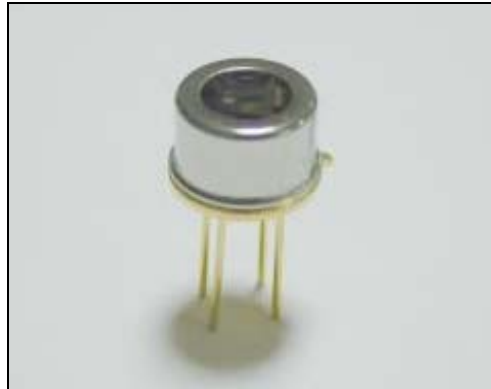


STS Pressure Sensor



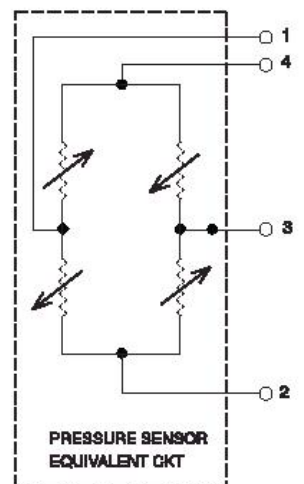
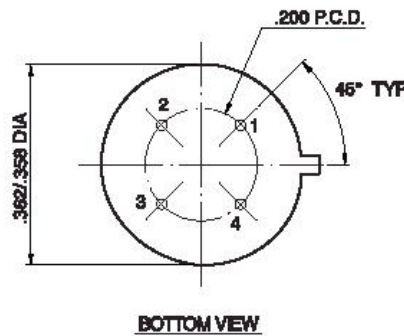
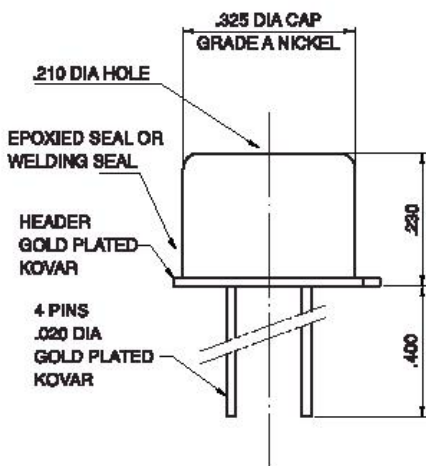
FEATURES

- Low Cost Sensor Element
- Solid State Reliability
- Absolute Pressure
- Constant Voltage or Constant Current Drive

APPLICATIONS

- Altimeters
- Weather Station
- Pneumatic Control
- Cable Fault Detection

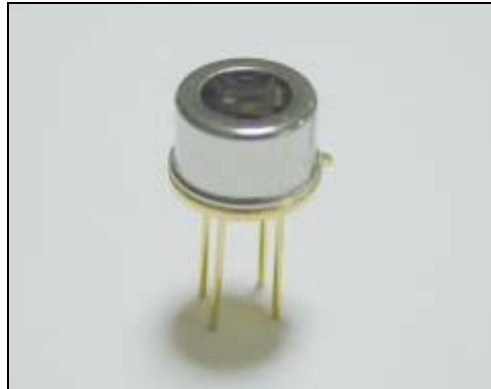
DIMENSION



PIN#	PIN OUT
1	Vs-
2	Out+
3	Vs+
4	Out -

Parameter	Value	Units	Notes
General			
Pressure Range	15 / 30 / 100	Psi	
Maximum Overpressure	3X		rated pressure
Electrical @25°C (77°F) unless otherwise specified			
Excitation	3	VDC	
Input Impedance	4~6	kΩ	
Output Impedance	4~6	kΩ	
Environmental			
Operating Temperature Range	-40~+125	°C	-40 °F ~+257°F
Storage Temperature Range	-40~+125	°C	-40 °F ~+257 °F
Mechanical			
Media Compatibility	Clean, dry air & noncorrosive gases		
PERFORMANCE⁽¹⁾			
Zero Offset	$\pm 30/\pm 30/\pm 10$	mV/V	
Span	$145\pm 30/60\pm 20$ $/60\pm 20$	mV	
Bridge Resistance	4~6	kΩ	
Linearity	$\pm 0.3/\pm 0.3/\pm 0.2$	% Span	
Hysteresis	± 0.1	% Span	
Temperature Coefficient of Zero Offset	-0.08~+0.08	% Span/°C	
Temperature Coefficient of Span	<-0.15/ <-0.15/-0.2	%Span/°C	
Notes: 1. All values are Minimum/Maximum and are measured at 3 VDC and 25°C unless otherwise specified.			
2. Best fit straight line.			
3. Between -20 °C and 100 °C. Temperature coefficients are typical values.			

STS Pressure Sensor



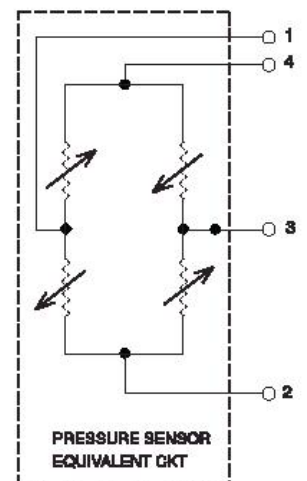
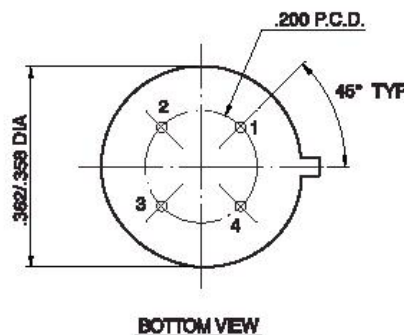
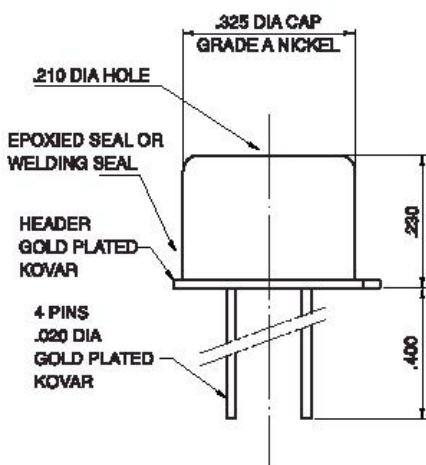
FEATURES

- Low Cost Sensor Element
- High Performance
- Absolute Pressure

APPLICATIONS

- Altimeters
- Weather Station
- Pneumatic Control
- Cable Fault Detection

DIMENSION



PIN#	PIN OUT
1	Vs-
2	Out+
3	Vs+
4	Out -

Characteristics:

This specification is based on a nominal 5V supply, Since the pressure sensor is a ratiometric device, voltage measurements need to be appropriately scaled for operating conditions as supplies other than 5V.

Parameter	Value	Units	Notes
General			
Pressure Range	150 / 300	Psi	
Maximum Overpressure	750	Psi	rated pressure
Electrical			
Excitation	5	VDC	
Input Impedance	4.5~5.5	kΩ	
Output Impedance	4.5~5.5	kΩ	
Environmental			
Operating Temperature Range	-40~+125	°C	-40 °F ~+257°F
Storage Temperature Range	-40~+125	°C	-40 °F ~+257 °F
Mechanical			
Media Compatibility	Clean, dry air & noncorrosive gases		
PERFORMANCE			
Zero Offset	±15	mV/V	
Span	145±45/290±45	mV	See note 1
Bridge Resistance	4.5~5.5	kΩ	
Sensitivity	0.193±0.6	mV/V/psi	See note 1
Non-Linearity	-2.5~2.5	%FS	See note 1 See note 2
	-1~1	%FS	See note 3
	-0.2~0.2	%FS	See note 1 See note 4
Temperature Coefficient of Zero Offset	-215~85	uV/V/°C	
Temperature Coefficient of Span	-0.22±0.06	%FS/°C	

All parameter are tested at 5V supply. Parameters are additionally tested at 5V as indicated.

Sencera Co., LTd.

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www.sensorelement.com Email: justinel@ms14.hinet.net Tel:886-2-27046595 Fx:886-2-27041279

Notes:

1. Tested at 5V supply
2. Difference between pressure at span and 0 psi. this corresponds to the maximum discrepancy possible due to device non-linearity.
3. Difference between pressure linearly approximated and the actual pressure over the span of the sensor, measured as a percentage of the full scale output.
4. Difference between pressure linearly approximated and the actual pressure over the application pressure range, measured as a percentage of the full scale output.