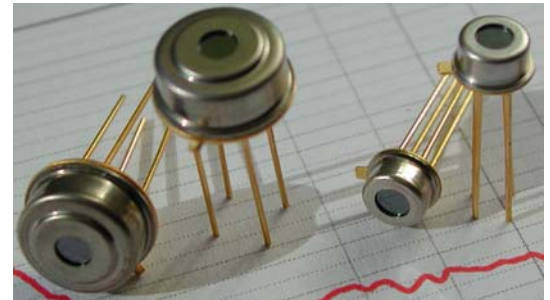


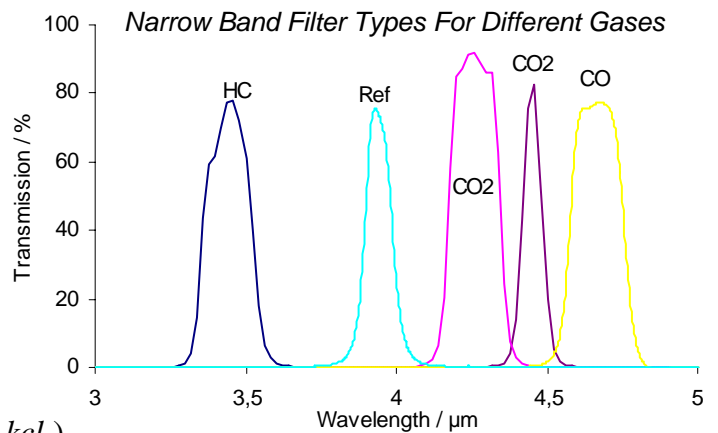
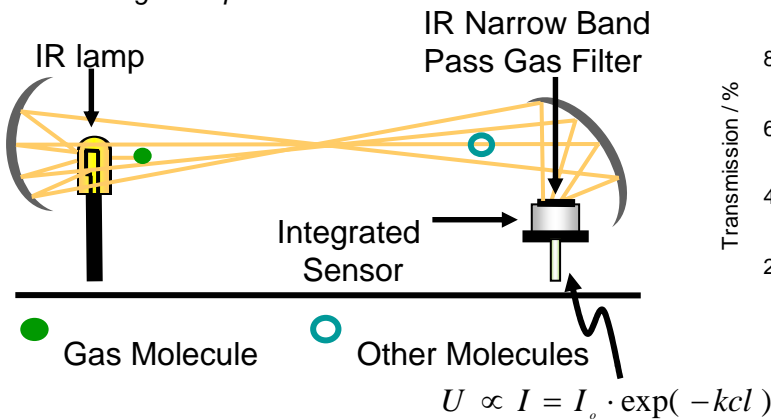
Integrated Sensor For NDIR Gas Detection

- Thermopile single sensor with integrated ASIC
- 2 analog outputs for amplified thermopile and reference signal
- Simple linear reference function for external compensation
- TO-5 or TO-18 metal housing with 4 connections
- Fast sensor response time of 8 msec typical
- Various types equipped with different filters available
- Gas types for NDIR gas detection CO₂, CO, NO_x, HC, (H₂O)
- IR-Lamp or broadband IR-Source available

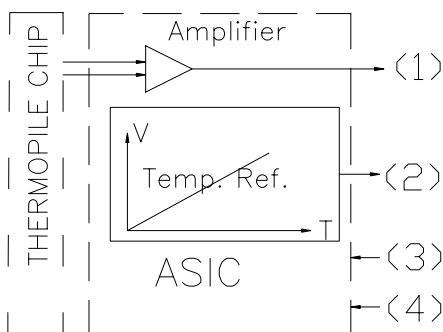


Parameter	Typ. Value ASIC 1	Typ. Value ASIC 2	Unit	Condition
supply voltage	5	3 or 5	V	VDD
supply current	1.7	1	mA	without load
output voltage range	0.3 .. VDD-0.3	0.3 .. VDD-0.3	V	
output load	> 20	> 20	kOhm	for optimal operation
thermopile amplification	5500	4000	V/V	
gradient temp. reference	15	15	mV/°C	linear ; 1.225V at 25°C
response time	8	8	ms	t/T=63% ; sensor
transmission range	filter list	filter list	µm	narrow band pass
sensor housing	TO-5	TO-5 or TO-18		
operating temperature	-40 to 120	-40 to 120	°C	

Measuring Principle



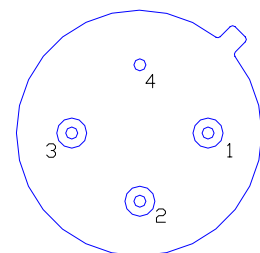
Schematic



Pin Assignment

- (1) 1: AOT → Sensor
- (2) 2: AOR → Temp. Reference
- (3) 3: VDD → Supply Voltage
- (4) 4: Vss → Ground

TO Header Bottom Side



Package drawings TO-5 and TO-18 see HTS- and HMS series datasheet

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