

# 6MCF200Nd

MID FREQUENCY TRANSDUCER
Preliminary Data Sheet

# **KEY FEATURES**

- · Very high efficiency mid-range driver
- Carbon fiber cone for optimum loading behaviour and low distortion
- Extremely linear frequency response
- 2" aluminium voice coil
- 400 W Program Power
- High efficiency and sensitivity
- Shorting cap for extended response
- FEA optimized neodymium motor structure
- Sealed cast aluminium frame
- Designed for high performance mid-frequency line array



Nominal diameter	165 mm	6 E in
	100 11111	6,5 in
Rated impedance		8 Ω
Minimum impedance		8 Ω
Power capacity*	200	0 W <sub>AES</sub>
Program power		400 W
Sensitivity	97 dB 1W / 1n	n @ Z <sub>N</sub>
Frequency range	400 - 12.	000 Hz
Voice coil diameter	51,7 mm	2 in
BI factor	1	9,2 N/A
Moving mass	0	,016 kg
Voice coil length	,	9,2 mm
Air gap height		9 mm

## THIELE-SMALL PARAMETERS\*\*

Resonant frequency, f <sub>s</sub>	410 Hz
D.C. Voice coil resistance, R <sub>e</sub>	6,3 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	5,9
Electrical Quality Factor, Q <sub>es</sub>	0,72
Total Quality Factor, Qts	0,64
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	0,25 l
Mechanical Compliance, C <sub>ms</sub>	9 μm / N
Mechanical Resistance, R <sub>ms</sub>	7,1 kg / s
Efficiency, η <sub>0</sub>	2,4 %
Effective Surface Area, S <sub>d</sub>	0,014 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> ***	2,5 mm
Displacement Volume, V <sub>d</sub>	35 cm <sup>3</sup>
Voice Coil Inductance, Le @ 1 kHz	0,25 mH

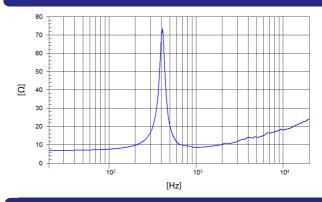
#### Notes:



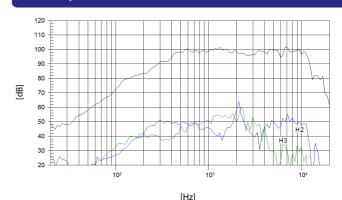
## **MOUNTING INFORMATION**

Overall diameter	174 mm	6,85 in
Bolt circle diameter	158 mm	6,22 in
Baffle cutout diameter:		
- Front mount	146 mm	5,75 in
Depth	75 mm	2,95 in
Net weight	2,3 kg	5,07 lb
Shipping weight	2,7 kg	5,95 lb

## FREE AIR IMPEDANCE CURVE



## FREQUENCY RESPONSE & DISTORTION



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

<sup>\*</sup> The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

<sup>\*\*</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>\*\*\*</sup> The  $X_{max}$  is calculated as  $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$ , where  $L_{vc}$  is the voice coil length and  $H_{ag}$  is the air gap height.