MIDWOOFER 18W/4434G00

The Discovery series offer traditional design, superior sound, a solid construction, and a wide range of variants. Combining these elements - plus a wealth of technical features and finesses - it gives our customers the possibility of acquiring a tailor-made Scan-Speak solution with very good performance at a reasonable low price point!

**KEY FEATURES:**
- High Output 91dB @ 2.83V
- Magnet System w. Alu Ring
- Die cast Alu Chassis vented below spider
- Coated NRSC Fibre Glass Cone
- Low Damping SBR Rubber Surround

**T-S Parameters**
- Resonance frequency \([fs]\) 47 Hz
- Mechanical Q factor \([Qms]\) 7.81
- Electrical Q factor \([Qes]\) 0.37
- Total Q factor \([Qts]\) 0.35
- Force factor \([Bl]\) 6.0 Tm
- Mechanical resistance \([Rms]\) 0.55 kg/s
- Moving mass \([Mms]\) 14.41 g
- Suspension compliance \([Cms]\) 0.79 mm/N
- Effective diaph. diameter \([D]\) 132 mm
- Effective piston area \([Sd]\) 137 cm²
- Equivalent volume \([Vas]\) 20.7 l
- Sensitivity (2.83V/1m) 91.3 dB
- Ratio Bl/\(\sqrt{R}\) 3.48 N/\(\sqrt{W}\)
- Ratio fs/Qts 134 Hz

**Notes:**
IEC specs. refer to IEC 60268-5 third edition. All Scan-Speak products are RoHS compliant. Data are subject to change without notice. Datasheet updated: February 22, 2011.

**Electrical Data**
- Nominal impedance \([Zn]\) 4 Ω
- Minimum impedance \([Z\text{min}]\) 3.9 Ω
- Maximum impedance \([Zo]\) 66.3 Ω
- DC resistance \([Re]\) 3 Ω
- Voice coil inductance \([Le]\) 0.39 mH

**Power Handling**
- 100h RMS noise test (IEC 17.1) 55 W
- Long-term max power (IEC 17.3) 170 W

**Voice Coil and Magnet Data**
- Voice coil diameter 32 mm
- Voice coil height 13.6 mm
- Voice coil layers 2
- Height of gap 5 mm
- Linear excursion ± 4.3 mm
- Max mech. excursion ± 8 mm
- Unit weight 1.3 kg

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Advanced Parameters (Preliminary)

**Electrical data:**
- Resistance \([R_e']\) = 3.29 Ω
- Free inductance \([L_{eb}]\) = 0.0771 mH
- Bound inductance \([L_e]\) = 0.561 mH
- Semi-inductance \([K_e]\) = 0.0401 SH
- Shunt resistance \([R_{ss}]\) = 2289 Ω

**Mechanical Data**
- Force Factor \([B_l]\) = 5.37 Tm
- Moving mass \([M_{ms}]\) = 12.7 g
- Compliance \([C_{ms}]\) = 0.967 mm/N
- Mechanical resistance \([R_{ms}]\) = 0.279 kg/s
- Admittance \([A_{ms}]\) = 0.0753 mm/N