MEMS Based Piezo-Electric Acoustic Sensor

PRODUCT DESCRIPTION:

SCL has developed AlN based piezoelectric acoustic sensors. Utilizes silicon diaphragm as main Sound Pressure to lateral stress converter and AlN as stress to electric charge converter.

FEATURES:

- Measurement Range, 100 -180dB
- Linearity better than 1.5dB
- Full scale output ±2.5V (adjustable)
- Frequency Range 31.5Hz to 6.3kHz
- Housing & Diaphragm SS AISI 316 L

Product Specifications		
S.No.	**Parameters**	**Specification**
1	Measurement range	100 -180dB
2	Linearity	better than 1.5dB
3	Centre Capacitance	120 pF
4	Rim Capacitance	210 pF
5	Dissipation factor	0.0005-0.0010
6	Full scale output	±2.5V (adjustable)
7	Sensitivity	100-120µV/Pa
8	Natural Frequency	~40 kHz
9	Frequency Range	31.5Hz to 6.3kHz
10	Frequency response	± 3dB
11	Housing & Diaphragm	SS AISI 316 L
12	Weight	150g