## WOOFER

The Illuminator woofers 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
- Black Anodized Alu. Cone
- Low-Loss linear suspension

T-S Parameters

| Resonance frequency [fs] | 33 Hz |
| :--- | ---: |
| Mechanical Q factor [Qms] | 3.31 |
| Electrical Q factor [Qes] | 0.35 |
| Total Q factor [Qts] | 0.32 |
| Force factor [BI] | 7.5 Tm |
| Mechanical resistance [Rms] | $1.00 \mathrm{~kg} / \mathrm{s}$ |
| Moving mass [Mms] | 16 g |
| Suspension compliance [Cms] | $1.45 \mathrm{~mm} / \mathrm{N}$ |
| Effective diaph. diameter [D] | 140 mm |
| Effective piston area [Sd] | $154 \mathrm{~cm}{ }^{2}$ |
| Equivalent volume [Vas] | 48.3 I |
| Sensitivity (2.83V/1m) | 85.5 dB |
| Ratio $\mathrm{BI} / \sqrt{ } \mathrm{Ve}$ | $3.09 \mathrm{~N} / \sqrt{ } \mathrm{W}$ |
| Ratio fs/Qts | 104 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.

- Patented Symmetrical Drive (SD-3)
- Exceptionally Long Linear Excursion
- Patented Design

Electrical Data

| Nominal impedance [Zn] | $8 \Omega$ |
| :--- | ---: |
| Minimum impedance [Zmin] | $7.7 \Omega$ |
| Maximum impedance [Zo] | $61.7 \Omega$ |
| DC resistance [Re] | $5.9 \Omega$ |
| Voice coil inductance [Le] | 0.41 mH |

Power Handling

| 100h RMS noise test (IEC 17.1) | 80 W |
| :--- | ---: |
| Long-term max power (IEC 17.3) | 150 W |

Voice Coil and Magnet Data

| Voice coil diameter | 42 mm |
| :--- | ---: |
| Voice coil height | 8 mm |
| Voice coil layers | 4 |
| Height of gap | 20 mm |
| Linear excursion | $\pm 9 \mathrm{~mm}$ |
| Max mech. excursion | $\pm 16 \mathrm{~mm}$ |
| Unit weight | 1.7 kg |

## ILLUMINATOR

## WOOFER



## Advanced Parameters (Preliminary)

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