

## 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-C1203540

Trans-C	120	35	40
Transducer	Frequency	Ceramic dia.	Emitting dia.

### 3. Dimensions

As per the drawing : Height = 60m/m Emitting Diameter = 40m/m

### 4. Electrical Specification ( By Piece )

- a. Resonant Frequency  $F_r = 120\text{kHz} \pm 0.5\text{kHz}$
- b. Resonant Resistance  $Z_r < 20\Omega$
- c. Capacitance  $\text{CAPA} = 4.11 \pm 20\% \text{ nF}$
- d.  $\text{tgD} (\% \text{ KHz}) < 0.5$
- e.  $Q_m > 500$



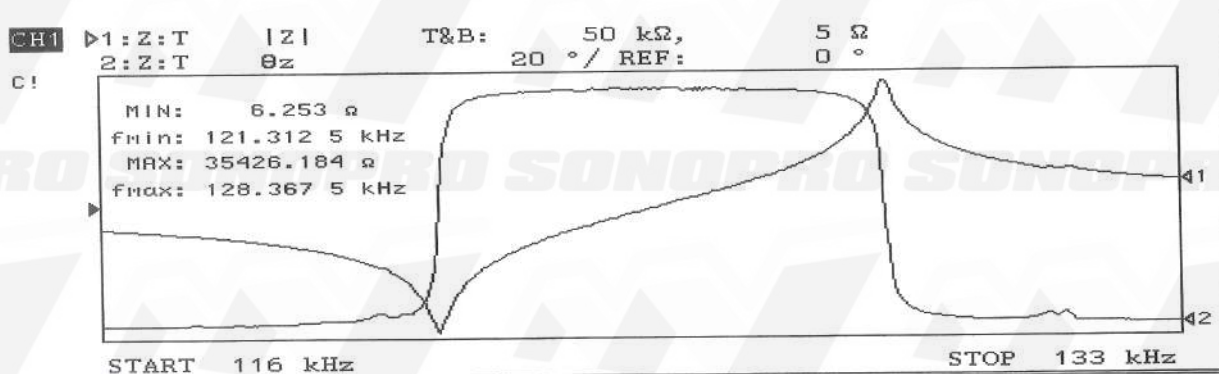
### 5. Mechanical Characteristics ( Periodical in Laboratory )

- a. Acoustic Power =  $4.7 \pm 0.5 \text{ Wcm}^2$  -- By Ohmico Ultrasonic Power Meter UMP- DT-1AV
- b. Amplitude  $> 10\mu\text{m}$  -- Peak-to-peak in sinusoidal

### 6. Frequency category :

A : 119.50~119.79kHz	B : 119.80~120.04kHz
C : 120.05~120.29kHz	D : 120.30~120.50kHz

### 7. Impedance VS Frequency curve of Trans-C1203540



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