

# **KAS6WNd**

### **LOW & MID FREQUENCY TRANSDUCER**

# **TECHNICAL SPECIFICATIONS**

Nominal diameter	165	mm	6,5 in
Rated impedance			8 Ω
Minimum impedance			7,9 Ω
Power capacity <sup>1</sup>			170 W <sub>AES</sub>
Program power <sup>2</sup>			340 W
Sensitivity	94 dB	1W /	$1m \mathbin{@} Z_N$
Frequency range		90 -	8.000 Hz
Voice coil diameter	50,8	mm	2 in
BI factor			11,2 N/A
Moving mass			0,014 kg
Voice coil length			9 mm
Air gap height			7 mm
X <sub>damage</sub> (peak to peak)			20 mm



#### THIELE-SMALL PARAMETERS<sup>3</sup>

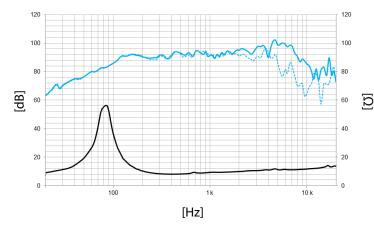
Resonant frequency, f <sub>s</sub>	85 Hz
D.C. Voice coil resistance, R <sub>e</sub>	6 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	3,7
Electrical Quality Factor, Q <sub>es</sub>	0,36
Total Quality Factor, Q <sub>ts</sub>	0,33
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	7 I
Mechanical Compliance, C <sub>ms</sub>	250 μm / N
Mechanical Resistance, R <sub>ms</sub>	2 kg / s
Efficiency, η <sub>0</sub>	1,2 %
Effective Surface Area, S <sub>d</sub>	0,014 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>4</sup>	3 mm
Displacement Volume, V <sub>d</sub>	14 cm <sup>3</sup>
Voice Coil Inductance, Le	0,2 mH

#### **MATERIALS**

Voice coil winding	Aluminum
Voice coil former	Glass fiber
Spider	Conex
Magnet	Neodymium
Cone	Paper
Frame	Die cast aluminum

## **MOUNTING INFORMATION**

Overall diameter	187,5 mm	7,4 in
Bolt circle diameter	172 mm	6,8 in
Baffle cutout diameter:		
- Front mount	146 mm	5,7 in
Depth	77,5 mm	3,1 in
Net weight	1,6 kg	3,5 lb
Shipping weight	1,8 kg	4,0 lb



Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

#### Notes

This datasheet is done with the measurement of a laboratory prototype. Small differences may appear when thw driver is transferred to the production line and manufactured in big quantities.

<sup>&</sup>lt;sup>1</sup> The power capaticty is determined according to AES2-1984 (r2003) standard.

<sup>&</sup>lt;sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>&</sup>lt;sup>3</sup> T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $<sup>^4</sup>$  The X<sub>max</sub> is calculated as (L<sub>vc</sub> - H<sub>ag</sub>)/2 + (H<sub>ag</sub>/3,5), where L<sub>vc</sub> is the voice coil length and H<sub>aq</sub> is the air gap height.