HIGH SENSITIVITY ULTRAMINIATURE PRESSURE TRANSDUCER

XCS-062 SERIES
- High Sensitivity
- Patented Silicon on Silicon Integrated Sensor VIS®
- Superior Signal To Noise Ratio
- Static And Dynamic Capability

The XCS Series uses a diaphragm of advanced design which gives a substantially higher basic output allowing for high mV/psi sensitivities and improved signal to noise ratio.

Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the XCS-062 transducer.

<table>
<thead>
<tr>
<th>WIRING</th>
<th>COLOR</th>
<th>DESIGNATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLACK</td>
<td>INPUT</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>+ INPUT</td>
<td></td>
</tr>
<tr>
<td>GREEN</td>
<td>+ OUTPUT</td>
<td></td>
</tr>
<tr>
<td>WHITE</td>
<td>- OUTPUT</td>
<td></td>
</tr>
</tbody>
</table>

**NOTICE:** FOR INTERNAL COMPENSATION CONSULT FACTORY

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**Pressure Range**

<table>
<thead>
<tr>
<th></th>
<th>0.35</th>
<th>0.7</th>
<th>1.0 BAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.35</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.7</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0 BAR</td>
<td>15 PSI</td>
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</table>

**Operational Mode**

- Absolute, Gage, Differential

**Over Pressure**

- 2 Times Rated Pressure

**Burst Pressure**

- 3 Times Rated Pressure

**Pressure Media**

- All Nonconductive, Noncorrosive Liquids or Gases

**Rated Electrical Excitation**

- 10 VDC/AC

**Maximum Electrical Excitation**

- 12 VDC/AC

**Input Impedance**

- 1000 Ohms (Min.)

**Output Impedance**

- 1000 Ohms (Nom.)

**Full Scale Output (FSO)**

- 125 mV (Nom.)
- 125 mV (Nom.)
- 200 mV (Nom.)

**Residual Unbalance**

- ± 5 mV (Typ.)

**Combined Non-Linearity, Hysteresis and Repeatability**

- ± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)

**Resolution**

- Infinitesimal

**Natural Frequency of Sensor Without Screen (KHz) (Typ.)**

- 150
- 175
- 200

**Acceleration Sensitivity % FS/g Perpendicular**

- 1.5x10⁻³
- 1.0x10⁻³
- 7.0x10⁻⁴

**Insulation Resistance**

- 100 Megohm Min. @ 50 VDC

**Operating Temperature Range**

- -65°F to +250°F (-55°C to +120°C)

**Compensated Temperature Range**

- 80°F to +180°F (25°C to +80°C) Any 100°F Range Within The Operating Range on Request

**Thermal Zero Shift**

- ± 1% FS/100°F (Typ.)

**Thermal Sensitivity Shift**

- ± 1% /100°F (Typ.)

**Steady Acceleration**

- 10,000g. (Max.)

**Linear Vibration**

- 10-2,000 Hz Sine, 100g. (Max.)

**Electrical Connection**

- 4 Leads 36 AWG 36” Long

**Pressure Sensing Principle**

- Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon

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**Note:** Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (R) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved. Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.