C10A Series

8" Dual Cone Loudspeaker Available With Transformer

C10A

Features

- Acoustically Proven, General Purpose 25 Watt Loudspeaker
- Includes Choice of Factory-Installed Line-Matching Transformer
- Ideal for Multi-Purpose Commercial, Industrial and Institutional Use
- Mounts a Wide Selection of Atlas Sound Baffles

Applications

Utilize Atlas Sound's Model C10A, 8" dual-cone loudspeaker for dependable voice, music and signal reproduction in commercial, industrial and institutional communication systems. It is the industry standard for performance and service reliability in general purpose applications. Model includes a choice of eight factory-installed line matching transformers to meet a wide range of project requirements.

General Description

Model C10A is a dual cone, 25 Watts 8" (203mm) loudspeaker with a 10 oz. (260g) ceramic magnet. It includes a curvelinear, treated-paper cone for lower harmonic distortion. The loudspeaker is also equipped with a full 1" diameter copper voice coil with a black-anodized aluminum former for better power dissipation.

Model C10A operates within a frequency response range of 45Hz – 19kHz with a sensitivity of 97dB and a dispersion angle of 105˚. It mounts a wide variety of Atlas Sound round and square baffles and enclosures to meet functional and aesthetic application requirements.

Specifications

Size	8" (203mm)
Power Handling	25 Watts Peak, 15 Watts RMS
Sensitivity	97dB Peak, 94dB Average
Impedance	8Ω
Frequency Response	45Hz–19kHz Nominal, 85Hz–8kHz (+5dB)
Dispersion	105˚ (2kHz Octave Band, -6dB Points)
Diameter	8.125" (205mm)
Depth	2.875" (73mm
Mounting Dimensions	7.625" (194mm) Bolt Circle
Cone Material	Treated Paper
Surround Material & Damping	Damped Self Edge
Flux Density	10,600 Gauss, 1.06 Tesla
Magnet Weight	Nominal, 10oz. (260g)
Basket Material	Stamped Plated 20 gauge CRS
VC Diameter	1" (25mm)
VC Material	Copper
VC Former Material	Black Anodized Aluminum
VC Winding Width	.225"
Top Plate Thickness	.239"
Weight	32oz. (908g)

Thiele-Small Parameters

Pe	15 Watts
Fs	125Hz
Xmax	.05"
Resistance	7.3Ω
Qts	.80
Qes	.95
Qms	5.2
BL	7.9 N/A
Efficiency	1.9%
Vas	.32 (ft^3)
Sd	33.2 (in^2)
Le@1kHz	.36 mH
Mms	.39oz.
Cms	.024 in./lb.

Atlas Sound
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Transfomer Specifications

C10AT25

Includes Transfomer	LT-25
Primary Voltage	25V
Transfomer Frequency Response	100Hz – 10kHz, (±1.5dB)
Primary Taps	.5, 1, 2, & 5 Watts
Secondary Impedance	8Ω
Insertion Loss	1.5dB
Core Size	½" x ⅝" (13 x 16mm)
Power Rating	5 Watts

C10AT70

Includes Transfomer	LT-70
Primary Voltage	70.7V
Transfomer Frequency Response	100Hz – 10kHz, (±1.5dB)
Primary Taps	.5, 1, 2, & 5 Watts
Secondary Impedance	8Ω
Insertion Loss	1.5dB
Core Size	½" x ⅝" (13 x 16mm)
Power Rating	5 Watts

C10AT72

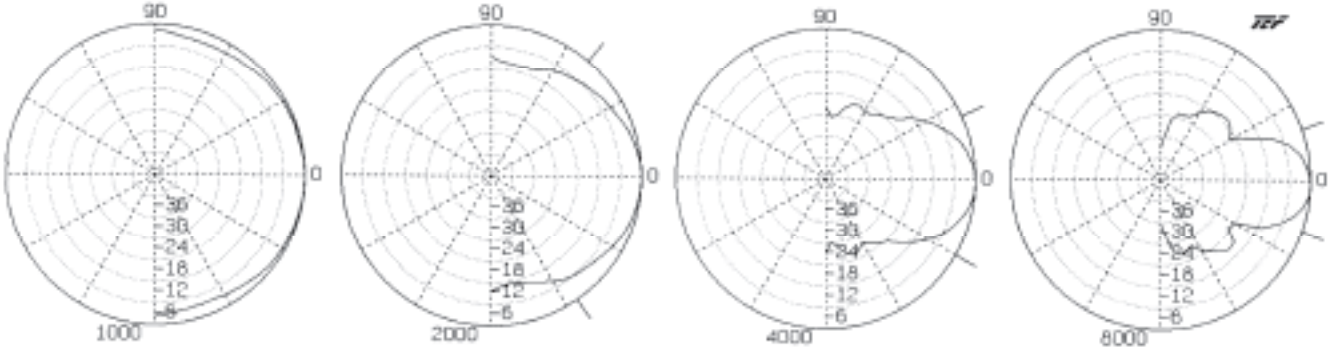
Includes Transfomer	LT-72
Primary Voltage	25V/70.7V
Transfomer Frequency Response	100Hz – 10kHz, (±1.5dB)
Primary Taps	.5, 1, 2, & 4 Watts
Secondary Impedance	8Ω
Insertion Loss	1.5dB
Core Size	½" x ⅝" (13 x 16mm)
Power Rating	4 Watts

Architect and Engineer Specifications

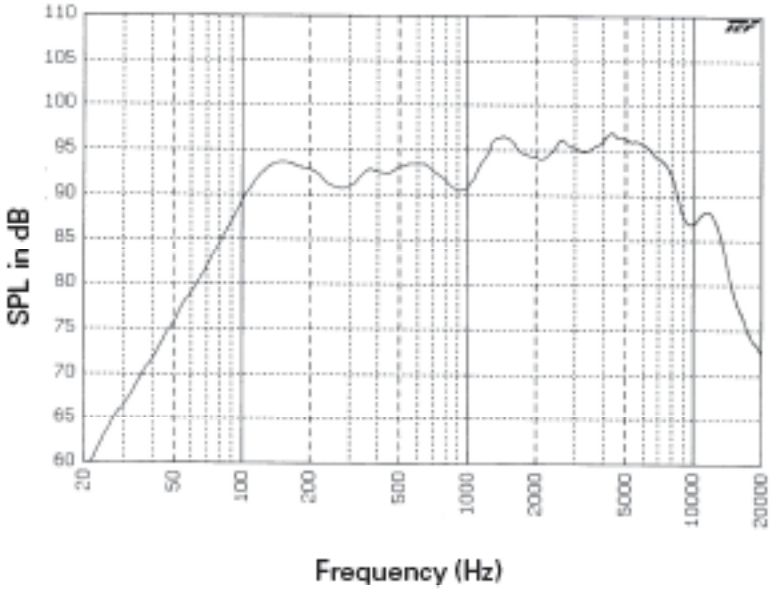
Unit shall be Atlas Sound 8" loudspeaker Model _____ or loudspeaker / transformer combination Model _____ (utilizing line-matching transformer Model _____). It shall have a (10oz.) ceramic magnet and a seamless cone. Frequency response range shall be _____.

Sensitivity shall be _____. Voice coil shall be black anodized aluminum to help dissipate heat, have an impedance of 8Ω and a diameter of 1" (25mm). Transformer primary voltage shall be ____ with a frequency response range of _____. Insertion loss shall not exceed ____.

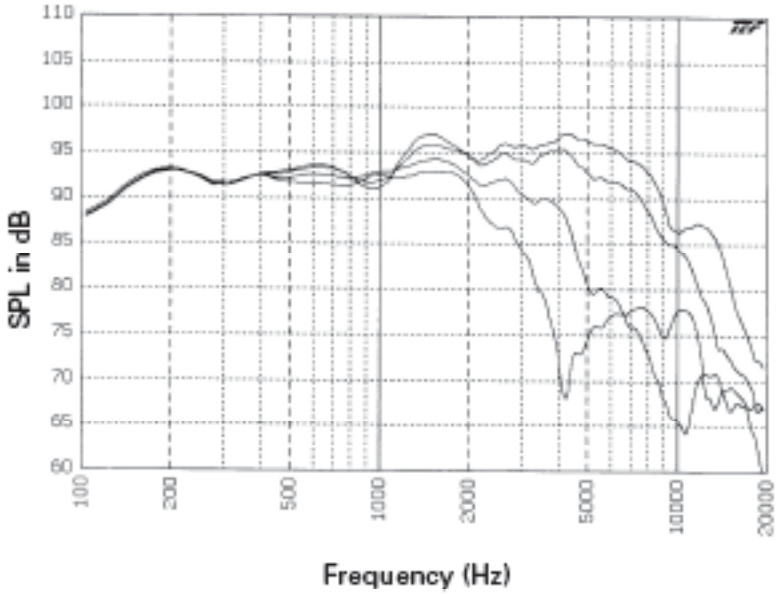
C10A Polars (Normalized to Zero on Axis) (-6dB)



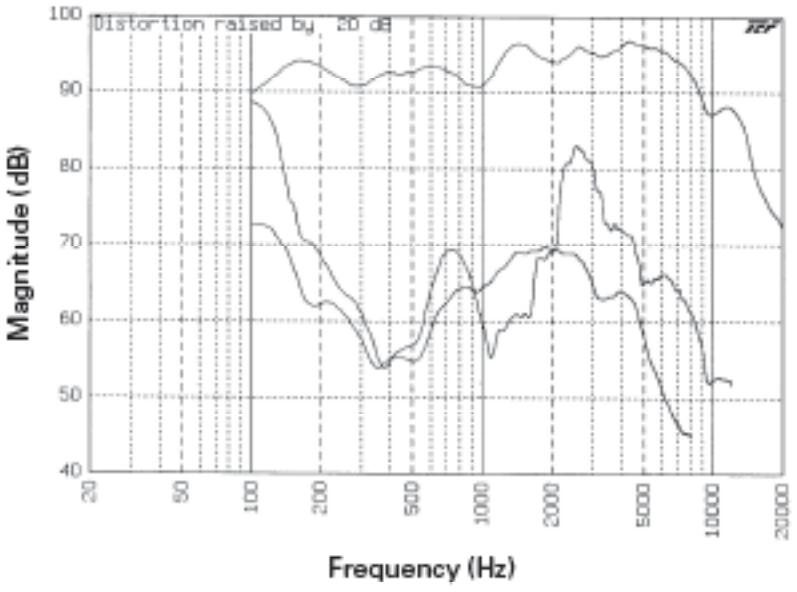
C10A Frequency Response



C10A Frequency Response Overlay



C10A Harmonic Distortion



C10A Impedance