



**TECHNICAL DATA FOR SOUND REINFORCEMENT SPEAKERS.**

**ATC5026 200mm (8 inch speaker) , full range , 30 watts ,suitable for sound reinforcement applications. Available with multi-tapped transformer for 100 volt line , model ATC5027.**

- Nominal diameter 200mm ( 8'' )
- Rated impedance 8 ohm +- 20%
- Power capacity 30 watts RMS
- Sensitivity 92 dB +- 2dB
- Frequency range 42hz - 18Khz +- 3dB
- Voice coil diameter 25 mm
- Magnetic assembly weight 13.00 oz (208 grams)

**ENTERED DATA**

- Entered driver DC resistance (Re) 7.60 ohms
- Entered driver resonance frequency (Fs) 47.20 Hz
- Entered driver maximum impedance at Fs 44.50 ohms
- Entered driver F1 frequency 37.30 Hz @ 18.40 ohms
- Entered driver F2 frequency 61.00 Hz @ 18.40 ohms
- Calculated square root of F1\*F2 47.70 Hz
- Compliance calculated by added mass method .
- Entered added mass 20.00 grams
- Entered driver new resonance frequency 29.10 Hz
- Entered driver piston diameter 165.00 mm
- Entered driver magnet gap depth 4.00 mm
- Entered driver voice coil length 8.50 mm

**THEILE - SMALL PARAMETERS**

- Free air resonance (Fs)=SQR (F1\*F2) 47.70 Hz
- Qts 0.8318
- Qes 1.0031
- Qms 4.87
- Equivalent acoustic compliance ( Vas ) 60.30 litres
- Piston area ( Sd ) 0.0214 square meters
- DC resistance ( Re ) 7.60 ohms
- Volume displacement ( Vd ) 48.11 ccm
- Linear displacement ( Xmax ) 2.25 mm
- Power handling ( Pe ) 30 watts RMS
- Coils inductance ( Le ) 8 ohms
- Reference efficiency ( Ref Eff ) 0.63 %
- Efficiency bandwidth Product ( EBP ) 47.55 Hz

**ADDITIONAL DATA**

- Moving mass of diaphragm only 10.08 grams
- Moving mass of diaphragm & air load (Mms) 11.86 grams
- Mass of air load on diaphragm (Ma) 1.77 grams
- Compliance (Cms) 0.00094 m/N
- BL product (Bl) 5.19 N/A
- Sensitivity (SPL 1w / 1m ) 92dB +- 2dB

