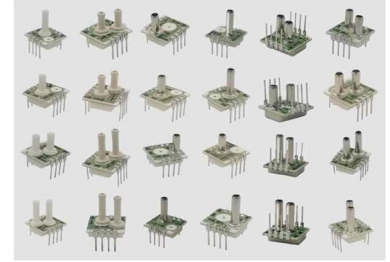


CHT-1230 Series  
Dual In Line Package  
mV Output, High Accuracy,  
Low Thermal Errors,  
Wide Temperature Compensated  
Current Supply

## CHT-1230 SERIES



### DESCRIPTION

Advanced Sensor Ceramic Hybrid Technology (CHT) 1230 Series is a temperature compensated, mV output, PCB mounted pressure sensor packaged in a rugged Dual In Line package. The 1230 Series offers higher pressure accuracy, wider temperature range, and lower thermal errors compared to the CHT-2 series. Incorporating a flexible design, the CHT-1230 Series is available with no, short or long tubes and can be mounted pin up or pins down to allow OEMs to optimize their board design. The CHT-1230 series is powered using a constant current and when configured as in the Application Note, the integrated gain set resistor will ensure sensor field interchangeability. The CHT-1230 series superior die performance, coupled with rugged ceramic substrate ensures long term stability with superior temperature performance over wide operating range.

### APPLICATIONS

- Pneumatic controls
- Automotive diagnostics
- Medical equipment/instrumentation
- Air Speed and Altitude
- Environmental controls
- Barometric pressure measurement
- Factory Automation
- Process Controls

### FEATURES

- Field Interchangeability
- Constant Current
- Wide selection of port
- Absolute, Differential or Gage pressures
- Temperature Compensated (-20 to 70°C)
- 0.1% Pressure Non Linearity (Typical)

### SPECIFICATIONS

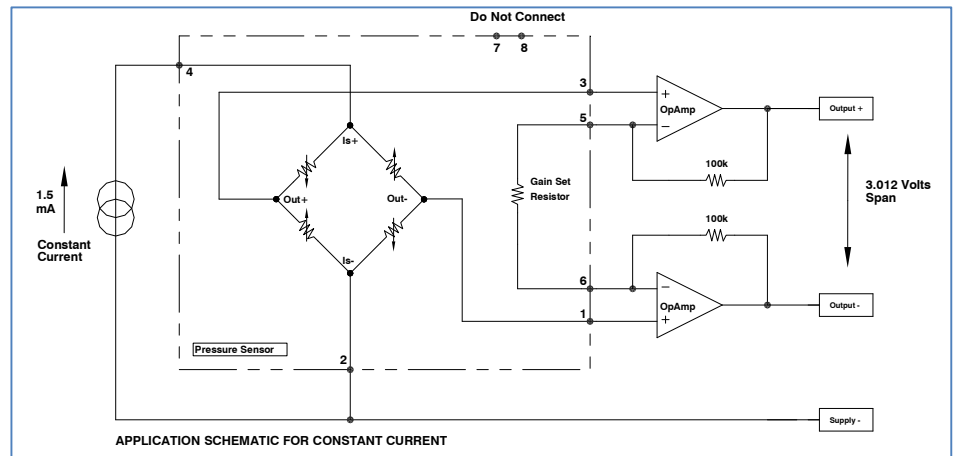
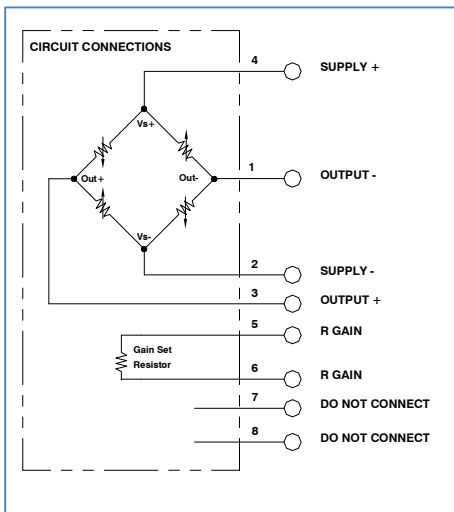
	Symbol	Min	Typical	Max	Unit	Note
<b>Performance Characteristic</b>						
Supply Current		0.5	1.5	2.0	mA	
Bridge Resistance, Input & Output		1800		6100	Ω	
Temperature Coefficient of Resistance			3000		Ppm/°C	
Zero Pressure Offset		-2.0	±0.1	+2.0	mV	
Pressure Non Linearity		-0.10		+0.10	%FSS	2
Hysteresis & Repeatability		-0.10		+0.10	%FSS	
Full Scale Span	FSS	75		150	mV	3
Temperature Hysteresis, Offset			±0.05		%FSS	4
Thermal Error of Span		-0.5		+0.5	%FSS	4
Thermal Error of Offset		-0.5		+0.5	%FSS	4
Output Noise (10Hz – 1KHz)			1.0		uV/p-p	
Response Time			100		uS	
Long Term Stability, Offset & Span			±0.1		%FSS	5
Weight				3.0	grams	
Compensated Temperature			-20 to 70		°C	
Operating Temperatures			-40 to 125		°C	

SPECIFICATIONS	Symbol	Min	Typical	Max	Unit	Note
<b>Absolute Maximum Conditions</b>						7
Supply Current				3	mA	
Storage Temperature		-50		125	°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)				

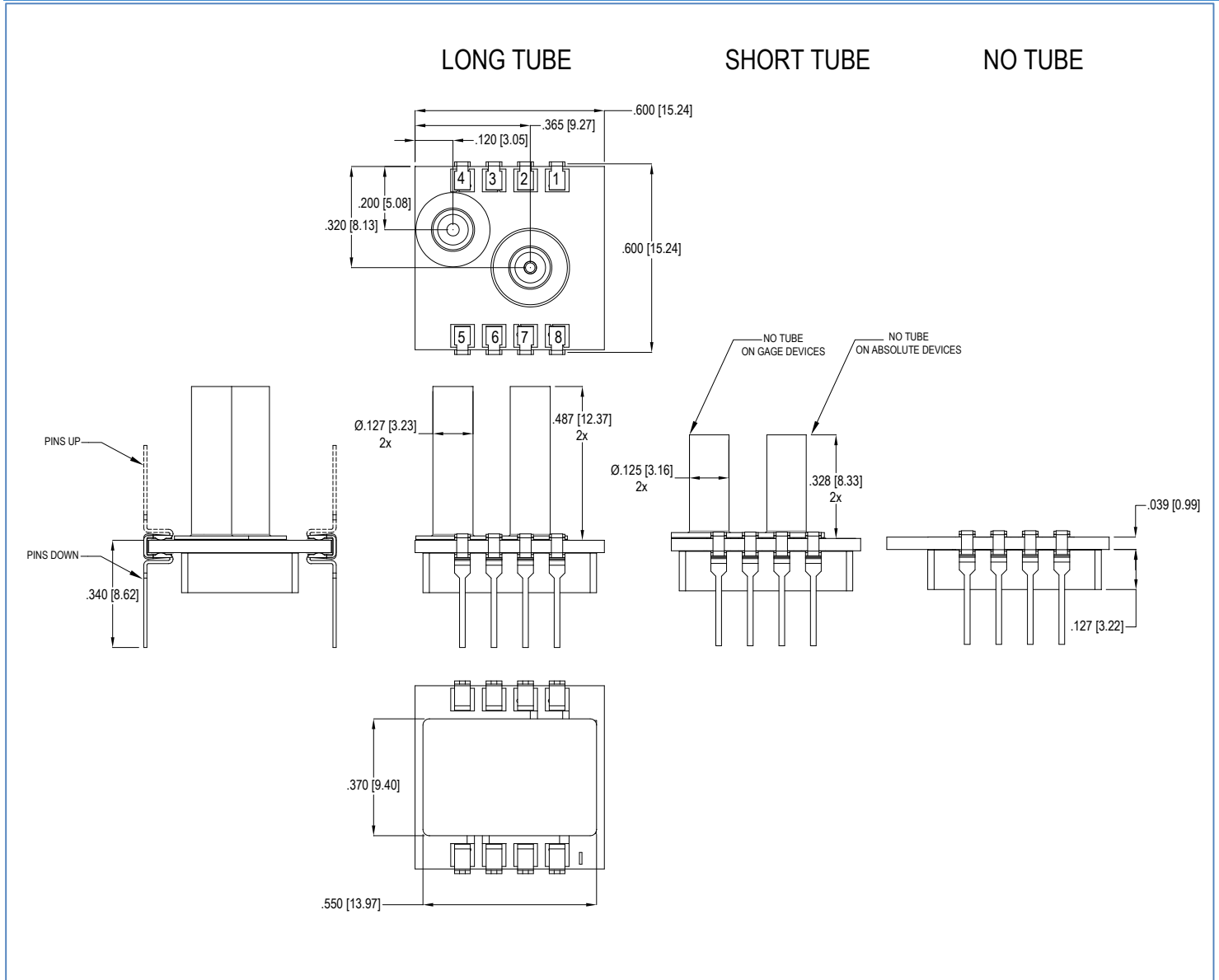
**Reference Conditions:** Vsupply: 1.500mA, Ta=25° C.

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 50° C and 0° 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.

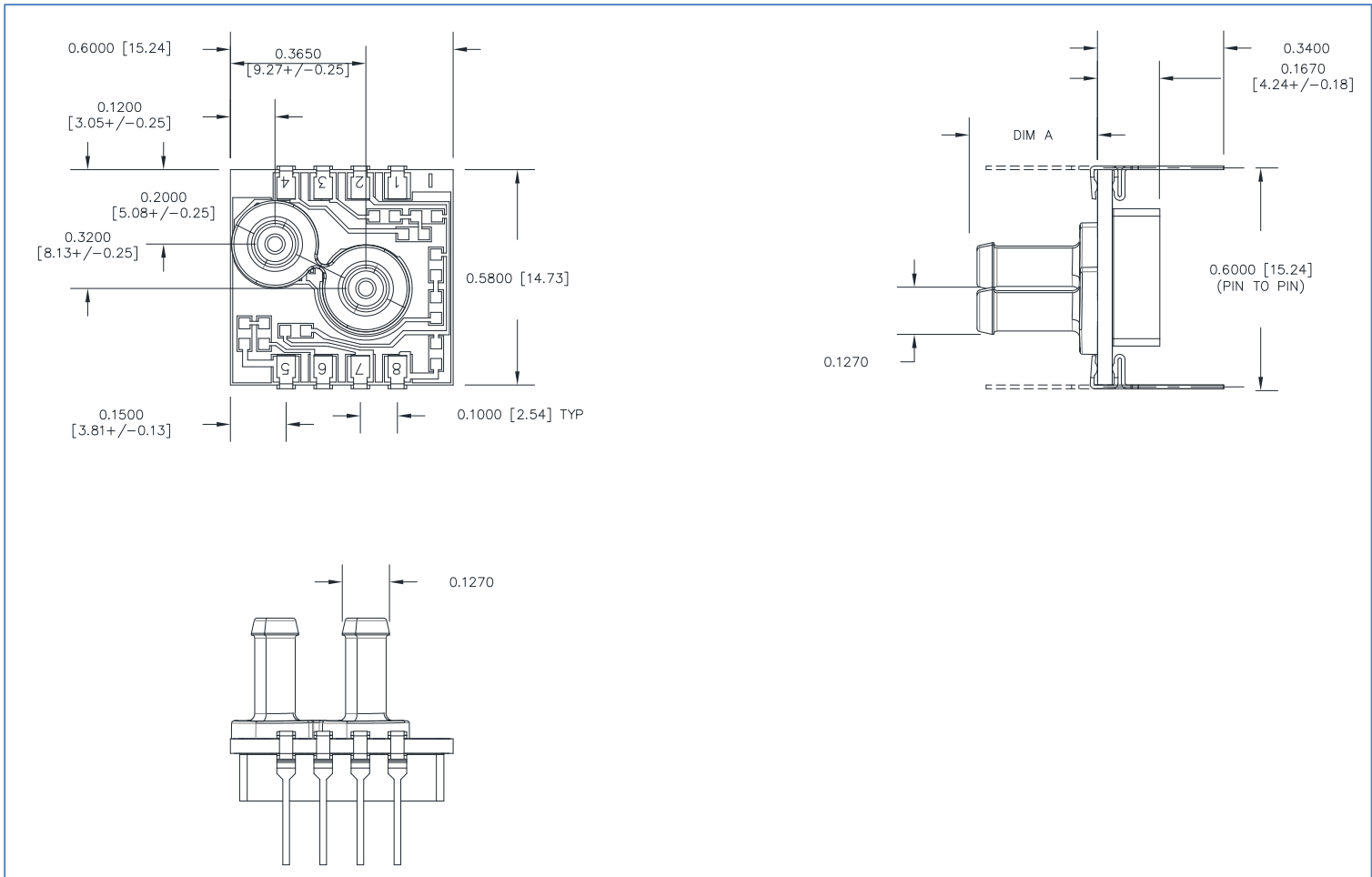
### EQUIVALENT CIRCUIT      APPLICATION CIRCUIT



### 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	NT=No Tube ST=Short Tube LT=Long Tube TB=Top Barb	001 002 005 015 030 050 100 150 300	P=PSI	A=Absolute (15,30,50,100,150) [NT,ST,LT]  G=Gauge (All Ranges) [NT,ST,LT]  D=Differential (All Ranges) [NT,ST,LT]	3= Down 1= Up

**Part Number Example: CHT-1230NT005PD3 0-5PSI Differential, No Tube, Pins Down, CHT-1230Product**

## 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.