

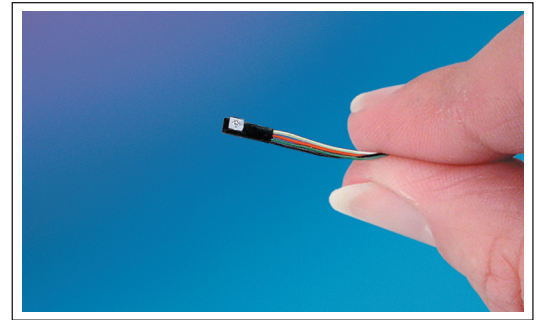


# ULTRAMINIATURE THIN LINE PRESSURE TRANSDUCERS

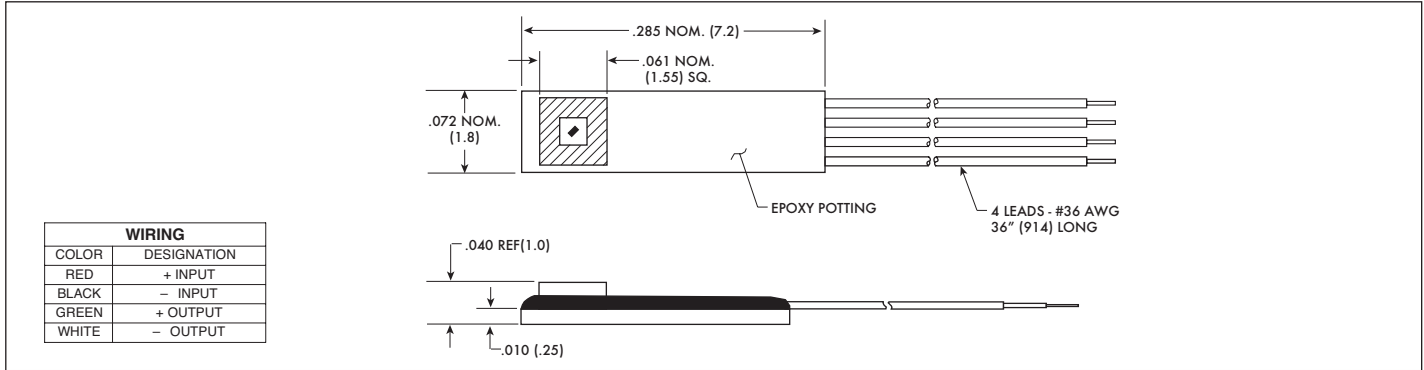
## LL-2-072 SERIES

- Ideal For Flight Test & Wind Tunnel Applications
- Excellent Static And Dynamic Performance
- High Natural Frequency
- Patented Leadless Technology **VIS**<sup>®</sup>

The LL 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 LL-2-072 transducer.



INPUT	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
	Operational Mode	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.)	240	300	380	550	700
	Acceleration Sensitivity % FS/g Perpendicular	5.0x10 <sup>-4</sup>	3.0x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	6.0x10 <sup>-5</sup>
Insulation Resistance	100 Megohm Min. @ 50 VDC					
ENVIRONMENTAL	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)				
	Thermal Zero Shift	± 2% FS/100°F (Typ.); ± 3% FS/100°F (Max.)	± 1% FS/100°F (Typ.); ± 2% FS/100°F (Max.)			
	Thermal Sensitivity Shift	± 2% /100°F (Typ.); ± 3% /100°F (Max.)	± 1% /100°F (Typ.); ± 2% /100°F (Max.)			
PHYSICAL	Linear Vibration	20g Peak, Sine 10 to 2000 Hz				
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration				
	Electrical Connection	4 Leads #36 AWG 36" 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. (C) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2018 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.