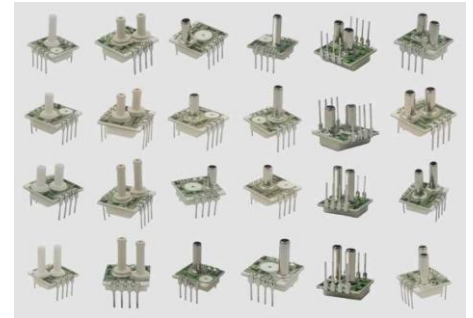


CHT-1230 UAV Series Dual In Line Package mV Output, Temperature Compensated Current Supply



DESCRIPTION

Advanced Sensor Ceramic Hybrid Technology (CHT) 1230 UAV Series combines silicon MEMS precision with rugged ceramic hybrid construction, delivering fast, stable, and accurate pressure measurements for UAV and drone applications. Ideal for airspeed, altitude, and environmental sensing, the sensor's wide temperature compensation and tight interchangeability minimize field calibration. Its rapid response time enables real-time flight control, improving stability and performance in both fixed-wing and rotary platforms. The ceramic hybrid design provides superior thermal stability and vibration resistance, making it dependable in demanding flight environments. OEMs can easily integrate the sensor into compact avionics modules thanks to its flexible porting and mounting options.

APPLICATIONS

- Pitot-static airspeed sensing
- Altitude and barometric control
- Cabin and payload pressure monitoring
- Temperature compensation for flight stability

FEATURES

- Field Interchangeability
- Constant Current
- Wide selection of port
- Absolute, Differential or Gage pressures
- Temperature Compensated (-20 to 80°C)
- 0.2% Pressure Non Linearity (Typical)

SPECIFICATIONS

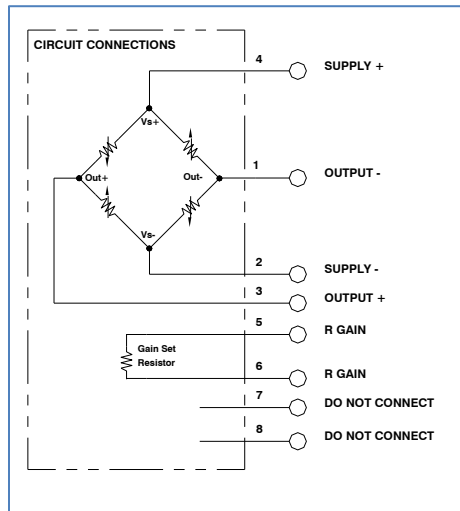
	Symbol	Min	Typical	Max	Unit	Note
Performance Characteristic						
Supply Current		0.5	1.5	2.0	mA	
Bridge Resistance, Input & Output		1800		6100	Ω	
Zero Pressure Offset		-2.0	± 0.1	+2.0	mV	
Pressure Non Linearity		-0.20	± 0.2	+0.20	%FSS	2
Hysteresis & Repeatability		-0.30	± 0.15	+0.30	%FSS	
Full Scale Span	FSS	75		150	mV	3
Temperature Hysteresis, Offset & Span		-0.20		+0.20	%FSS	4
Thermal Error of Span		-0.5		+0.5	%FSS	
Thermal Error of Offset		-0.5		+0.5	%FSS	
Response Time			100		μ s	
Insulation Resistance		50			M Ω	
Long Term Stability, Offset & Span			± 0.4		%FSS	5
Weight				3.0	grams	
Compensated Temperature		-20 to 80			°C	
Operating Temperatures		-40 to 125			°C	

SPECIFICATIONS	Symbol	Min	Typical	Max	Unit	Note
Absolute Maximum Conditions						7
Supply Current				3	mA	
Storage Temperature		-50		150	°C	
Overage Pressure						
Burst, Gauge, Differential Pressure				3x	Range	6
Burst, Absolute Pressure				10x	Range	6
Media Compatibility		CDA, Non Ionic, Non Corrosive Gases				
Wetted Materials		Ceramic, Epoxy, RTV, Silicon, Gold, Aluminum, Palladium Silver PPS (Top Barb Port)				

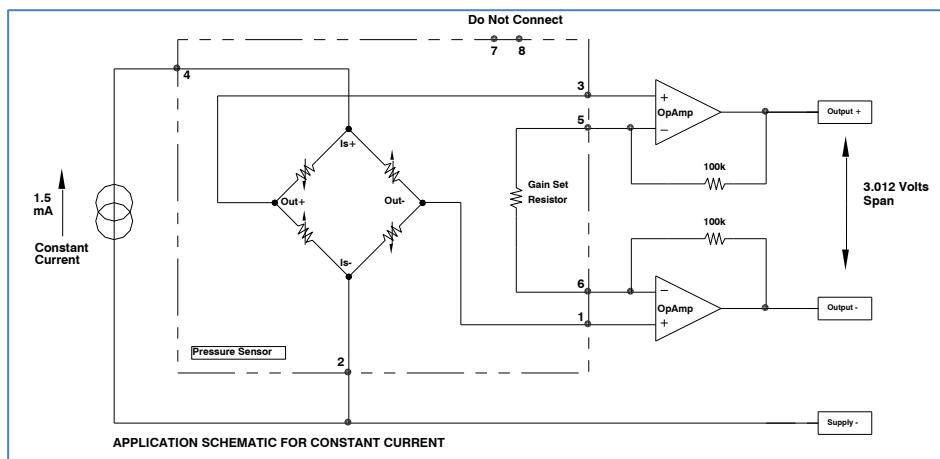
Reference Conditions: Vsupply: 1.500mA, Ta=25 °C.

1. All specification at reference conditions unless otherwise noted. Output is ratio metric to supply voltage.
2. ½ Terminal Base Non Linearity (Measured at 0, 50% and 100% FS).
3. Full Scale Span output with sensor only. Field Interchangeability of 1% is guaranteed with use of Application Note.
4. Deviation between 80 °C and -20 °C expressed as percentage of reading at 25 °C.
5. Deviation after 1 year period measured at reference conditions.
6. Maximum overpressure value is limited to 400psi for any configuration.
7. Exceeding Absolute Maximum Specification may damage the device. Extended exposure beyond the operating conditions may affect device reliability.

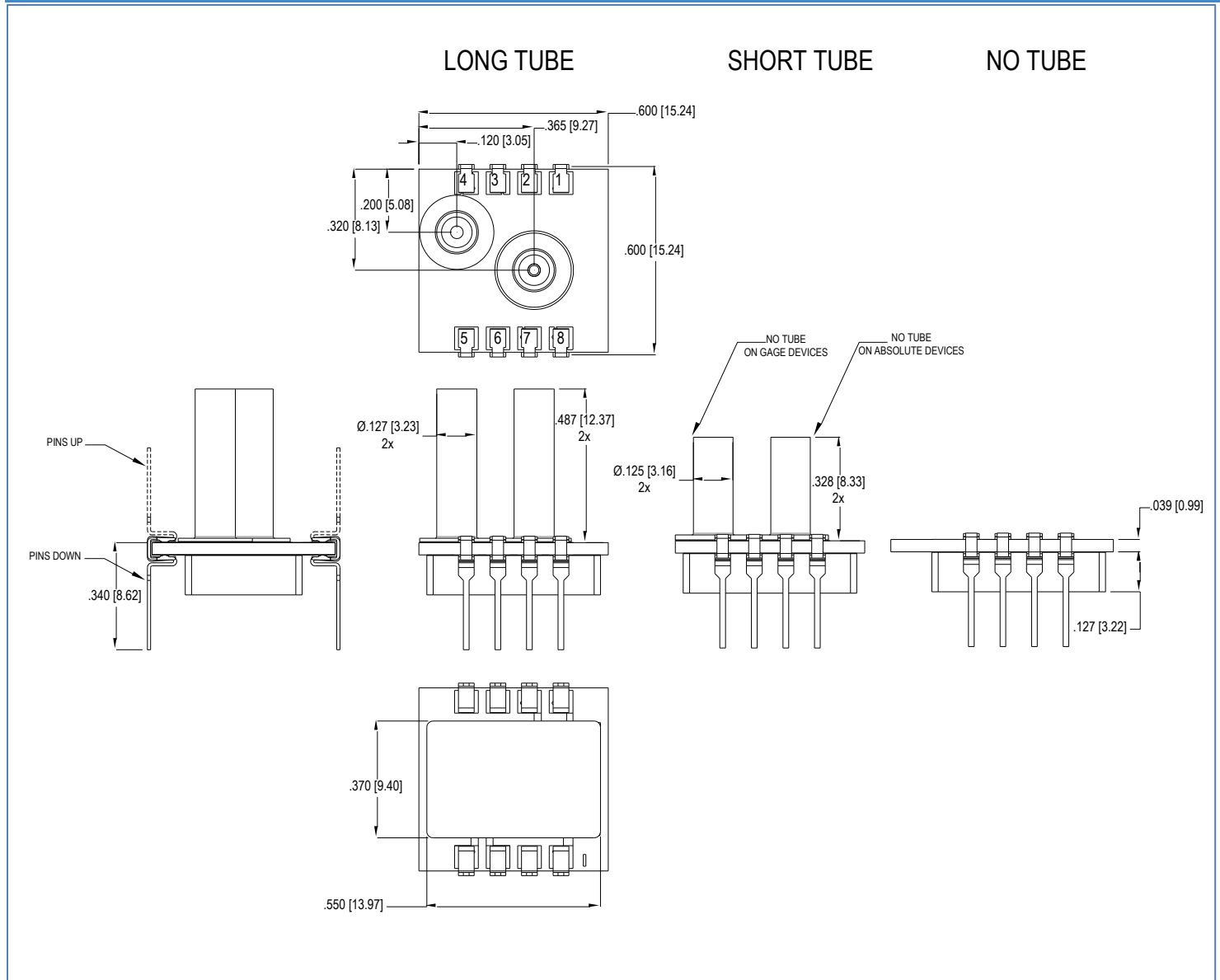
EQUIVALENT CIRCUIT



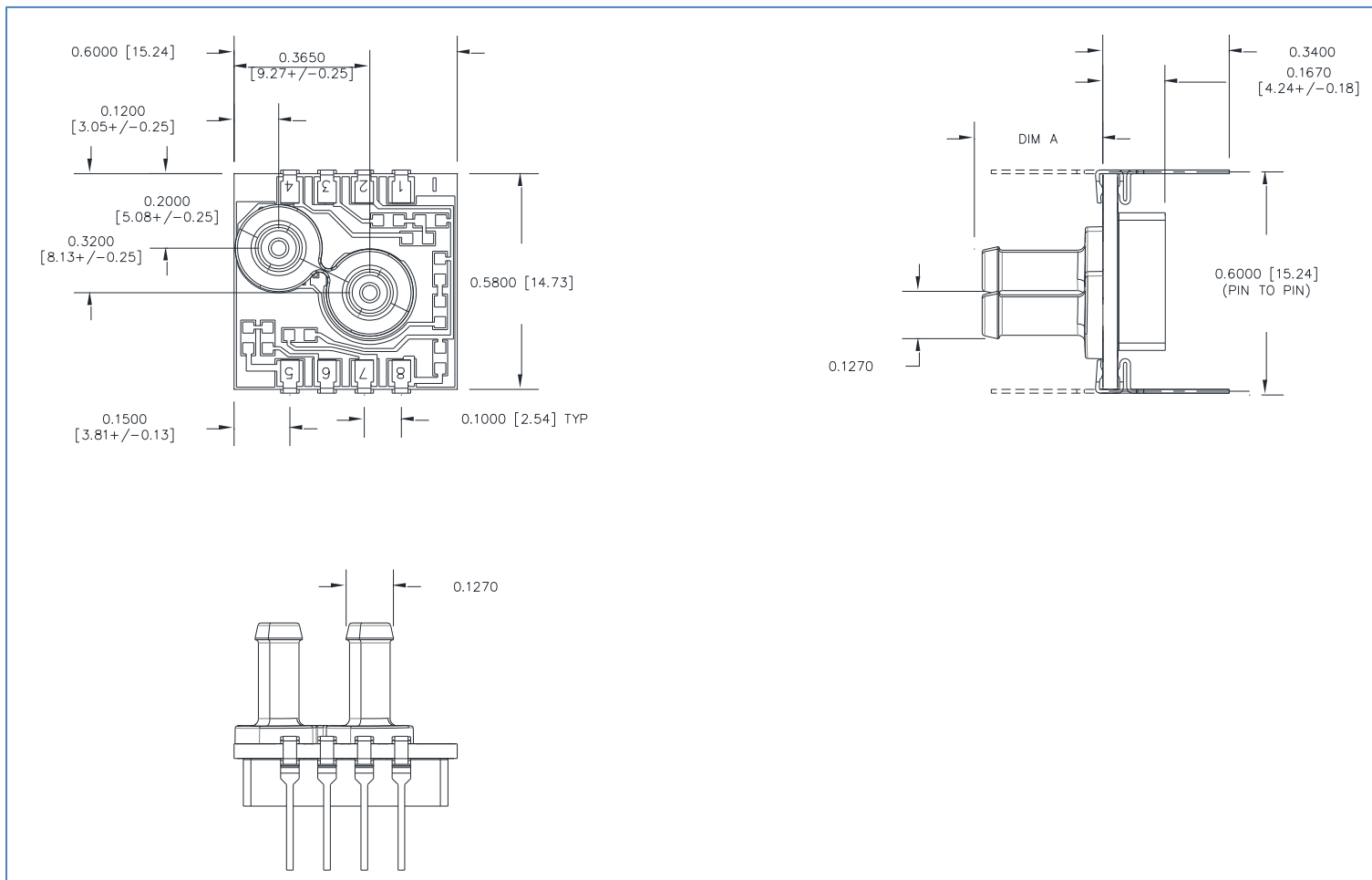
APPLICATION CIRCUIT



MECHANICAL DIMENSIONS in [mm]



TOP BARB



PART NUMBERING FOR ORDERS

Series	Port Style	Pressure Range	Pressure Units	Pressure Type (Range Availability) [Package Availability]	Pin Orientation
CHT-1230 UAV	NT=No Tube ST=Short Tube LT=Long Tube TB=Top Barb	001 002 005 015	P=PSI	A=Absolute (15) [NT,ST,LT] G=Gauge (1,2,5) [NT,ST,LT] D=Differential (1,2,5) [NT,ST,LT]	3= Down 1= Up

Part Number Example: CHT-1230 UAV TB 005PD3

CHT-1230 UAV Series, 0-5PSI Differential, Top Barb Ports, Pins Down,

WARRANTY

Pressure sensors have a limited one-year warranty to the original purchaser. AVSensors will repair or replace, at its option, without charge those items it finds defective. This is the buyers sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall AVSensors be liable for consequential, special, or indirect damages. This warranty does not apply to units that have been modified, misused, neglected or installed where the application exceeds published ratings. Specifications may change without notice. The information supplied is believed to be accurate and reliable as of this printing, however, we assume no responsibility for its use.