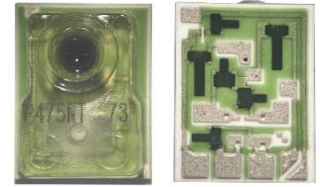


CHT-SU 1620 Series  
Single Use Medical Pressure Sensor  
AAMI Compliant  
Fully Tested



### DESCRIPTION

Advanced Sensors Ceramic Hybrid Technology, Single Use Medical Pressure Transducer (CHT-SU) 1620 series contains a piezo resistive sensor element that delivers a high level mV output in a low cost, small footprint, leadless castellation package that can be used in disposable medical applications. Each sensor is 100% calibrated and tested at the factory to ensure a high level of confidence and safety for medical OEMs. Device is designed and calibrated per the Association for the Advancement of Medical Instrumentation (AAMI BP-22 Standard) guidelines.

### APPLICATIONS

- Intrauterine Monitoring controls
- Surgical Procedures
- Blood Pressure Measurement
- Kidney Dialysis
- Organ Preservation Perfusion

### FEATURES

- Small size, Wide & Narrow Ports
- Medical Grade Polysulfone Body
- Expanded Ranges (30,60,100 PSI)
- Dielectric Gel
- High Accuracy
- Sensitivity 5uV/V/mmHg

### SPECIFICATIONS

	Symbol	Min	Typical	Max	Unit	Note
<b>Performance Characteristic</b>						
Supply Voltage		1	6.0	10	V	
Input Resistance		1200		3200	Ω	
Output Resistance		300		1000	Ω	
Operating Pressure Range		-50		300	mmHg	
Zero Pressure Offset		-20	8	+20	mmHg	
Pressure Accuracy (-50 to 100mmHg)		-1.0		+1.0	mmHg	2
Pressure Accuracy (100 to 300mmHg)		-1.0		+1.5	%Reading	2
Pressure Accuracy (5 to 100 PSI)		-1.5		+1.5	%Reading	2
Sensitivity (0 To 300mmHg)		4.95	5.00	5.00	uV/V/mmHg	
Sensitivity (5.8 To 30 PSI)		4.90		5.00	uV/V/mmHg	
Sensitivity (30 To 60 PSI)		4.80		5.00	uV/V/mmHg	
Sensitivity (60 to 100 PSI)		4.50		5.00	uV/V/mmHg	
Operating Temperature Range		10		40	°C	
Thermal Shift, Offset		-0.3		0.3	mmHg/°C	3
Thermal Shift, Span		-0.1		0.1	%/°C	3
Output Symmetry		0.95		1.05	Ratio	4
Frequency Response		1200			Hz	
Offset Drift				1	mmHg	
Phase Shift (@5KHz)				5	Degrees	
Defibrillator Isolation		5			Discharges	56
Shelf Life				5	Years	
Weight				0.5	grms	
Wetted Materials		Medical Grade Polysulfone, Medical Grade Dielectric Gel				

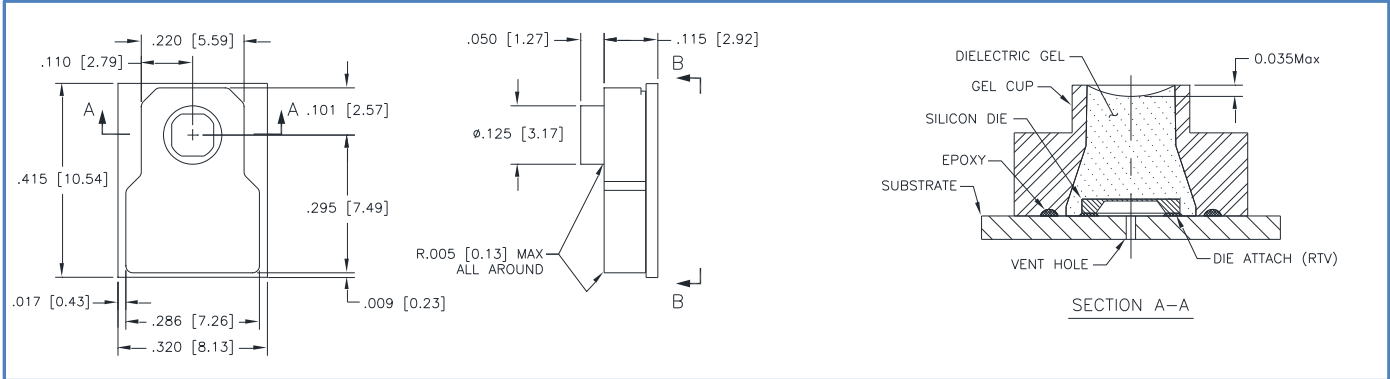
SPECIFICATIONS	Symbol	Min	Typical	Max	Unit	Note
<b>Absolute Maximum Conditions</b>						9
Overpressure		125			psi	
Storage Temperature		-25		70	°C	
Operating Product Life		168			Hrs	
Dielectric Breakdown		10			K Volts	
Risk Current (120VAC rms, 60Hz)				2	uA	
ETO Sterilization		3x			Cycles	6

**Reference Conditions:** Vsupply: 6.00Vdc, Ta=23 °C.

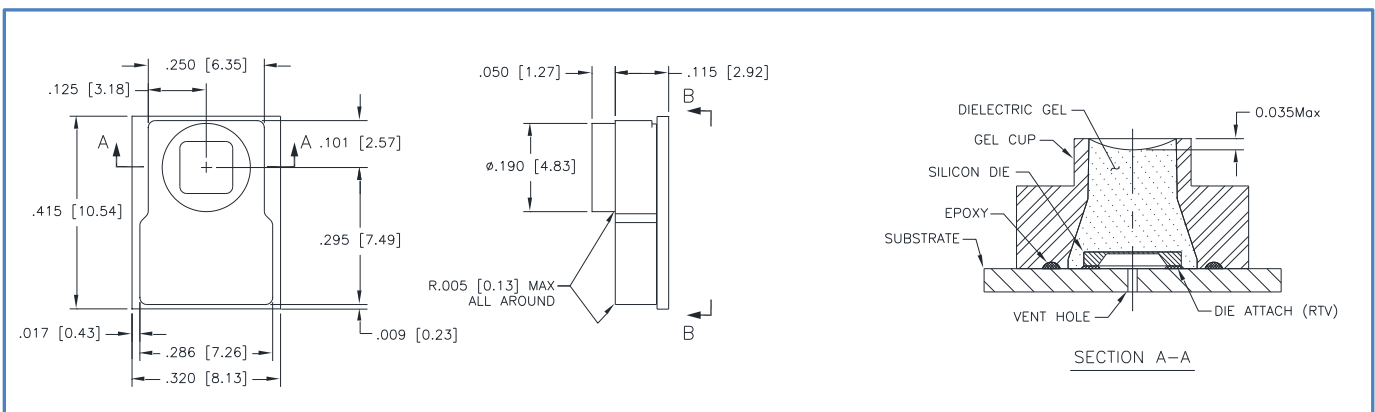
1. All specification at reference conditions unless otherwise noted. Output is ratio metric to supply voltage.
2. Best Fit Straight Line Non Linearity (Measured at 0, 50% and 100% FS).
3. Over operating temperature range with respect to reference temperature.
4. Defined as common mode symmetric between any output and supply terminal.
5. One discharger per minute.
6. Product compatible with ETO, Gamma and E Beam Sterilization.
8. Level of meniscus of gel shall be flush to 0.035" below surface.
9. Exceeding Absolute Maximum Specification may damage the device. Extended exposure beyond the operating conditions may affect device reliability.

### MECHANICAL DIMENSIONS in [mm]

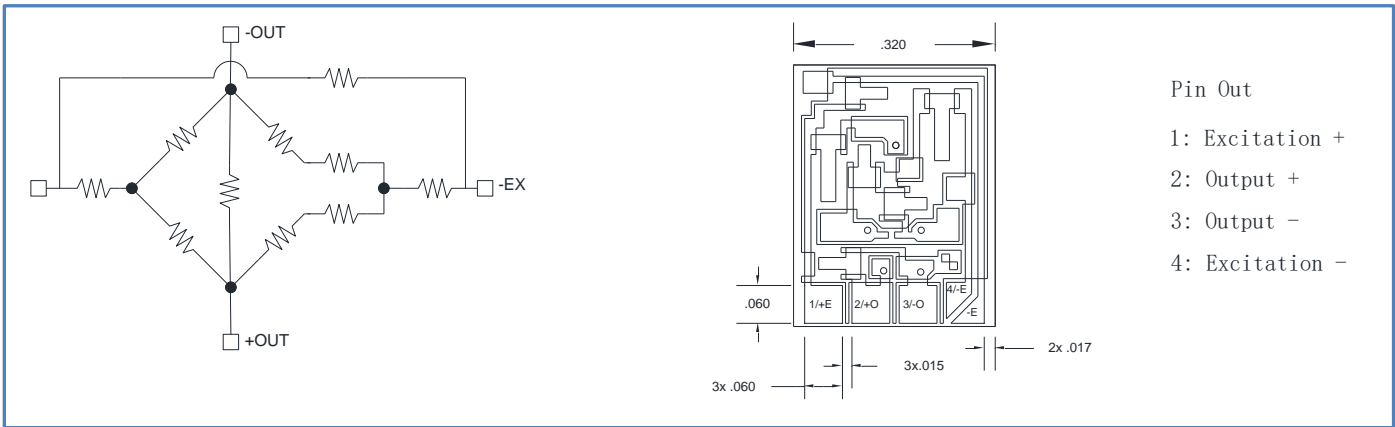
#### Narrow Gel Cup Configuration



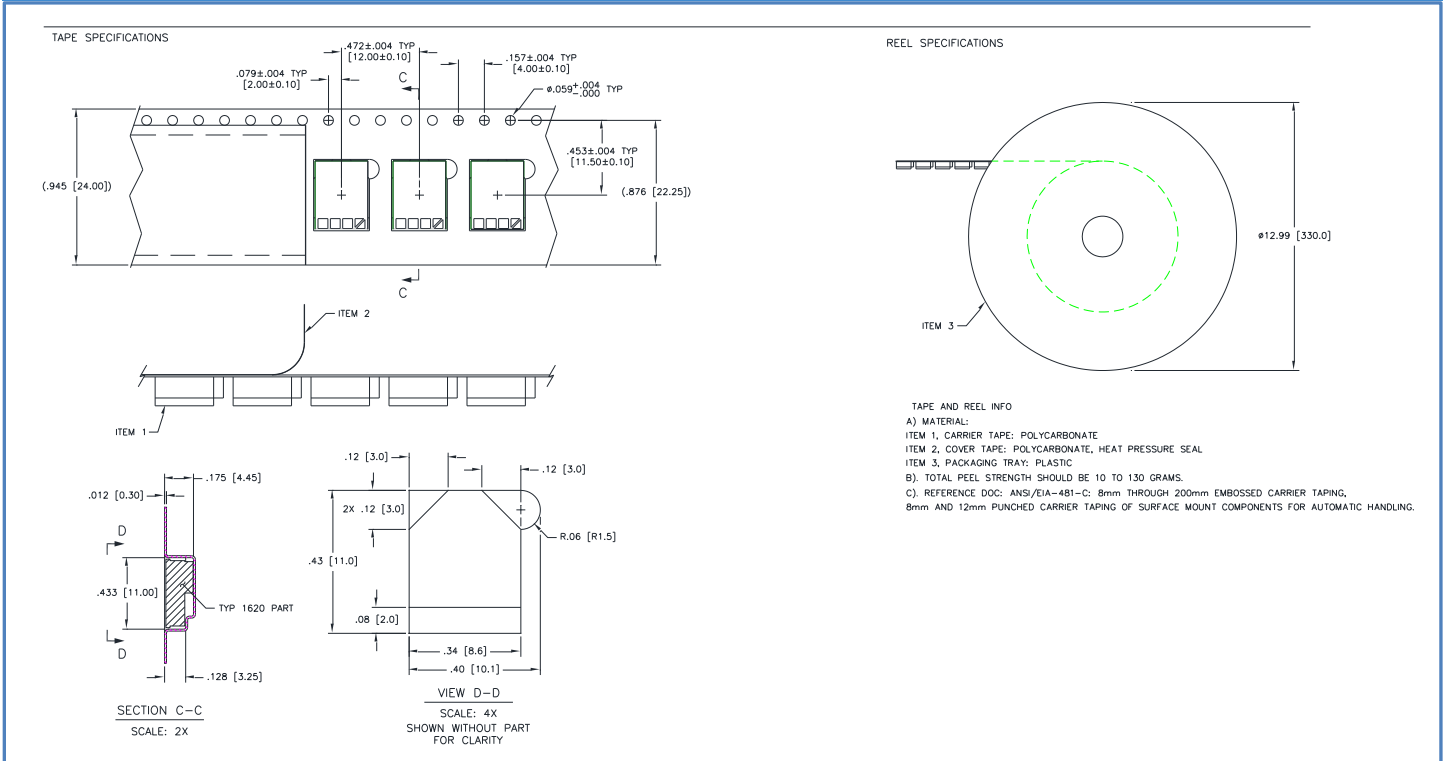
#### Wide Gel Cup Configuration



### Schematic & Solder Pad Configuration



### PACKAGING, TAPE & REEL DIMENSIONS in [mm]



**PART NUMBERING FOR ORDERS**

Series	Port Style	Pressure Range	Pressure Units	Pad Configuration Type	Pressure Type (Range Availability) [Package Availability]
CHT-SU-1620	NC=Narrow Cup WC=Wide Cup	300	Hg=mmHg	B= Open Bridge, Split	G=Gauge (All)
		30 60 100	P=PSI		

**Part Number Example: CHT-SU-1620 NC 300HG CG****0-300mmHg Gage, Narrow Cup, Open Bridge Pad Configuration****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 buyer's 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.