100 Hz, 30±2 °C, window excluded}	min typ	550 V/W 650 V/W
Voltage responsivity (rms) {500 K, 1 kHz, 30±2 °C, window excluded}	min typ	55 V/W 65 V/W
Detectivity {500 K, 100 Hz, BW 1 Hz, 30±2 °C, window excluded}	min typ	4.5E+08 cmVHz/W 5.2E+08 cmVHz/W
Detectivity {500 K, 1 kHz, BW 1 Hz, 30±2 °C, window excluded}	min typ	2.8E+08 cmVHz/W 3.3E+08 cmVHz/W
Responsivity ratio {100 Hz / 1 kHz}	max	11.5
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 ... +55 °C / -25 ... +70 °C
IR filter		All InfraTec standard crystal windows (BaF2, CaF2, CsI, KBr, Sapphire) are available. Customized filters upon request.
Filter sizes	nom	Circular filters: ø6.5 mm ±0.1 mm Standard thickness: 0.50 mm +0.2/-0.1 mm Maximum thickness: 0.85 mm
Field of View	min	CaF2 or BaF2; 0.4 mm thick: 100°

This preliminary datasheet contains information regarding a product InfraTec is considering for production release. Due to this state all data are for information only.

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