WOOFER 21W/8555-00

The Symmetric Drive (SD-1) concept with copper in the magnet system was invented by Scan-Speak. High-quality magnet system design has thus been a key feature of Scan-Speak design since the company’s inception. The Classic woofers are highly praised, and are used in some of the worlds most exceptional high-end loudspeakers. Some feature Kevlar cones, others have the innovative carbon fibre paper cones.

KEY FEATURES:
- Patented Symmetrical Drive Motor Design
- Low-Loss linear suspension
- Low Damping SBR Rubber Surround
- Low Resonance Freq. 20Hz
- Air Dried Paper/Carbon Fibre Cone
- 42mm Voice Coil

T-S Parameters
- Resonance frequency [fs] 20 Hz
- Mechanical Q factor [Qms] 4.50
- Electrical Q factor [Qes] 0.33
- Total Q factor [Qts] 0.31
- Force factor [Bl] 8.2 Tm
- Mechanical resistance [Rms] 0.89 kg/s
- Moving mass [Mms] 32 g
- Compliance [Cms] 1.98 mm/N
- Effective diaph. diameter [D] 167 mm
- Effective piston area [Sd] 220 cm²
- Equivalent volume [Vas] 134 l
- Sensitivity (2.83V/1m) 87 dB
- Ratio Bl/√Re 3.50 N/√W
- Ratio fs/Qts 65 Hz

Electrical Data
- Nominal impedance [Zn] 8 Ω
- Minimum impedance [Zmin] 6.4 Ω
- Maximum impedance [Zo] 80.5 Ω
- DC resistance [Re] 5.5 Ω
- Voice coil inductance [Le] 0.4 mH

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

Voice Coil & Magnet Data
- Voice coil diameter 42 mm
- Voice coil height 19 mm
- Voice coil layers 2
- Height of gap 6 mm
- Linear excursion ± 6.5 mm
- Max mech. excursion ± 12 mm
- Unit weight 2.2 kg

Notes:
IEC specs. refer to IEC 60268-3 third edition. All Scan-Speak products are RoHS compliant. Data are subject to change without notice. Datasheet updated: March 6, 2013.
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Advanced Parameters (Preliminary)

**Electrical data**
- Resistance \([R_{e}']\) 5.58 Ω
- Free inductance \([L_{eb}]\) 0.158 mH
- Bound inductance \([L_{e}]\) 2.04 mH
- Semi-inductance \([K_{e}]\) 0.033 SH
- Shunt resistance \([R_{ss}]\) 101 Ω

**Mechanical Data**
- Force Factor \([B_{l}]\) 7.81 Tm
- Moving mass \([M_{ms}]\) 33.9 g
- Compliance \([C_{ms}]\) 1.22 mm/N
- Mechanical resistance \([R_{ms}]\) 0.70 kg/s
- Admittance \([A_{ms}]\) 0.09 mm/N