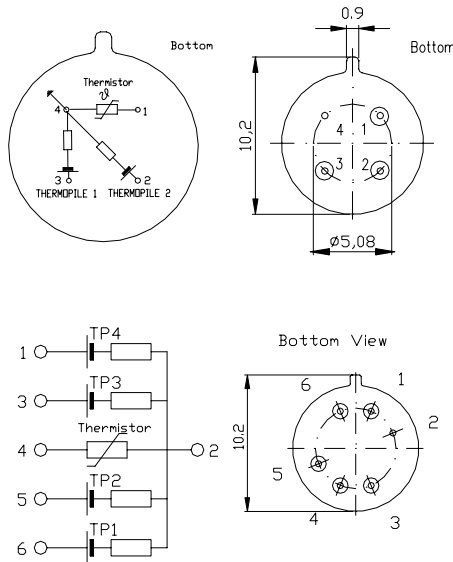




HTS Multichannel Sensor

Thermopile Sensor for Gas Analysis

The HTS Multichannel Sensors comprise two or four independent sensor chips for a multichannel gas concentration measurement. Typically one to three of the optical channels contain a gas specific filter window and the other channel, equipped with a filter with center wavelength where no gas absorption occurs, serves as reference. Of course we can also provide Multichannel Sensors with customer filters (thickness should be close to 0.5 mm).

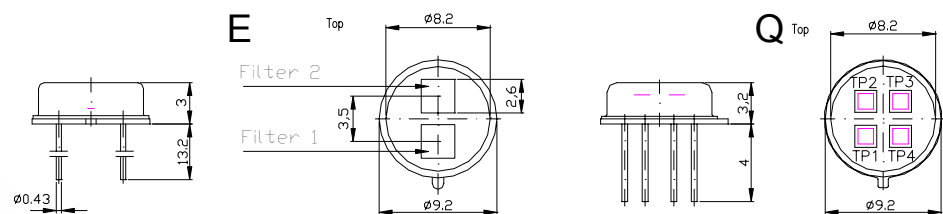
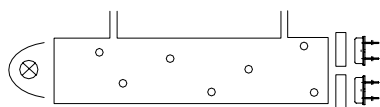


Parameter	HTS Q21	HTS E21	HTS E31	Unit
number of channels	4	2	2	
element size	1,2 ²	1,2 ²	2,1 ²	mm ²
voltage response ¹	125	125	237	V mm ² /W
sensitivity ¹	86	86	51	V/W
resistance R _{TP} ²	84	84	88	k Ohm
TC of resistance R _{TP} ²	0.02	0.02	0.02	% / K
noise ²	37	37	38	nV / Hz ^{1/2}
detectivity ^{1,2}	2.7 · 10 ⁸	2.7 · 10 ⁸	2.9 · 10 ⁸	cm Hz ^{1/2} / W
time constant	10	10	18	ms
thermistor reference ²	100	100	100	kOhm
temp. coeff. of thermistor B ³	3940	3940	3940	K
operating temperature		-20..120		°C
storage temperature		-40..120		°C

1) without filter, T_{obj}=500°C, DC
 2) at T_{amb}=25°C
 3) 25°C, 50°C

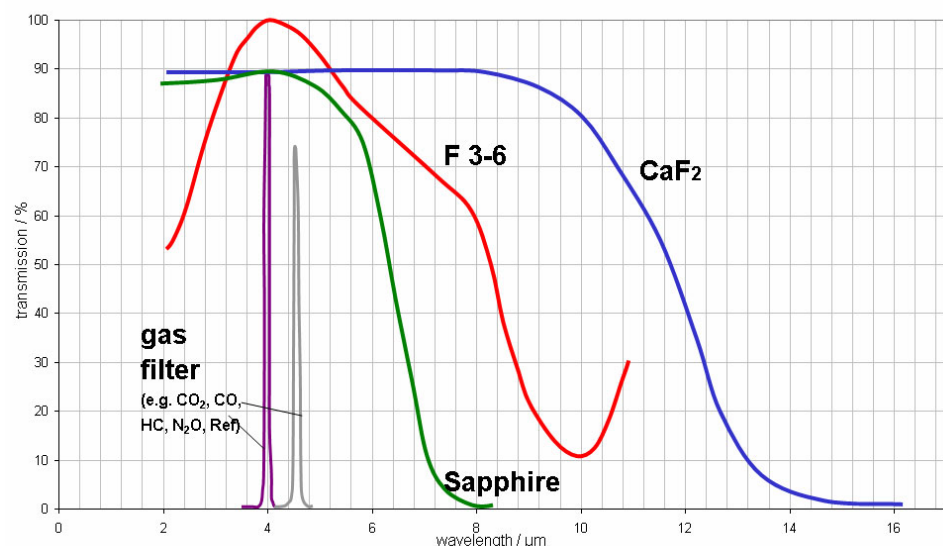
Ordering Information:

HTS / package type / chip type /
 w/wo thermistor / F desired filters
 e.g.: HTS E21 F4.0 / F4.26



Please contact Heimann Sensor also for

- IR lamps,
- light concentrators or
- high precision broad-band IR sources.



Modifications reserved Rev.08 / 01.10.2004