



TECHNICAL DATA FOR SOUND REINFORCEMENT SPEAKERS

ATC5007 200mm (8 inch speaker) , full range , 15 watts , suitable for sound reinforcement applications. Available with multi-tapped transformer for 100 volt line , model ATC5018

- Nominal diameter 200mm (8'')
- Rated impedance 8 ohm +- 20%
- Power capacity 15 watts
- Sensitivity 92 dB +- 2dB
- Frequency range 40Hz - 18Khz +- 3dB
- Voice coil diameter 25 mm
- Magnetic assembly weight 10.00 oz (160 grams)

ENTERED DATA

- Entered driver DC resistance (Re) 7.30 ohms
- Entered driver resonance frequency (Fs) 47.50 Hz
- Entered driver maximum impedance at Fs 36.80 ohms
- Entered driver F1 frequency 38.70Hz @ 16.40 ohms
- Entered driver F2 frequency 59.00Hz @ 16.40 ohms
- Calculated square root of F1*F2 47.80 Hz
- Compliance calculated by added mass method .
- Entered added mass 10.00 grams
- Entered driver new resonance frequency 34.50 Hz
- Entered driver piston diameter 165.00 mm
- Entered driver magnet gap depth 4.00 mm
- Entered driver voice coil length 10.00 mm

THEILE - SMALL PARAMETERS

- Free air resonance (Fs)=SQR (F1*F2) 47.80 Hz
- Qts 1.0487
- Qes 1.3083
- Qms 9.02
- Equivalent acoustic compliance (Vas) 65.47 litres
- Piston area (Sd) 0.0214 square meters
- DC resistance (Re) 7.30 ohms
- Volume displacement (Vd) 64.15 ccm
- Linear displacement (Xmax) 3.00 mm
- Power handling (Pe) 15 watts RMS
- Coils inductance (Le) 8 ohms
- Reference efficiency (Ref Eff) 0.52 %
- Efficiency bandwidth Product (EBP) 36.54 Hz

ADDITIONAL DATA

- Moving mass of diaphragm only 9.10 grams
- Moving mass of diaphragm & air load (Mms) 10.87 grams
- Mass of air load on diaphragm (Ma) 1.77 grams
- Compliance (Cms) 0.00102 m/N
- BL product (BI) 4.27 N/A
- Sensitivity (SPL 1w / 1m) 92dB +- 2dB

