



8" COAXIAL LOUDSPEAKER AVAILABLE WITH TRANSFORMER

**C803A
Series**

ONE



C803A
(shown with transformer)

SPECIFICATIONS

Speaker Size:	LF: 8" (203mm), HF: 3" (76mm)
Power Rating:	16 Watts RMS
Sensitivity (SPL at 1W/1M):	98dB (peak), 95dB (avg)
Impedance:	Nominal, 8 ohms
Frequency Response:	70 Hz - 15.5 kHz (± 5 dB)
Crossover Frequency:	2,800 Hz, First Order
Dispersion:	120°
Mounting Dimensions:	7 $\frac{5}{8}$ " (194mm) B.C.
Cone Material:	Treated Paper
Surround Material & Damping:	Self Edge with Dampener
Flux Density:	10,600 Gauss, 1.06 Tesla
Magnet Weight:	Nominal, 10 oz. (260g)
Basket Material:	20 ga. Stamped Steel
Voice Coil Diameter:	1" (25mm)
Voice Coil Material:	Copper
Voice Coil Former Material:	Black Anodized Aluminum
Voice Coil Winding Width:	.265 (7mm)
Top Plate Thickness:	.239 (6mm)
Weight:	2.4 lbs. (1060g)
Diameter & Depth Less Xfmr:	8 $\frac{1}{8}$ " (206mm) Dia. & 2 $\frac{1}{8}$ " (73mm) Deep

THIELE-SMALL PARAMETERS

Pe: 16 Watts	Qes: .556	Sd: 33.1 In. ³
Fs: 105 Hz	Qms: 6.58	Le@1kHz: .74 mH
Xmax: .05 in.	BL: 8.9 N/A	Mms: .369 oz
Resistance: 6.4 ohms	Efficiency: 2.9%	Cms: .039 in./lb.
Qts: .513	Vas: .507 Ft. ³	

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) dia., 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 70 Hz-15.5 kHz, ± 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) dia. 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 10 oz. (260g) ceramic magnet; the tweeter has a 2.35 oz. (67g) ceramic magnet and the unit has a peak sensitivity of 98dB (at 1 watt, 1 meter).

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

MODEL COMBINATIONS / TRANSFORMER SPECIFICATIONS

SPKR. / XFMR. COMBINATIONS AVAILABLE	XFMR.	PRIMARY VOLTAGE	XFMR. FREQUENCY RESPONSE	PRIMARY TAPS (WATTS)	SECONDARY IMPEDANCE	INSERTION LOSS (MAX)	CORE SIZE	POWER RATING
C803AT25	LT-25	25 V	100 Hz - 10 kHz, ± 1.5 dB	.5, 1, 2 & 5	8 Ohms	1.5dB	1/2" x 5/8" (16 x 16mm)	5 Watts
C803AT47	HT-47	70.7 V	60 Hz - 12 kHz, ± 1.0 dB	.5, 1, 2 & 4	8 Ohms	1.0dB	5/8" x 5/8" (16 x 16mm)	4 Watts
C803AT70	LT-70	70.7 V	100 Hz - 10 kHz, ± 1.5 dB	.5, 1, 2 & 5	8 Ohms	1.5dB	1/2" x 5/8" (16 x 16mm)	5 Watts
C803AT72	LT-72	25/70 V	100 Hz - 10 kHz, ± 1.5 dB	.5, 1, 2 & 4	8 Ohms	1.5dB	1/2" x 5/8" (16 x 16mm)	4 Watts
C803AT82	HT-82	25 V	50 Hz - 15 kHz, ± 1.0 dB	1, 2, 4, 8	4 & 8 Ohms	0.6dB	1" x 3/4" (25 x 19 mm)	8 Watts
C803AT87	HT-87	70.7 V	50 Hz - 15 kHz, ± 1.0 dB	1, 2, 4, 8	4 & 8 Ohms	0.6dB	1" x 3/4" (25 x 19mm)	8 Watts

For additional information on Atlas Sound transformer models, refer to technical literature #SL1-1369.

Specifications subject to change without notice

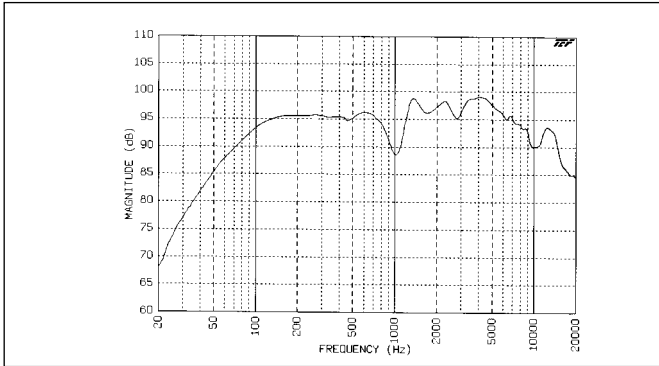


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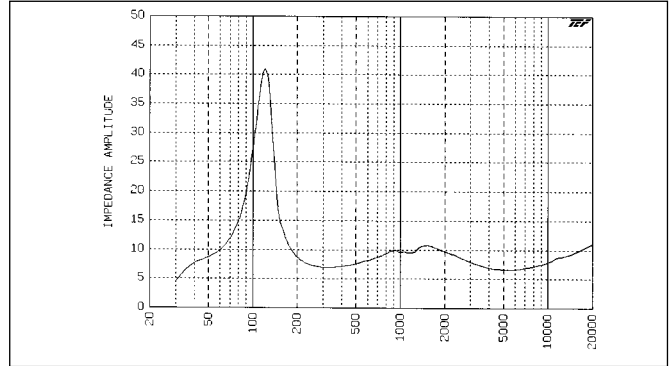
ARCHITECT & ENGINEER SPECIFICATIONS

Unit shall be Atlas Sound 8" dia. 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 10 oz. (260g) ceramic magnet; the tweeter shall have a 2.35 oz. (67g) ceramic magnet. The two reproducer sections shall be coupled through a built-in crossover network. The crossover frequency shall be at 2800 Hz. Frequency response range shall be 70 Hz to

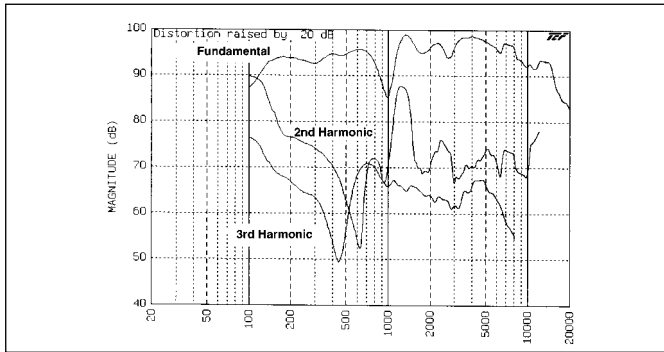
15.5 kHz, ± 5 dB. Sensitivity shall be 98dB at 1 watt, 1 meter. Voice coil impedance shall be 8 ohms. Low frequency voice coil diameter shall be 1" (25mm) and operate in a magnet field of at least 10,600 gauss. Transformer primary voltage shall be _____ (25V, 70.7V, 70/25) with a frequency response range of _____ and power taps at _____ watts. Insertion loss shall not exceed _____ dB. The maximum depth of the loudspeaker shall not exceed 2 1/4" (73mm).



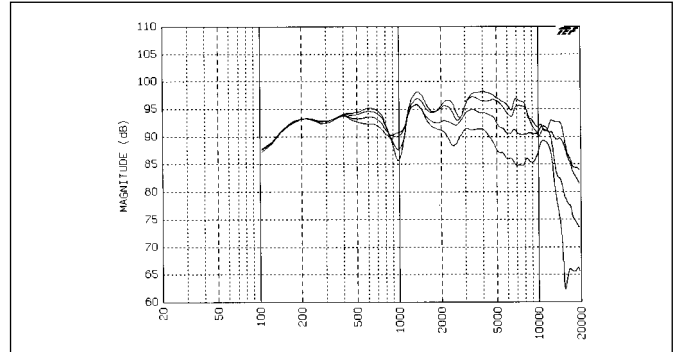
C803A: Frequency Response



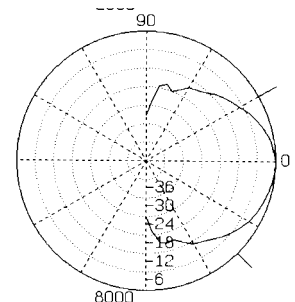
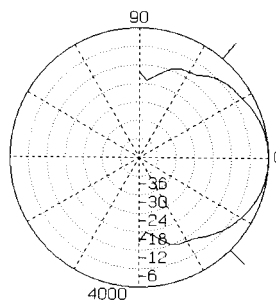
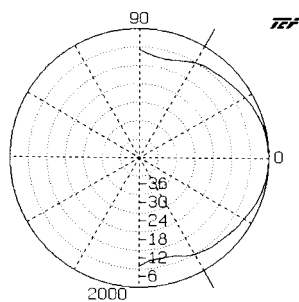
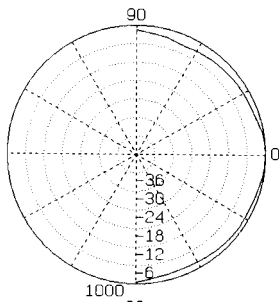
C803A: Impedance



C803A: Fundamental vs 2nd & 3rd Harmonics (Raised 20dB) @ 1 watt



C803A Frequency Response Overlay at 0, 15, 30 & 45 degrees



Octave Bands Normalized to Zero On Axis

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