

## HTS L-Series

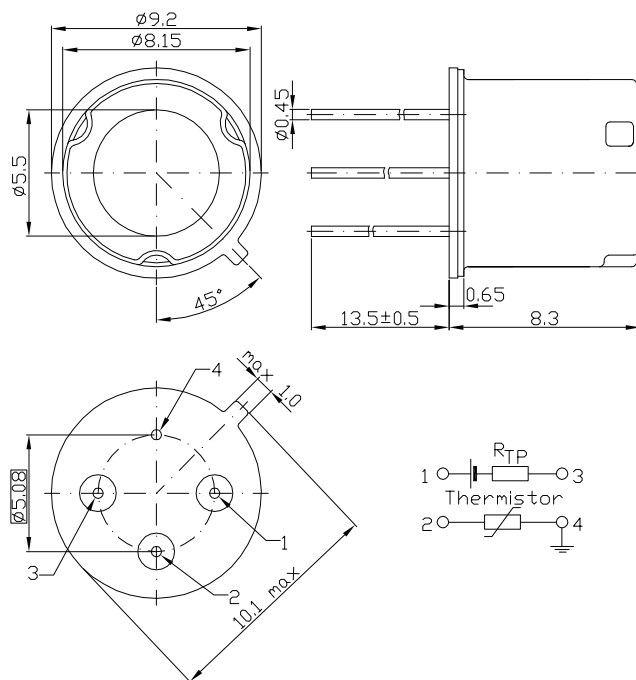
### Thermopile Sensors for Remote Temperature Measurements

The HTS L-Series provides an integrated lens in a TO-39 transistor housing which is ideally suited for narrow fields of view with small measurement spots. This allows accurate temperature measurements at greater distances.

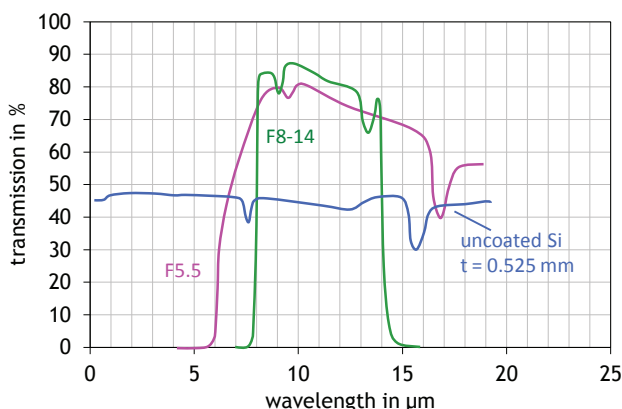
The HTS L-Series thermopile sensors feature high sensitivity, a small temperature coefficient of sensitivity and high reproducibility and reliability.

Additionally, Heimann Sensor offers integrated thermopile sensors (HIS series), which combine a thermopile sensor chip with an ASIC in a TO-39 housing.

### Dimensions and PIN-Configuration



### Filter Options



### Characteristics

	HTS L11	HTS L1c1	Unit
Element size	0.61 <sup>2</sup>	0.76 <sup>2</sup>	mm <sup>2</sup>
Voltage response <sup>a)</sup>	19	27	V mm <sup>2</sup> / W
Sensitivity <sup>a)</sup>	50	45	V / W
Resistance R <sub>TP</sub> <sup>b)</sup>	86	75	kOhm
TC of resistance R <sub>TP</sub> <sup>b)</sup>	0.02	0.02	% / K
Noise <sup>b)</sup>	38	35	nV / Hz <sup>1/2</sup>
Detectivity <sup>a),b)</sup>	8.0·10 <sup>7</sup>	9.8·10 <sup>7</sup>	cm Hz <sup>1/2</sup> / W
Time constant	<5	8	ms
Thermistor reference <sup>b)</sup>	100	100	kOhm
Temp. coeff. of thermistor <sup>c)</sup>	3940	3940	K
Field of view <sup>d)</sup>	5	6.5	°
Operating temperature	-20 ... 120		°C
Storage temperature	-40 ... 120		°C

a) Without filter, T<sub>obj</sub> = 100°C, DC  
 b) At T<sub>amb</sub> = 25°C  
 c) 25°C, 50°C  
 d) Deg at 50% signal level

### Ordering Information

HTS	Heimann Thermopile Sensor
L	Package type (TO-39 with lens)
1, 1C	Thermopile chip
1, 2, 0	Thermistor 100kΩ, 30kΩ, no thermistor
Lx	Lens type (focal length)
Fx	Filter type

E.g.: HTS L1C1 L3.0 F5.5