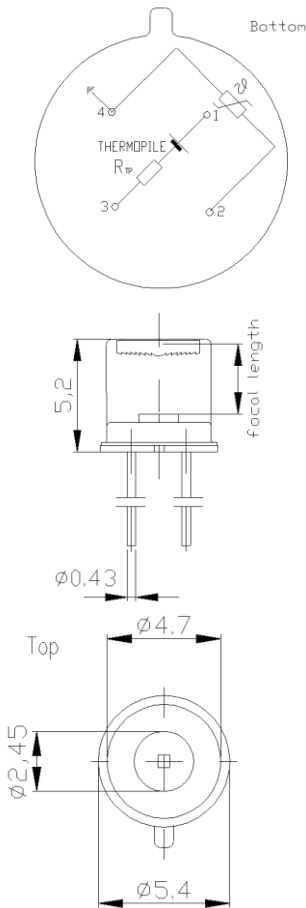


HMS-M Series

Thermopile Sensors with Lens L 3.0

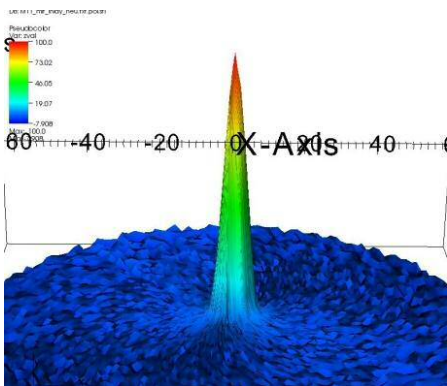
The HMS-M Series combines the good characteristics of the HMS Series in TO46 housing and the advantages of a diffractive lens in respect to field of view and signal. The focal length of this lens is 3.0 mm and it is available with F5.5 or F8.0 filter coatings.



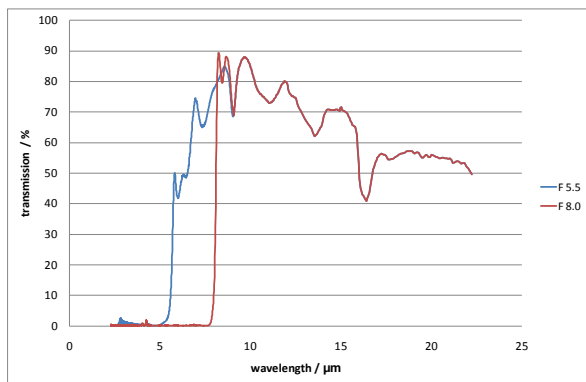
Parameter	HMS M11	HMS M1C1	HMS M21	Unit
element size	0,61 ²	0.76 ²	1,2 ²	mm ²
signal voltage ¹	330	480	890	μV
resistance R _{TP} ²	86	75	84	k Ohm
temp. coeff. of resistance R _{TP}	0.02	0.02	0.02	% / K
noise ²	38	35	37	nV/ Hz ^{1/2}
time constant	< 6	< 9	< 13	ms
thermistor reference ²	100	100	100	kOhm
temp. coeff. of thermistor B ³	3940	3940	3940	K
field of view ⁴	12° @ 50% 20° @ 10% 25° @ 5%	14° @ 50% 22° @ 10% 26° @ 5%	16° @ 50% 30° @ 10% 34° @ 5%	degree
operating temperature	-20...120			°C
storage temperature	-40...120			°C

- 1) Tamb=25°C, TBB = 100°C, 4.5Hz, distance 15mm, filter F5.5
- 2) at Tamb=25°C
- 3) 25°C, 50°C
- 4) Full FOV vs indicated Sv level
Diagonal cut
Tested with point source

M11 L3.0 Field of View



Filter types for lenses L 3.0



Modifications reserved Rev.01 / 28.07.2011