



C803A Series

8 " Coaxial Loudspeaker Available With Transformer



C803A

Features

- Industry Standard 8" (203mm) Coaxial, 16 Watt Loudspeaker
- Offers Proven Performance with Wide Frequency Response
- Post-Mounted Tweeter Adds Strength and a More Attractive Appearance
- Ideal for Multi-Purpose Commercial, Industrial, and Institutional Use

Applications

Use Atlas Sound 8" (203mm) diameter, multi-purpose, coaxial loudspeaker Model C803A for voice transmission, music and signal reproduction in high-quality commercial, industrial, and institutional applications.

General Description

Model C803A. High-quality, 16 Watt model C803A utilizes a post-mounted tweeter which adds strength to the assembly and provides an attractive appearance. This coaxial loudspeaker features a 70Hz–15.5kHz, (± 5 dB) frequency response and a broad, uniform dispersion pattern of 120°. Such provisions allow for highly intelligible sound reproduction and better distribution for high-quality sound systems. The C803A combines a full-size 8" (203mm) diameter low-frequency reproducer and a 3" (76mm) high-frequency reproducer. The two sections are coupled via a built-in crossover network. The woofer has a 10oz. (260g) ceramic magnet; the tweeter has a 2.35oz. (67g) ceramic magnet and the unit has a peak sensitivity of 98dB (at 1W/1M).

The loudspeaker is available with six different factory-installed line-matching transformers to meet a variety of project requirements. Model C803A mounts a wide variety of Atlas Sound baffles and enclosures, with the optimum sealed enclosure size being .36 ft³.

Specifications

Speaker Size	LF: 8" (203mm), HF: 3" (76mm)
Power Rating	16 Watts RMS
Sensitivity	98dB (peak)
Impedance	8 Ω Nominal
Frequency Response	70Hz–15.5kHz (± 5 dB)
Crossover Frequency	2,800Hz, First Order
Dispersion	120°
Voice Coil Diameter	1" (25mm)
Voice Coil Material	Copper
Voice Coil Former Material	Black Anodized Aluminum
Weight	2.4 lbs. (1060g)
Diameter Less Transformer	8 $\frac{1}{8}$ " (206mm)
Depth Less Transformer	2 $\frac{7}{8}$ " (73mm)
Mounting Dimensions	7 $\frac{5}{8}$ " (194mm) B.C.

Transformer Specifications

C803AT47

Includes Transformer	HT-47
Primary Voltage	70.7V
Transformer Frequency Response	60Hz – 12kHz, (±1dB)
Primary Taps	.5, 1, 2, & 4 Watts
Secondary Impedance	8Ω
Insertion Loss	1.0dB
Core Size	5/8" x 5/8" (16 x 16mm)
Power Rating	4 Watts

C803AT167

Includes Transformer	HT167
Primary Voltage	70.7V
Transformer Frequency Response	40Hz – 15kHz
Primary Taps	4, 8, 16 Watts
Secondary Impedance	8Ω
Insertion Loss	.6dB
Core Size	1" x 1"
Power Rating	16 Watts

C803AT70

Includes Transformer	LT-70
Primary Voltage	70.7V
Transformer Frequency Response	100Hz – 10kHz, (±1.5dB)
Primary Taps	.5, 1, 2, & 5 Watts
Secondary Impedance	8Ω
Insertion Loss	1.5dB
Core Size	1/2" x 5/8" (13 x 16mm)
Power Rating	5 Watts

C803AT72

Includes Transformer	LT-72
Primary Voltage	25V/70.7V
Transformer Frequency Response	100Hz – 10kHz, (±1.5dB)
Primary Taps	.5, 1, 2, & 4 Watts
Secondary Impedance	8Ω
Insertion Loss	1.5dB
Core Size	1/2" x 5/8" (13 x 16mm)
Power Rating	4 Watts

C803AT87

Includes Transformer	HT-87
Primary Voltage	70.7V
Transformer Frequency Response	50Hz – 15kHz, (±1dB)
Primary Taps	1, 2, 4, & 8 Watts
Secondary Impedance	4 & 8Ω
Insertion Loss	0.6dB
Core Size	1" x 3/4" (25 x 19mm)
Power Rating	8 Watts

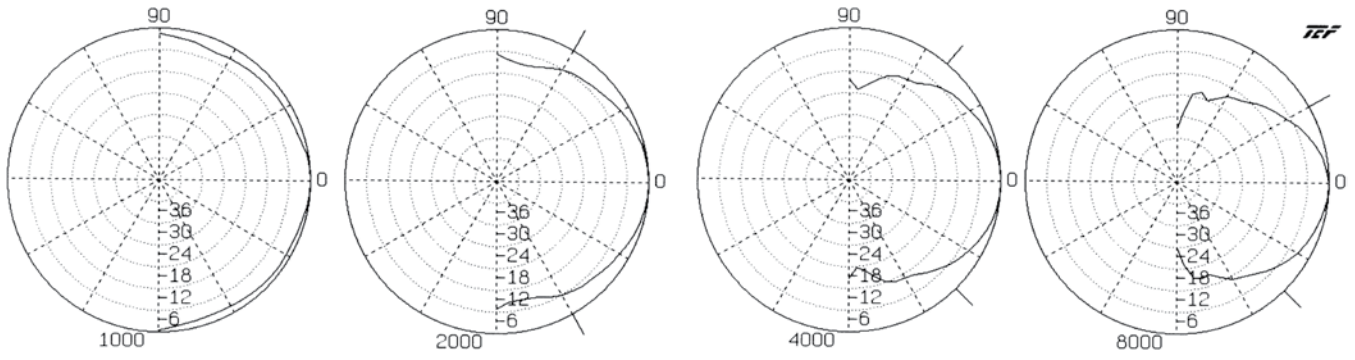
Architect and Engineer Specifications

Unit shall be Atlas Sound 8" diameter loudspeaker Model C803A or loudspeaker /transformer combination Model _____ (utilizing Atlas Sound line-matching transformer Model _____). The low-frequency reproducer cone shall be a full 8" (203mm) in diameter and the high frequency reproducer cone shall be 3" (76mm) in diameter. The woofer shall have a 10oz. (260g) ceramic magnet; the tweeter shall have a 2.35oz. (67g) ceramic magnet. The two reproducer sections shall be coupled through a built-in crossover network.

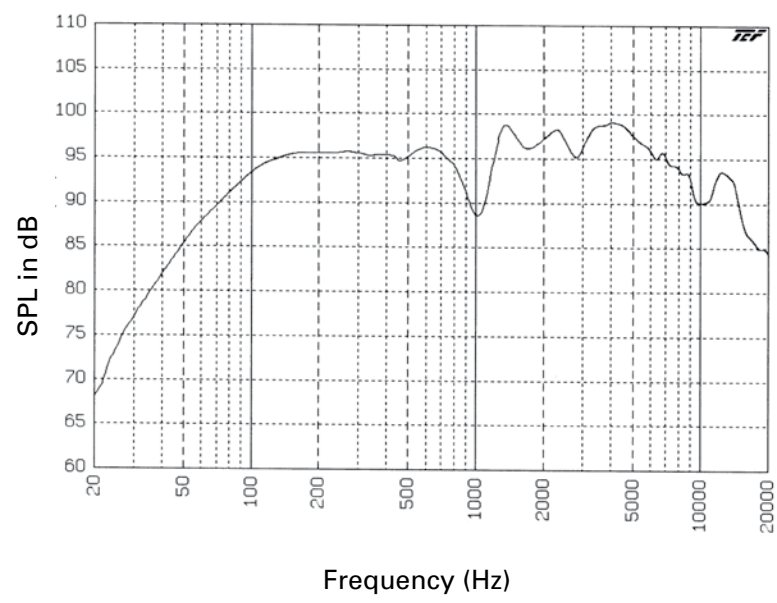
The crossover frequency shall be at 2800Hz. Frequency response range shall be 70Hz – 15.5kHz, (±5dB). Sensitivity shall be 98dB at 1 Watt/ 1 meter. Voice coil impedance shall be 8Ω. Low frequency voice coil diameter shall be 1" (25mm) and operate in a magnet field of at least 10,600 gauss. Transformer primary voltage shall be _____ (25V, 70.7V, 25V/70.7V) with a frequency response range of _____ and power taps at _____ watts. Insertion loss shall not exceed _____dB. The maximum depth of the loudspeaker shall not exceed 2 7/8" (73mm).

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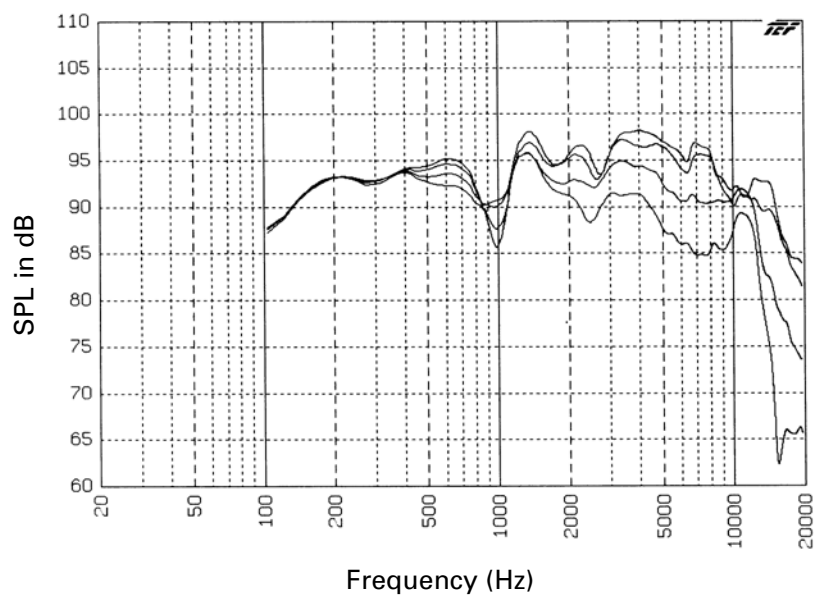
C803A Polars (Normalized to Zero on Axis) (-6dB)



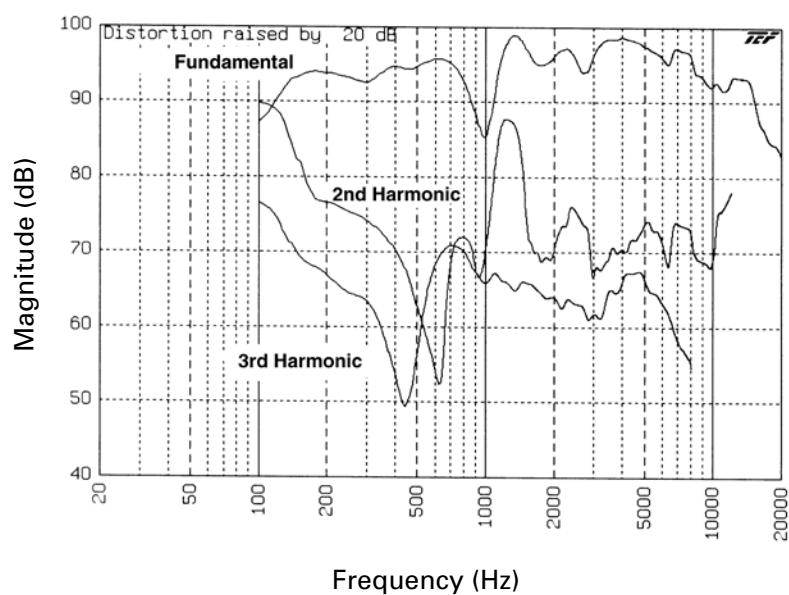
C803A Frequency Response



C803A Frequency Response Overlay



C803A Harmonic Distortion



C803A Impedance

