Piezoelectric Diaphragm





RoHS Compliant

Scope:

This product specification is applied to the piezoelectric element used for sounder in alarm systems. Please contact us when using this product for any other applications than described in the above.

Test Conditions:

Product shall be measured under a condition (Temperature :+15 $^{\circ}$ C to +35 $^{\circ}$ C,Humidity :45 to 85 %R.H., Atmosphere: 86 to 106kPa) unless the standard condition (Temperature :+25 ±3 $^{\circ}$ C,Humidity :60 ±10%R.H.,Atmosphere:86 to106kPa) is regulated measure

Maximum Rating:

| Item | Specification |
|-----------------------------|---------------|
| Maximum Input Voltage | 30Vp-p /Max. |
| Operating Temperature Range | -20°C +70°C |
| Storage Temperature Range | -30°C +80°C |

Electrical Characteristics:

| Item | Specification |
|----------------------------------|---------------|
| Resonant Frequency | 3.7 ±0.5kHz |
| Resonant Impedance | 500Ω /Max |
| Electrostatic Capacity (at 1kHz) | 20,000pF ±30% |



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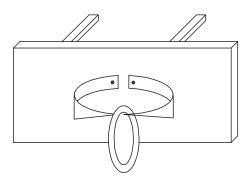


Measuring Method:

Resonant Frequency / Resonant Impedance

Piezoelectric diaphragm shall be clamped at a node point as shown in following figure to be free from any mechanical stress, and measured its resonant frequency and resonant impedance by using vector impedance analyzer or equivalent.

When the input frequency is sweeped within 3 to 12 kHz, the resonant frequency is defined the frequency where the impedance shows minimum value, and this impedance shell be the resonant impedance.



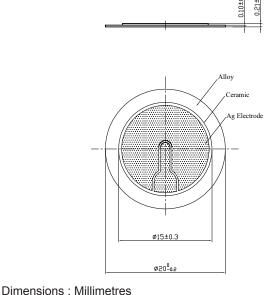
Electrostatic Capacitance

A electrostatic capacity capacitance shall be measured at 1kHz by using L.C.R.meter, ex. HP4192A(H.P.), or equivalent.

Insulation Resistance

An insulation resistance shall be measured by using an insulation resistance meter.

Dimensions:



Part Number Table

| Description | Part Number |
|-------------------------|-----------------|
| Piezoelectric Diaphragm | FT-20N-3.7B1-94 |

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