LM8K

wide band planar ribbon transducer





- Neodymium magnets and Kapton diaphragm
- smooth extended response
- superior sonic transparency and resolution of vocal range
- extremely wide and even horizontal dispersion
- reliable design for long term operation
- environmental protection
- optimized for line array application

SPECIFICATIONS

Preliminary

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Nominal size	8"/200mm
Radiating configuration	
Dipole (open back)	- standard
Closed back (with enclosure)	- optional
Power handling, AES ¹	60 W
Long-term maximum power, IEC ¹	100 W
Short-term maximum power, IEC ¹	200 W
Sensitivity ²	95 dB
Effective frequency range ³	250 Hz – 20 kHz
Horizontal coverage angle,	150 deg
closed back ^₄	
Horizontal coverage angle,	120 deg
dipole (open back) ⁴	
Vertical coverage angle⁴	30 deg
Diaphragm	Kapton
Current carrying conductors	Aluminum foil
Displacement limit for VC	0.7 mm
Minimum impedance = Re	Impedance is predominantly
(inductive component is absent)	constant @ Re=7 Ω
Magnet material	Neodymium
Driver plates material	Powder coated steel
Recommended minimum XO point	
12 dB/Oct.	250 Hz
6 dB/Oct.	500 Hz
Net weight	0.78 kg (1.72 lb.)

1. AES refers to AES2-1984 Rev.2003. IEC refers to IEC 60268-5. AES power handling tested using IEC60268-1 noise signal for duration of 2 hours in effective frequency range in free air.

2. Frequency response and sensitivity of LM8K as an open back planar ribbon transducer is highly dependent on its acoustic alignment. Specified number is an average of 1W/1m data within 500Hz- 5 kHz range. Measured at 1m at 2.83V in simulated free field conditions. Various acoustic alignments and angles are indicated in the legend below the response graphs.

3. Highly dependent on acoustic alignment and application. Maximum recommended LF extension is 250Hz for speech reproduction applications. Measured in accordance with IEC 60268-5, defined at -10 dB below SPL averaged in 250 Hz- 5 kHz range.

4. Coverage angles (especially in horizontal plane) dependent on acoustic alignment of LM8K (closed back vs. dipole). Refer to horizontal directivity data for both cases. No baffle was used for dipole directivity measurements. Defined at -6dB, averaged in 500 Hz- 8 kHz range. Vertical coverage angle is estimated as average within 2 kHz- 8 kHz range as applied for wide band speech applications. For applications in MF band refer to directivity data.

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