SUBMINIATURE HIGH TEMPERATURE IS® PRESSURE TRANSDUCER

- XTEL-140 (M) SERIES
- Easy Installation
- Smallest Threaded Device Available
- Patented Leadless Technology VIS[®]
- High Natural Frequency
- 6-32 UNC-2A Thread
- High Temperature Up To 525°F

The XTEL Series utilizes Kulite's Patented Leadless Technology to obtain extremely high natural frequencies in the smallest thread mount available. This transducer is well suited for both dynamic and static pressure measurements in benign or harsh environments. Its wide operating range (-65°F to +525°F) makes it ideal for numerous applications in Aerospace and other areas of industry.



PRESSURE TUBE. 014 FOR PSIG 4 COND. # 36 AW SHIEIDED CABLE 24" (610) LONG CONSULT FACTORY FOR SPECS. ON SEALED C		.14 (3.6)	52 NOM. (13.2)	→ 	140 6-32	ARD NAL COLOR RED BLACK UNC-2A GREEN K.6-6g WHITE	WIRING DESIGNATION + INPUT - INPUT + OUTPUT - OUTPUT
INPUT Pressure Range	.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
		-				1	
Operational Mode Over Pressure	Absolute, Gage, Sealed Gage, Differential Absolute, Sealed Gage						
	2 Times Rated Pressure With No Change in Calibration						
Burst Pressure	3 Times Rated Pressure						
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)						
Rated Electrical Excitation	10 VDC/AC						
Maximum Electrical Excitation	15 VDC/AC						
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 (KHz) (Typ.)	150	175	240	300	380	550	700
Acceleration Sensitivity % FS/g Perpendicular Transverse	1.5x10 ⁻³ 2.2x10 ⁻⁴	1.0x10 ⁻³ 1.4x10 ⁻⁴	5.0x10 ⁻⁴ 6.0x10 ⁻⁵	3.0x10 ⁻⁴ 4.0x10 ⁻⁵	1.5x10 ⁻⁴ 2.0x10 ⁻⁵	1.0x10 ⁻⁴ 9.0x10 ⁻⁶	6.0x10 ^{.5} 6.0x10 ^{.6}
Insulation Resistance	100 Megohm Min. @ 50 VDC						
ENVIRONMENTAL Operating Temperature Range	-65°F to +525°F (-55°C to +273°C)						
Compensated Temperature Range	+80°F to +450°F (+25°C to +232°C)						
Thermal Zero Shift	± 1% FS/100°F (Typ.)						
Thermal Sensitivity Shift	± 1% /100°F (Typ.)						
Steady Acceleration	10,000 g. (Max.)						
Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)						
PHYSICAL Electrical Connection	4 Conductor 36 AWG Teflon Cable 30" Long						
Weight	3 Grams (Nom.) Excluding Cable						
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology						
Mounting Torque	15 Inch-Pounds (Max.)						

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.

Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (G)

KULITE SEMICONDUCTOR PRODUCTS, INC. • One Willow Tree Road • Leonia, New Jersey 07605 • Tel: 201 461-0900 • Fax: 201 461-0990 • http://www.kulite.com