C5A Series

8" Dual Cone Loudspeaker Available With Transformer



Features

- Industry Standard Value Loudspeaker with Proven Performance
- Available with 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 dual-cone loudspeaker for voice transmission, music and signal reproduction in commercial, industrial, and institutional applications. Model C5A is an economical, multi-purpose loudspeaker with choice of eight factory-installed line matching transformers to meet a variety of value-conscious project requirements.

General Description

Model C5A is a reliable, economically priced 15 watt loudspeaker that offers many features found in speakers costing considerably more. It includes a curvelinear, treated-paper cone for lower harmonic distortion. It is also equipped with a full 1" diameter copper voice coil with a black-anodized aluminum former for better power dissipation.

Model C5A operates within a frequency response range of 50 Hz - 18 kHz with a sensitivity of 96 dB 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 15 Watts program, 10 Watts RMS

Sensitivity (1W/1M) 96dB Peak, 93dB Average

Impedance Nominal, 8Ω

Frequency Response 50Hz – 18kHz (Nominal), 80Hz – 9kHz (+5dB)

Dispersion 105° (2kHz Octave Band, -6dB Points)

 Diameter
 8.125" (205mm)

 Depth
 2.625" (67mm)

Mounting Dimensions 7.625" (194mm) Bolt Circle

Cone Material Treated Paper
Surround Material & Damping Self Edge

Flux Density 9,200 Gauss, .92 Tesla

Magnet Weight - Nominal 5oz., (132g)

Basket Material Stamped Plated 20-gauge CRS

VC Diameter 1" (25mm)
VC Material Copper

VC Former Material Black Anodized Aluminum

VC Winding Width .190"

Top Plate Thickness .180"

Weight 22oz. (607g)

Thiele-Small Parameters

Pe 10 Watts 128Hz Fs Xmax .05" Resistance 6.1Ω Qts 1.15 Qes 1.57 Qms 4.2 BL5.6 N/A Efficiency 1.3% .35 (ft3) Vas 33.2 (in²) Sd Le@1kHz .26 mH MMs .36oz. Cms .027 in./lb.



Transfomer Specifications

C5AT25

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 $\frac{1}{2}$ " x $\frac{5}{6}$ " (13 x 16mm)

Power Rating 5 Watts

C5AT70

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 5%" (13 x 16mm)

Power Rating 5 Watts

C5AT72

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 5%" (13 x 16mm)

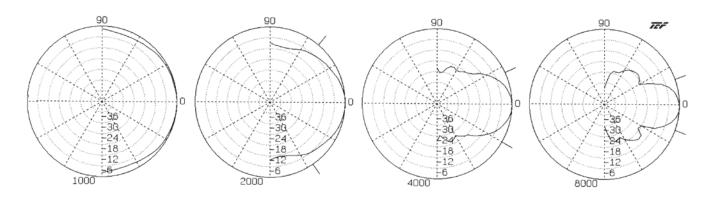
Power Rating 4 Watts

Architect and Engineer Specifications

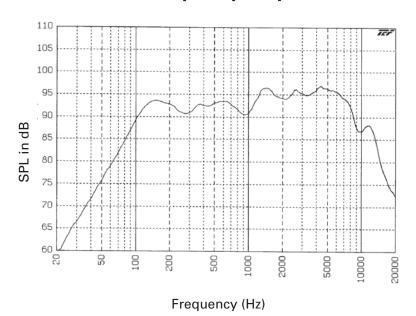
Unit shall be Atlas Sound 8" loudspeaker Model _____ or loudspeaker /transformer combination Model _____ (utilizing line-matching transformer Model _____). It shall have a (5oz.) ceramic magnet and a seamless cone. Frequency response range shall be _____. Sensitivity shall be _____. Voice coil shall be black anodized 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 ____.



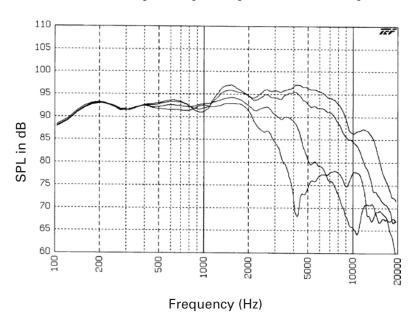
C5A Polars (Normalized to Zero on Axis) (-6dB)



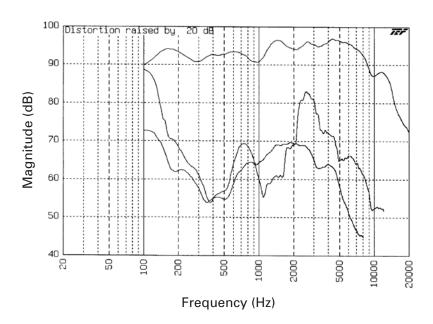
C5A Frequency Response



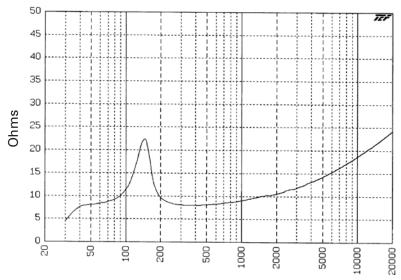
C5A Frequency Response Overlay



C5A Harmonic Distortion



C5A Impedance



Frequency (Hz) Octave Smoothing = 30.0%