

## 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-C803840-6

Trans-C	80	38	40
Transducer	Frequency	Ceramic dia.	Emitting dia.

### 3. Dimensions

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

### 4. Electrical Specification ( By Piece )

- a. Resonant Frequency  $F_r = 80\text{kHz}\pm 0.5\text{kHz}$
- b. Resonant Resistance  $Z_r < 15\Omega$
- c. Capacitance  $\text{CAPA} = 3.74\pm 20\% \text{ nF}$
- d.  $\text{tgD} (\% \text{ KHz}) < 0.5$
- e.  $Q_m > 500$



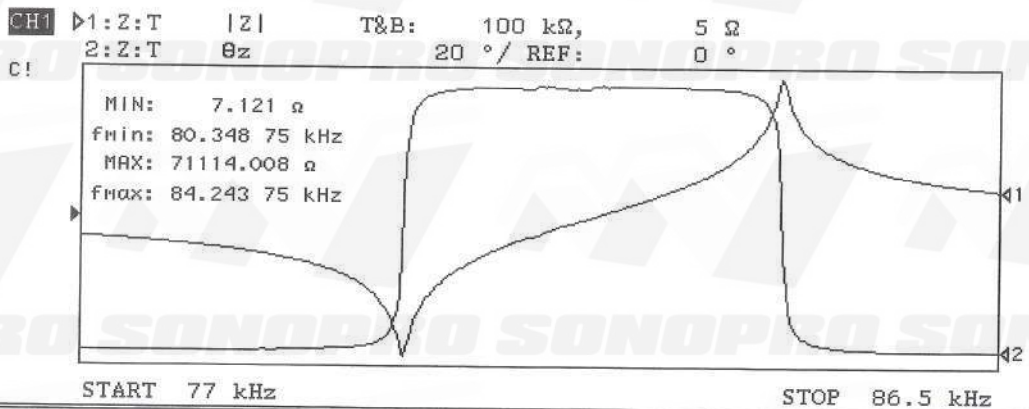
### 5. Mechanical Characteristics ( Periodical in Laboratory )

- a. Acoustic Power =  $6.35\pm 1 \text{ Wcm}^2$  -- By Ohmico Ultrasonic Power Meter UMP- DT-1AV
- b. Amplitude  $> 10\mu\text{m}$  -- Peak-to-peak in sinusoidal

### 6. Frequency category :

- A : 79.50~79.79kHz      B : 79.80~80.04kHz  
 C : 80.05~80.29kHz      D : 80.30~80.50kHz

### 7. Impedance VS Frequency curve of Trans-C803840



$F_r$ (Hz)	= 80341.883097
$Z$ (Ohm)	= 7.26756095886
$C_0$ (nF)	= 2.64049180015
$L_1$ (mH)	= 14.9081507739
$R_1$ (Ohm)	= 7.24001550674
$C_1$ (nF)	= .2632251004
$Q_{m1}$	= 1039.46848919