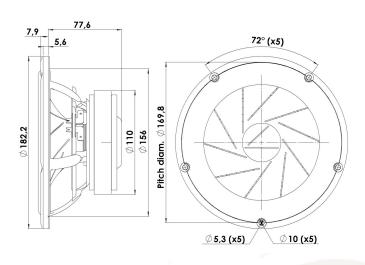


# REVELATOR

### **MIDWOOFER**

### 18W/4531G01

The Revelator midrange and midwoofers, both well known for their sliced paper cone technology. The slices are filled with damping glue, which dramatically reduces break-up modes in the diaphragm. In combination with Scan-Speaks low-loss linear suspension and the patented Symmetrical Drive (SD-1) it represented a breakthrough in midrange clarity and overall smooth frequency response characteristics.





#### **KEY FEATURES:**

- Patented Symmetrical Drive Motor Design
- Wood Fibre Cone

**T-S Parameters** 

- · Low Damping SBR Rubber Surround
- · Sliced Cone (Controls Cone Breakups)
- Low-Loss linear suspension
- · Large Ferrite Magnet System

| Resonance frequency [fs]      | 34 Hz               |
|-------------------------------|---------------------|
| Mechanical Q factor [Qms]     | 4.90                |
| Electrical Q factor [Qes]     | 0.38                |
| Total Q factor [Qts]          | 0.35                |
| Force factor [BI]             | 5.7 Tm              |
| Mechanical resistance [Rms]   | 0.74 kg/s           |
| Moving mass [Mms]             | 16.9 g              |
| Compliance [Cms]              | 1.3 mm/N            |
| Effective diaph. diameter [D] | 142 mm              |
| Effective piston area [Sd]    | 157 cm <sup>2</sup> |
| Equivalent volume [Vas]       | 45.6 l              |
| Sensitivity (2.83V/1m)        | 89 dB               |
| Ratio BI/√Re                  | 3.05 N/√W           |
| Ratio fs/Qts                  | 97 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 11, 2011.

| Electrical Data                |         |
|--------------------------------|---------|
| Electrical Data                |         |
| Nominal impedance [Zn]         | 4 Ω     |
| Minimum impedance [Zmin]       | 4.4 Ω   |
| Maximum impedance [Zo]         | 40.0 Ω  |
| DC resistance [Re]             | 3.5 Ω   |
| Voice coil inductance [Le]     | 0.27 mH |
|                                |         |
| Power Handling                 |         |
| 100h RMS noise test (IEC 17.1) | 70 W    |
| Long-term max power (IEC 17.3) | 110 W   |
|                                |         |
| Voice Coil & Magnet Data       |         |
| Voice coil diameter            | 38 mm   |
| Voice coil height              | 18 mm   |

| Voice coil diameter | 38 mm    |
|---------------------|----------|
| Voice coil height   | 18 mm    |
| Voice coil layers   | 2        |
| Height of gap       | 5 mm     |
| Linear excursion    | ± 6.5 mm |
| Max mech. excursion | ± 11 mm  |
| Unit weight         | 1.7 kg   |

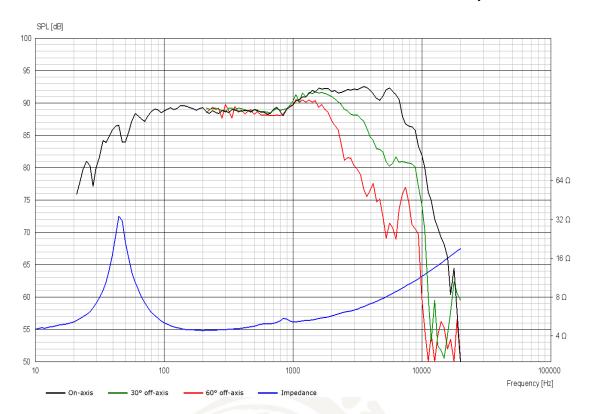




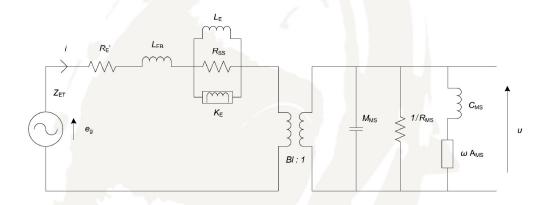


### **MIDWOOFER**

## 18W/4531G01



## Advanced Parameters (Preliminary)



| Electrical data        |      |
|------------------------|------|
| Resistance [Re']       | - Ω  |
| Free inductance [Leb]  | - mH |
| Bound inductance [Le]  | - mH |
| Semi-inductance [Ke]   | - SH |
| Shunt resistance [Rss] | - Ω  |

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

