

The 93083 is a high-power, 6.5" coaxial, 8 ohm speaker with a mounted PEI dome tweeter for extended range music and voice audio. A powerful ferrite magnet, sturdy steel frame, and durable polypropylene cone come together to make a reliable solution for background or foreground music.

- Extended voice and music speaker
- 6.5" (165 mm) steel basket diameter
- 30 watt, 8 ohm, 88 dB SPL
- 1" copper voice coil, Kapton former
- PEI dome tweeter, coaxially mounted
- Polypropylene cone, ferrite magnet

MISCO engineers test and analyze the performance of these speakers using the world's most sophisticated loudspeaker measurement systems including the Klippel Analyzer and the Klippel QC, which confirm the final design.



Primary Specifications

Size, Nominal (inch & mm)	6" (152 mm)
Rated Impedance (Ω)	8
Continuous Power (W)	30
Sensitivity (dB SPL) ¹	88
Frequency Range (Hz)	45 - 20,000
Resonant Frequency (Fs) (Hz) +/- 15%	70

More Specifications

Application	Voice Communications
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	6.8
Program Power (W)	60
Continuous Power (W)	30

Small Signal Parameters

Nominal Impedance (Z) (Ω)	8
DC Resistance (Re) (Ω)	6.8
Voice Coil Inductance (Le) (mH)	0.43
Resonant Frequency (Fs) (Hz) +/- 15%	70
Mechanical Q Factor (Qms)	7.30
Electrical Q Factor (Qes)	1.08
Total Q Factor (Qts)	0.94
Moving Mass (Mms) (gm)	12.17
Suspension Compliance (Cms) (mm/N)	0.42
Mechanical Resistance (Rms) (kg/s)	0.74
Surface Area of Diaphragm (Sd) (cm²)	134.78
Compliance Equivalent Volume (Vas) (L)	10.80
Motor Force Factor (BL) (T•M)	5.8
Efficiency (η_0) (%)	0.34

Material Descriptions

Basket Type	Stamped steel
Terminal Size (mm)	2.8 x 0.5
Voice Coil Diameter (mm)	25.781
Voice Coil Wire Material	High temperature copper
Voice Coil Former Material	Kapton
Magnet Material	Ferrite
Magnet Weight (g)	136.08
Cone Body Material	Polypropylene
Cone Surround Material	Foam
Dust Cap Material	Felt
Net Weight (kg)	1.08

