

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-C283545

Trans-C	28	35	45
Transducer	Frequency	Ceramic dia.	Emitting dia.

3. Dimensions

As per the drawing : Height = 79 m/m Emitting Diameter= 45 m/m

4. Electrical Specification (By Piece)

- a. Resonant Frequency $F_r = 28\text{kHz}\pm 0.5\text{kHz}$
- b. Resonant Resistance $Z_r < 15\Omega$
- c. Capacitance $\text{CAPA} = 4.11\pm 20\% \text{ nF}$
- d. $\text{tgD} (\% \text{ KHz}) < 0.5$
- e. $Q_m > 500$

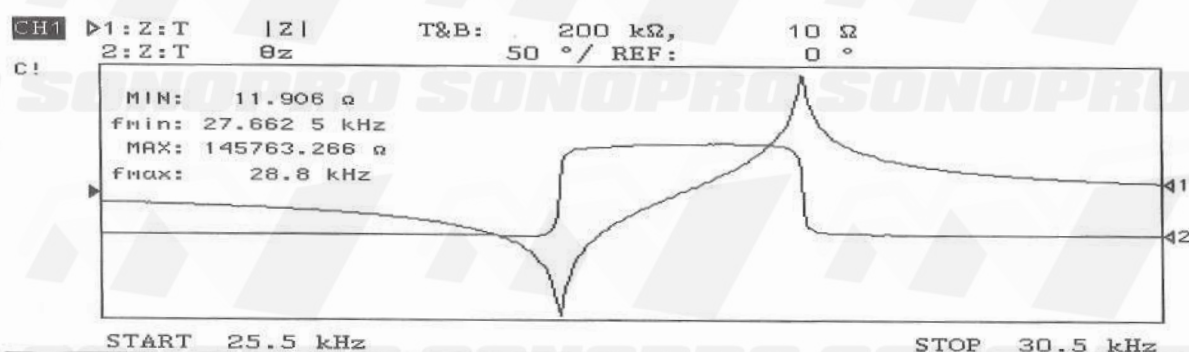
5. Mechanical Characteristics (Periodical in Laboratory)

- a. Acoustic Power = $3.7\pm 0.5 \text{ Wcm}^2$
- b. Amplitude $> 15\mu\text{m}$ Peak-to-peak in sinusoidal

6. Frequency category :

- | | |
|--------------------|--------------------|
| A : 27.50~27.79kHz | B : 27.80~28.04kHz |
| C : 28.05~28.29kHz | D : 28.30~28.50kHz |

7. Impedance VS Frequency curve of Trans-C283545



F_r (Hz)	=	27659.2187813
Z (Ohm)	=	13.1370649338
$C0$ (nF)	=	4.49813630932
$L1$ (mH)	=	86.7969291369
$R1$ (Ohm)	=	12.3648891449
$C1$ (nF)	=	.381443289656
$Qm1$	=	1220.00051996