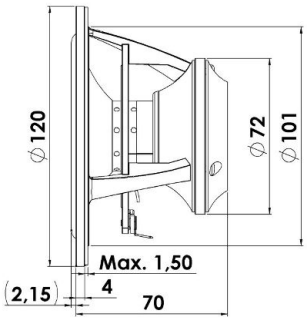
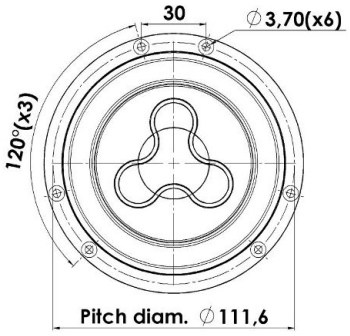
ILLUMINATOR

MIDRANGE 12MU/8731T00

The Illuminator midranges and midwoofers are in every aspect unusual designs with the open construction, the extremely long linear excursion and patented under-hung SD-3 (Symmetrical Drive) neodymium motor system, which due to copper caps and its construction ensures very low distortion, adding the unique patented cones, low-loss linear suspension the result is: "The Very Best Money Can Buy"!





KEY FEATURES:

- Under-Hung Neodymium Motor Design
- One Piece Cone-Dust Cap
- Very Wide Frequency Response 100-10KHz
- Patented Symmetrical Drive (SD-3)
- Low-Loss Linear Suspension
- High Output 87dB @ 2,83V

T-S Parameters	
Resonance frequency [fs]	66 Hz
Mechanical Q factor [Qms]	3.63
Electrical Q factor [Qes]	0.31
Total Q factor [Qts]	0.29
Force factor [Bl]	6.1 Tm
Mechanical resistance [Rms]	0.54 kg/s
Moving mass [Mms]	4.7 g
Compliance [Cms]	1.24 mm/N
Effective diaph. diameter [D]	86 mm
Effective piston area [Sd]	58 cm²
Equivalent volume [Vas]	5.8 l
Sensitivity (2.83V/1m)	87.2 dB
Ratio Bl/√Re	2.51 N/√W
Ratio fs/Qts	231 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: January 30, 2013.

Electrical Data	
Nominal impedance [Zn]	8 Ω
Minimum impedance [Zmin]	7.7 Ω
Maximum impedance [Zo]	75.0 Ω
DC resistance [Re]	5.9 Ω
Voice coil inductance [Le]	0.13 mH

Power Handling	
100h RMS noise test (IEC 17.1)*	80 W
Long-term max power (IEC 17.3)*	150 W

*Filter: 2. order HP Butterworth, 200 Hz

Voice Coil & Magnet Data	
Voice coil diameter	32 mm
Voice coil height	6.2 mm
Voice coil layers	4
Height of gap	13 mm
Linear excursion	± 3.4 mm
Max mech. excursion	± 11 mm
Unit weight	0.7 kg

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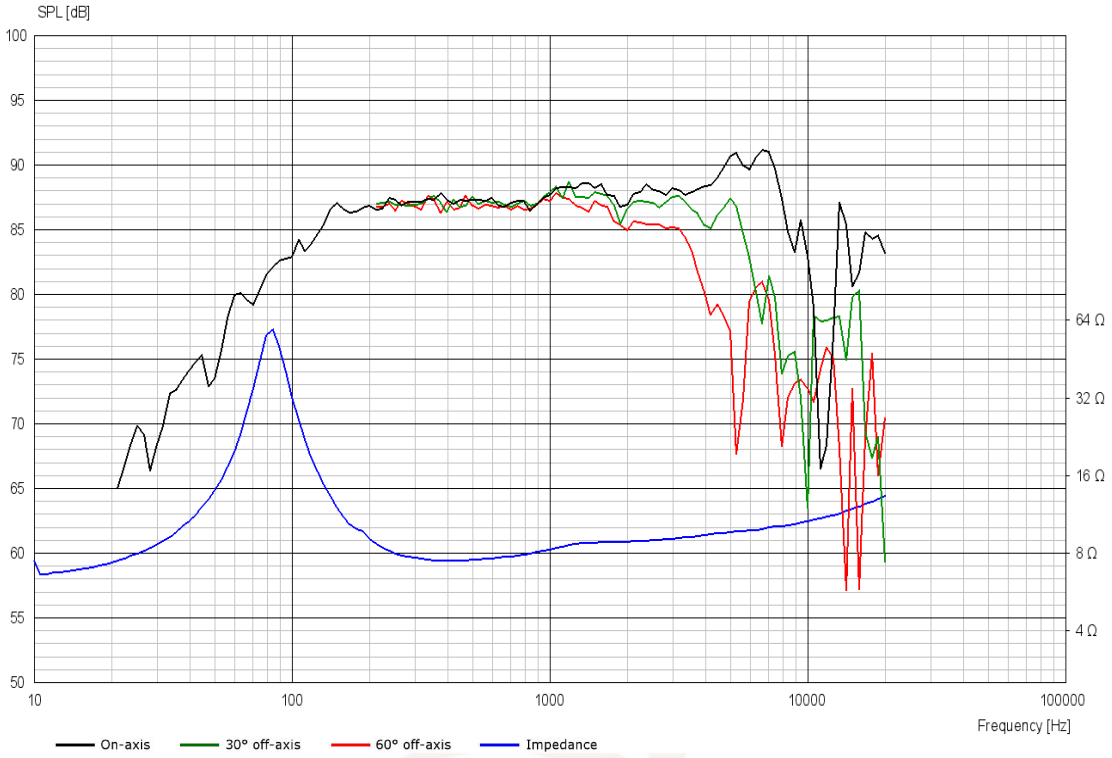
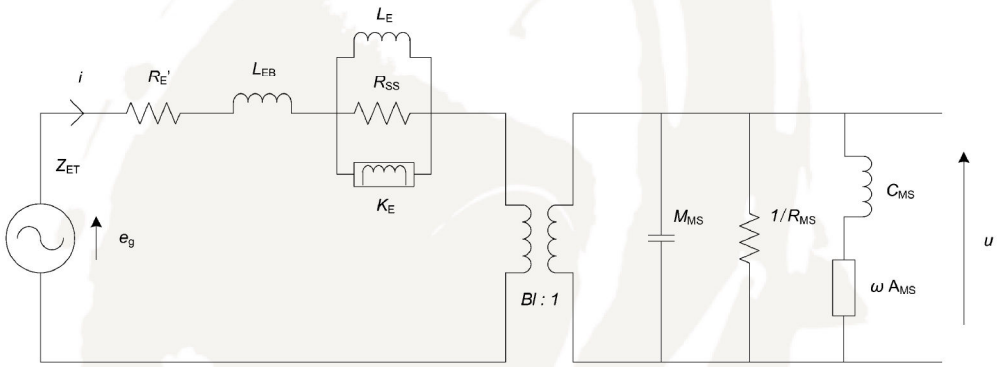


Advanced Parameters (Preliminary)



Electrical data	
Resistance [Re']	5.86 Ω
Free inductance [Leb]	0.064 mH
Bound inductance [Le]	2.03 mH
Semi-inductance [Ke]	0.080 SH
Shunt resistance [Rss]	5 Ω

Mechanical Data	
Force Factor [Bl]	5.85 Tm
Moving mass [Mms]	5.2 g
Compliance [Cms]	0.69 mm/N
Mechanical resistance [Rms]	0.63 kg/s
Admittance [Ams]	0.09 mm/N

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