



HIGH TEMPERATURE THIN LINE PRESSURE TRANSDUCER

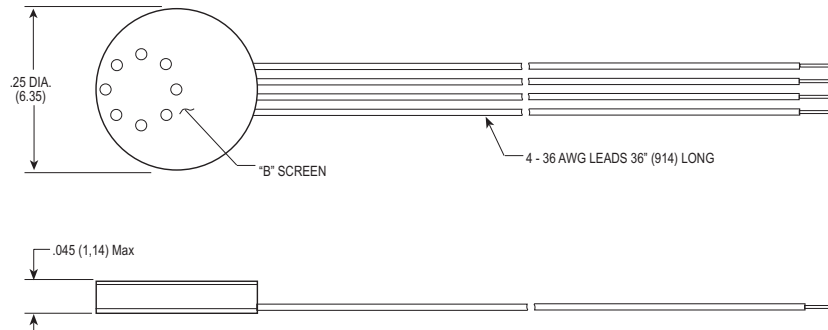
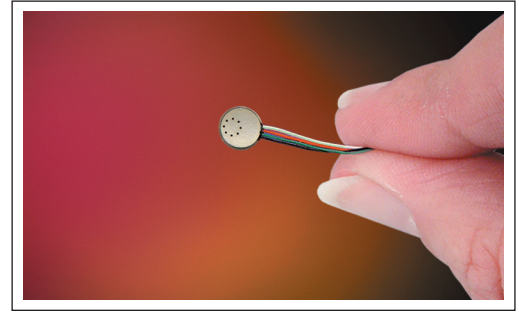
LLHT-250A SERIES

- Patented Leadless Technology **VIS**[®]
- High Natural Frequency
- Excellent Stability
- Excellent Static & Dynamic Performance
- Ideal For Flight Test & Wind Tunnel Applications
- High Temperature Capabilities
-65°F To +450°F

The LLHT Series features Kulite's Patented Leadless Technology and demonstrates Kulite's ability to provide pressure transducers suited for adaptation into custom packages. These devices can be integrated into various test articles such as fan blades, engine nozzles of various types, etc. The features of these transducers include small foot print, high natural frequency, extreme resistance to vibration and shock, and wide temperature range.

Part performance not guaranteed if used in water.

Kulite recommends the [KSC Series](#) of signal conditioners to maximize the measurement capability of the LLHT-250A transducer.



| WIRING | |
|--------|-------------|
| COLOR | DESIGNATION |
| RED | + INPUT |
| BLACK | - INPUT |
| GREEN | + OUTPUT |
| WHITE | - OUTPUT |

| INPUT | Pressure Range | 0.7 10 | 1 15 | 1.7 25 | 3.5 50 | 7 100 | 17 BAR 250 PSI |
|---------------|---|---|--|----------------------|--|----------------------|----------------------|
| | Operational Mode | Absolute | | | Absolute, Sealed Gage | | |
| | Over Pressure | 2 Times Rated Pressure | | | | | |
| | Burst Pressure | 3 Times Rated Pressure | | | | | |
| | Pressure Media | Most Conductive Liquids and Gases - Please Consult Factory | | | | | |
| | Rated Electrical Excitation | 10 VDC | | | | | |
| | Maximum Electrical Excitation | 12 VDC | | | | | |
| | Input Impedance | 1000 Ohms (Min.) | | | | | |
| OUTPUT | Output Impedance | 1000 Ohms (Nom.) | | | | | |
| | Full Scale Output (FSO) | 100 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.) | 175 | 200 | 240 | 300 | 380 | 550 |
| | Acceleration Sensitivity % FS/g Perpendicular | 1.0x10 ⁻³ | 6.5x10 ⁻⁴ | 5.0x10 ⁻⁴ | 3.0x10 ⁻⁴ | 1.5x10 ⁻⁴ | 1.0x10 ⁻⁴ |
| | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | | |
| ENVIRONMENTAL | Operating Temperature Range | -65°F to +450°F (-55°C to +235°C) | | | | | |
| | Compensated Temperature Range | 80°F to +450°F (25°C to +235°C) | | | | | |
| | Thermal Zero Shift | ± 3% FS/100°F (Typ.) (± 4% FS/100°F (Max.)) | ± 2% FS/100°F (Typ.) (± 3% FS/100°F (Max.)) | | ± 1% FS/100°F (Typ.) (± 2% FS/100°F (Max.)) | | |
| | Thermal Sensitivity Shift | ± 3% /100°F (Typ.) (± 4% /100°F (Max.)) | ± 2% /100°F (Typ.) (± 3% /100°F (Max.)) | | ± 1% /100°F (Typ.) (± 2% /100°F (Max.)) | | |
| | Linear Vibration | 20g Peak, Sine 10 to 2000 Hz | | | | | |
| | Mechanical Shock | 20g Half Sine Wave 11 msec. Duration | | | | | |
| PHYSICAL | Electrical Connection | 4 - 36 AWG Leads 36" (914) Long | | | | | |
| | Weight | .2 Gram (Nom.) Excluding Leads | | | | | |
| | Pressure Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology | | | | | |

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (J) 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.