

SPECIFICATION

1. Scope

This specification covers the SONOPRO transducer for cleaning under the atmosphere of $25\pm 3^{\circ}\text{C}$ 40 ~ 70%RH.

2. Type

Trans-C40*1203840

Trans-C	40 & 120	38	40
Transducer	Frequency	Ceramic dia.	Emitting dia.

3. Dimensions

As per the drawing : Height = 59m/m Emitting Diameter = 40m/m

4. Electronical Specification (By Piece)

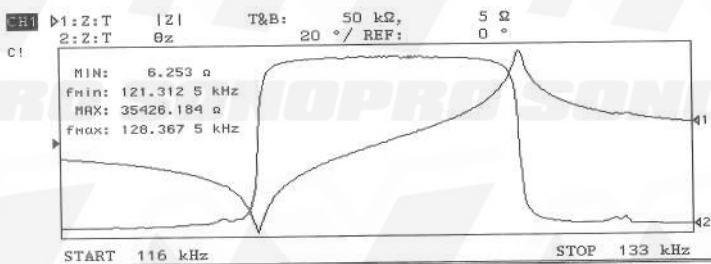
- Resonant Frequency $F_r = 40*120\text{kHz}\pm 0.5\text{kHz}$
- Resonant Resistance $Z_r < 15\Omega$
- Capacitance $\text{CAPA} = 3.74\pm 20\% \text{ nF}$
- $\text{tgD} (\% \text{ KHz}) < 0.5$
- $Q_m > 500$



5. Mechanical Characteristics (Periodical in Laboratory)

- Acoustic Power = $6.7\pm 1 \text{ Wcm}^2$ -- By Ohmico Ultrasonic Power Meter UMP- DT-1AV
- Amplitude $> 10\mu\text{m}$ -- Peak-to-peak in sinusoidal

6. Impedance VS Frequency curve of Trans-C40*1203840



$F_r (\text{Hz}) = 121308.069181$
 $Z (\text{Ohm}) = 6.29052829742$
 $C_0 (\text{nF}) = 2.3750599679$
 $L_1 (\text{mH}) = 6.06941672725$
 $R_1 (\text{Ohm}) = 6.26207685471$
 $C_1 (\text{nF}) = .283596199178$
 $Q_{m1} = 738.774066674$



$F_r (\text{Hz}) = 38424.0560472$
 $Z (\text{Ohm}) = 10.7988920212$
 $C_0 (\text{nF}) = 4.21989003781$
 $L_1 (\text{mH}) = 20.5024990216$
 $R_1 (\text{Ohm}) = 10.779417038$
 $C_1 (\text{nF}) = .83683471816$
 $Q_{m1} = 459.178939259$