Oberton 10 NM 300

KEY FEATURES:

- **100 db 1W / 1m average sensitivity**
- **77 mm high temperature voice coil**
- **800 W AES program power**
- **Vented neodymium magnet assembly with massive heatsink**
- **Double aluminium demodulating ring for lower distortion and improved heat dissipation**

Application : Power midrange speaker

The **10NM300** neodymium loudspeaker is combining high efficiency, wide range and high power handling capability with use of 77 mm aluminium voice coil. It features aluminium die cast frame with vented neodymium magnet structure. The massive heatsink improves the cooling of the magnet structure, which reduce power compression. It is suitable for application as high power midrange or LF driver in 2-way satellite systems.

SPECIFICATIONS

Nominal Diameter	10"/262 inch/mm
Impedance	8 Ohm
Minimum Impedance	7.16 Ohm
Power Capacity AES [1]	400 W
Program Power [2]	800 W
Sensitivity	(200-2000 Hz) 100 dB/W/m
Frequency Range	100 - 4000Hz
Voice Coil Diameter	77 mm
Voice Coil Material	Aluminium
Voice Coil Former	Kapton™
Voice Coil Winding Depth	15 mm
Magnet Gap Depth	9 mm
Cone Material	Paper
Basket	Die cast aluminium
Magnet	Neodymium
Flux Density	1.45 T

THIELE-SMALL PARAMETERS

Resonance Frequency	71.36 Hz
Mechanical Efficiency Factor (Qms)	9.15
Electrical Efficiency Factor (Qes)	0.214
Total Q (Qts)	0.209
Equivalent Air Volume (Vas)	20.61 Litres
Diaphragm mass ind. airload (Mms)	34.62 grams
Voice Coil Resistance Re	5.58 Ohms
Effective Diagram Area (Sd)	317.3 cm2
Peak Linear Displacement of Diaphragm (Xmax)*	±5.25 mm
Mechanical Compliance of Suspension (Cms)	0.144 mm/N
BL Product (BL)	20.12 T.m
V.C. Inductance at 1 kHz (Le)	0.62 mH

MOUNTING INFORMATION

Overall Diameter	262 mm
Baffle Hole Diameter	228 mm
Number of Mounting Holes	8 with dia. 7 mm
Bolt Circle Diameter	244 mm
Overall Depth	148.3 mm
Net Weight	4.75 kg

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 30 L box enclosure tuned 60 Hz using a 50-1000 Hz band limited pink noise test signal applied continuously for 2 hours.

2. Program power is defined as 3db greater than AES Power Capacity.

** Linear Mathematical Xmax is calculated as: (Hvc - Hg)/2 + Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.*

Frequency Responce