

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-JT-40

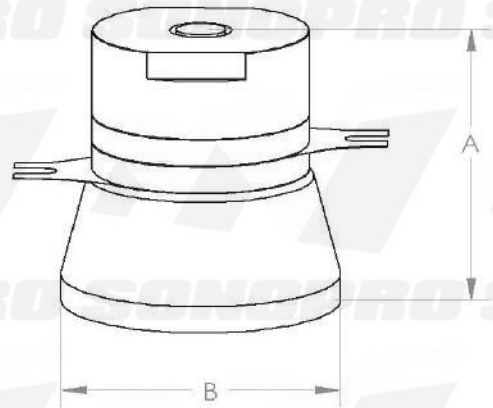
Trans-C	40	35	45
Transducer	Frequency	Ceramic dia.	Emitting dia.

3. Dimensions

As per the drawing : A = 52.2m/m B = 45m/m

4. Electronical Specification (By Piece)

- Resonant Frequency $F_r = 40\text{kHz} \pm 0.5\text{kHz}$
- Resonant Resistance $Z_r < 20\Omega$
- Capacitance $\text{CAPA} = 4.11 \pm 20\% \text{ nF}$
- $\text{tgD} (\% \text{ KHz}) < 0.5$
- $Q_m > 500$



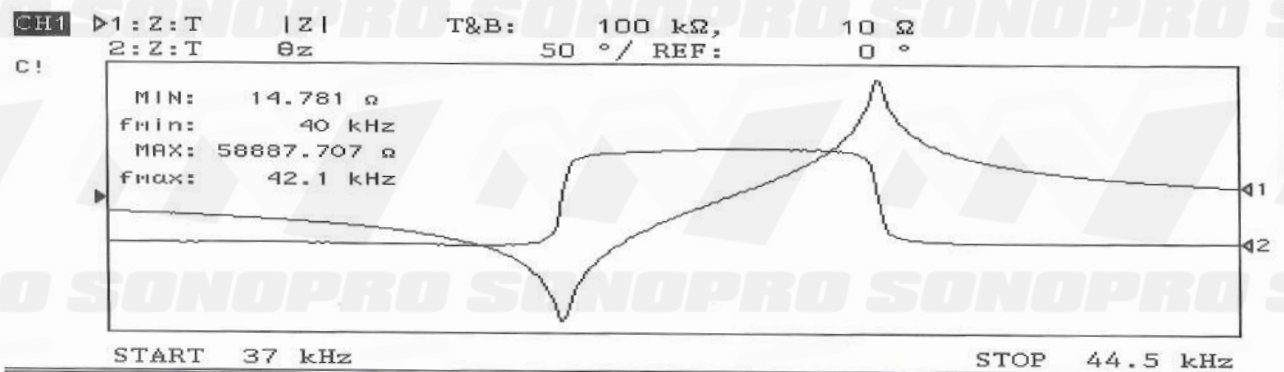
5. Mechanical Characteristics (Periodical in Laboratory)

- Acoustic Power = $3.7 \pm 0.5 \text{ Wcm}^2$ -- By Ohmico Ultrasonic Power Meter UMP- DT-1AV
- Amplitude $> 12\mu\text{m}$ -- Peak-to-peak in sinusoidal

6. Frequency category :

A : 39.50~39.79kHz B : 39.80~40.04kHz
 C : 40.05~40.29kHz D : 40.30~40.50kHz

7. Impedance VS Frequency curve of Trans-JT-40



F_r (Hz)	=	40011.9843479
Z (Ohm)	=	14.7979249954
C0 (nF)	=	4.19794526299
L1 (mH)	=	35.01059992
R1 (Ohm)	=	15.1646747589
C1 (nF)	=	.451934655704
Q_{m1}	=	580.391836817