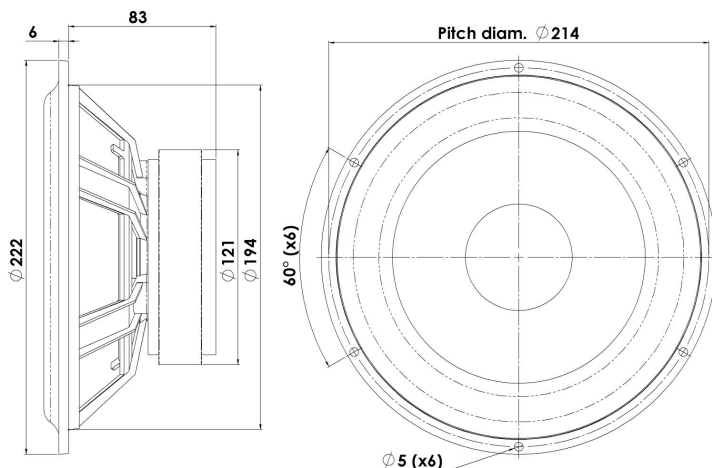




## WOOFER

## 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 companys 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 cm <sup>2</sup> |
| Equivalent volume [Vas]       | 134 l               |
| Sensitivity (2.83V/1m)        | 87 dB               |
| Ratio Bl/√Re                  | 3.50 N/√W           |
| Ratio fs/Qts                  | 65 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: March 6, 2013.

#### 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   |

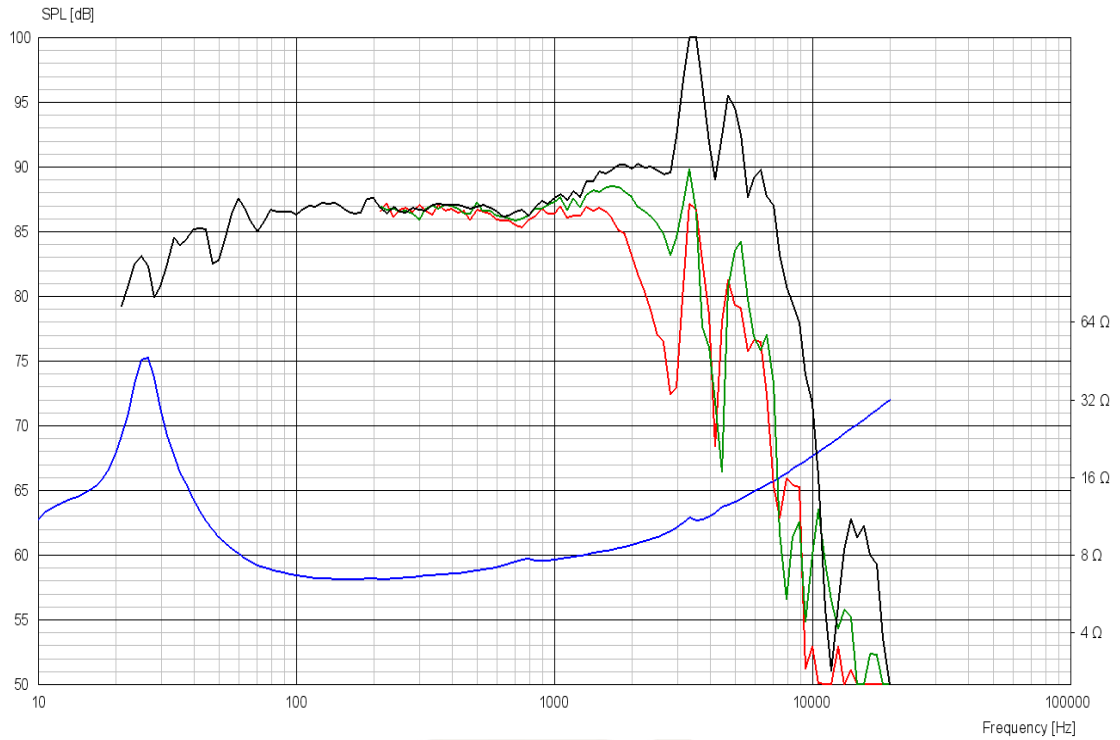
#### Voice Coil & Magnet Data

|                     |          |
|---------------------|----------|
| 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   |

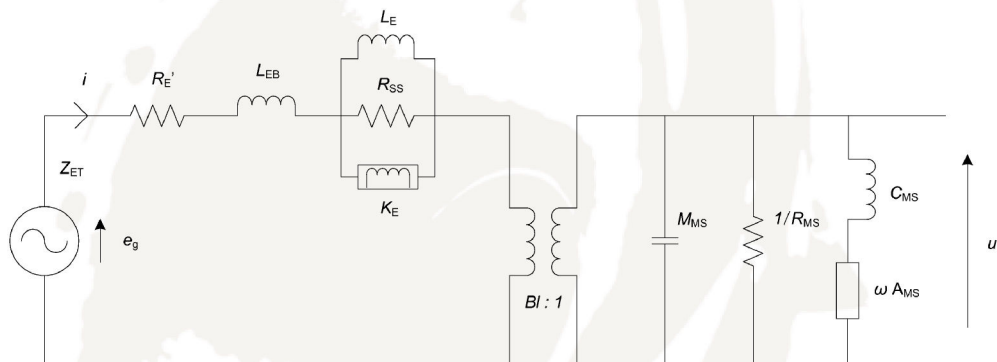


# WOOFER

# 21W/8555-00



## Advanced Parameters (Preliminary)



### Electrical data

|                        |          |
|------------------------|----------|
| Resistance [Re']       | 5.58 Ω   |
| Free inductance [Leb]  | 0.158 mH |
| Bound inductance [Le]  | 2.04 mH  |
| Semi-inductance [Ke]   | 0.033 SH |
| Shunt resistance [Rss] | 101 Ω    |

### Mechanical Data

|                             |           |
|-----------------------------|-----------|
| Force Factor [BI]           | 7.81 Tm   |
| Moving mass [Mms]           | 33.9 g    |
| Compliance [Cms]            | 1.22 mm/N |
| Mechanical resistance [Rms] | 0.70 kg/s |
| Admittance [Ams]            | 0.09 mm/N |