

## 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-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 )

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

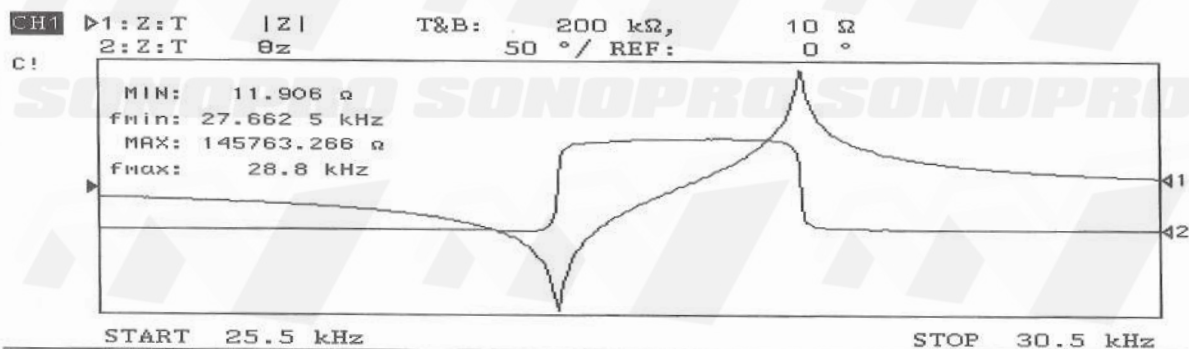
### 5. Mechanical Characteristics ( Periodical in Laboratory )

- Acoustic Power =  $3.7\pm 0.5 \text{ Wcm}^2$
- 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

