

## SPECIFICATION

### 1. Scope

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

### 2. Type

**Trans-C255064**

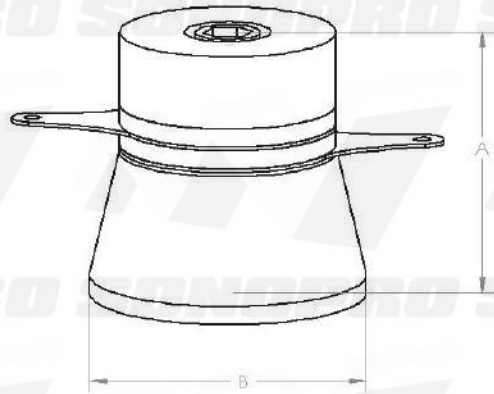
Trans-C	25	50	64
Transducer	Frequency	Ceramic dia.	Emitting dia.

### 3. Dimensions

As per the drawing : A = 83 m/m B = 64 m/m

### 4. Electrical Specification ( By Piece )

- a. Resonant Frequency  $F_r = 25\text{kHz} \pm 0.5\text{kHz}$
- b. Resonant Resistance  $Z_r < 20\Omega$
- c. Capacitance  $C_{APA} = 5.75 \pm 20\% \text{ nF}$
- d.  $\text{tgD} (\% \text{ KHz}) < 0.5$
- e.  $Q_m > 500$



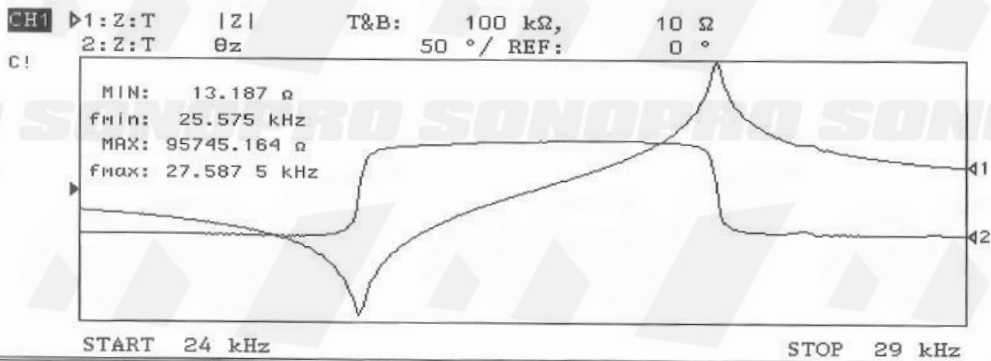
### 5. Mechanical Characteristics ( Periodical in Laboratory )

- a. Acoustic Power =  $3.2 \pm 0.5 \text{ Wcm}^2$  -- By Ohmic Ultrasonic
- b. Amplitude  $> 20\mu\text{m}$  -- Peak-to-peak in sinusoidal

### 6. Frequency category :

A : 24.50~24.79kHz	B : 24.80~25.04kHz
C : 25.05~25.29kHz	D : 25.30~25.50kHz

### 7. Immedance VS Frequency curve of Trans-C255064



$F_r$ (Hz)	= 25576.3311802
$Z$ (Ohm)	= 13.3183822632
$C_0$ (nF)	= 5.55109664736
$L_1$ (mH)	= 42.5574358147
$R_1$ (Ohm)	= 13.2033939362
$C_1$ (nF)	= .909876081577
$Q_{m1}$	= 517.981268771