



**TECHNICAL DATA FOR SOUND REINFORCEMENT SPEAKERS**

**ATC5008 200mm( 8 inch) speaker , full range , 5 watts ,suitable for sound reinforcement applications. Available with multi-tapped transformer for 100 volt line , model ATC5010 .**

- Nominal diameter 200mm (8")
- Rated impedance 8 ohm +- 20%
- Power capacity 5 watts
- Sensitivity 90 dB +- 2dB
- Frequency range 75hz - 18Khz +- 3dB
- Voice coil diameter 20 mm
- Magnetic assembly weight 3.6 oz (57.6 grams)

**ENTERED DATA**

- Entered driver DC resistance (Re) 7.20 ohms
- Entered driver resonance frequency (Fs) 94.80 Hz
- Entered driver maximum impedance at Fs 16.60 ohms
- Entered driver F1 frequency 87.30 Hz @ 10.9 ohms
- Entered driver F2 frequency 103.3 Hz @ 10.9 ohms
- Calculated square root of F1\*F2 95.00 Hz
- Compliance calculated by added mass method .
- Entered added mass 10.00 grams
- Entered driver new resonance frequency 66.50 Hz
- Entered driver piston diameter 170.00 mm
- Entered driver magnet gap depth 4.00 mm

**THEILE - SMALL PARAMETERS**

- Free air resonance (Fs)=SQR (F1\*F2) 95Hz
- Qts 3.9104
- Qes 6.9055
- Qms 9.02
- Equivalent acoustic compliance ( Vas ) 21.14 litres
- Piston area ( Sd ) 0.0227 square meters
- DC resistance ( Re ) 7.20 ohms
- Volume displacement ( Vd ) 45.40 ccm
- Linear displacement ( Xmax ) 2.00 mm
- Power handling ( Pe ) 5 watts RMS
- Coils inductance ( Le ) 8 ohms
- Reference efficiency ( Ref Eff ) 0.25 %
- Efficiency bandwidth Product ( EBP ) 13.76 Hz

**ADDITIONAL DATA**

- Moving mass of diaphragm only 7.67 grams
- Moving mass of diaphragm & air load (Mms) 9.61 grams
- Mass of air load on diaphragm (Ma) 1.94 grams
- Compliance (Cms) 0.00029 m/N
- BL product (Bl) 2.45 N/A
- Sensitivity (SPL 1w / 1m ) 90dB +- 2dB

