



**GD87**  
(Front View) (Rear View)

## FEATURES

- Industry standard 8" (203mm) coaxial, 16 watt, loudspeaker with high quality factory installed 8 watt line matching transformer
- 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
- Individually packaged for stocking & ordering convenience

## APPLICATIONS

Use Atlas Sound 8" (203mm) diameter, multi-purpose, coaxial loudspeaker Model GD87 for voice transmission, music and signal reproduction in high-quality commercial, industrial and institutional applications.

## GENERAL DESCRIPTION

The speaker used in the GD87 is the next generation of Atlas high performance cone loudspeakers, very similar to the preceding C-Series speakers. The similarity in the sonic qualities ensures that contractors and designers who have worked with the Atlas Sound C803A Series in the past will know exactly what to expect when they use the GD87.

The high-quality, 25 watt Model GD87 utilizes a post mounted tweeter which adds strength to the assembly and provides an attractive appearance. This coaxial loudspeaker features a 45Hz-19kHz (nominal) frequency response and a broad, uniform dispersion pattern of 90° @ 2kHz. Such provisions allow for highly intelligible sound reproduction and better distribution for high-quality sound systems. The GD87 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 10oz. (260g) ceramic magnet; the tweeter has a 2.35 oz. (67g) ceramic magnet. The unit has an average sensitivity of 96dB (1W/1M). The loudspeaker is matched with a high efficiency 8 watt 70.7V transformer with a maximum insertion loss of 0.6dB. This premium transformer is constructed of audio grade laminations and has a full range frequency response of +1dB from 50Hz to 15kHz. The primary taps are 1, 2, 4, and 8 watts.

## ARCHITECT & ENGINEER SPECIFICATIONS

Unit shall be Atlas Sound 8" diameter. loudspeaker/transformer combination Model GD87. 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 100Hz-10kHz (nominal). Average sensitivity shall be 97dB (1W/1M). 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 70.7V with a frequency response range of ±1dB-50Hz-15kHz and power taps at 1,2,4 & 8 watts. Insertion loss shall not exceed .6dB. The maximum depth of the loudspeaker/transformer package shall not exceed 2.875" (73mm).

### GD87 SPECIFICATIONS

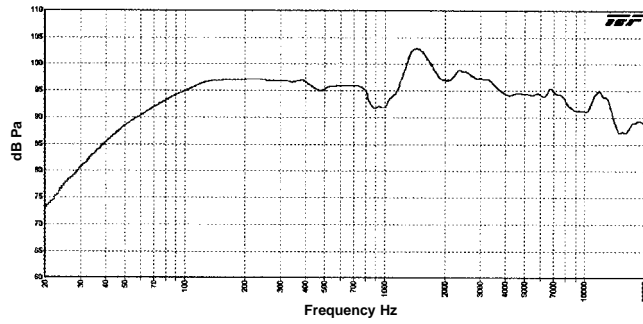
Size	8" (205mm)
Power Handling	25 Watts Peak, 15 Watts RMS
Sensitivity	96dB Average
Impedance	8 Ohms Nominal
Frequency Response	45Hz-19kHz Nominal, 55Hz-15kHz ±5dB
Dispersion	105° (2kHz Octave Band, -6dB Points)
Diameter & Depth	8.125" (205mm) Dia. & 2.875" (73mm) Deep
Mounting Dimensions	7.625" (194mm) 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 20ga. 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	7.3 Ohms
Qts	0.8
Qes	0.95
Qms	5.2
BL	7.9 N/A
Efficiency	1.90%
Vas	.32 (ft³)
Sd	33.2 (in²)
Le@1kHz	.36 mH
Mms	.39oz.
Cms	.024 in./lb.
Transformer Specifications	
Frequency Response	50Hz-15kHz (±1dB)
Primary Taps (Watts)	1, 2, 4 & 8
Secondary Impedance (ohms)	4 & 8
Maximum Insertion Loss	.6dB
Primary Termination	6" (152mm) Com. Lead Color Coded
Core Size	1" x 3/8" (25 X 19mm)
Power Rating (Watts)	8

Specifications subject to change without notice

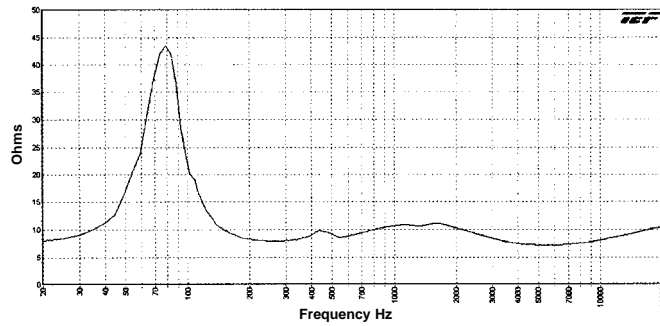


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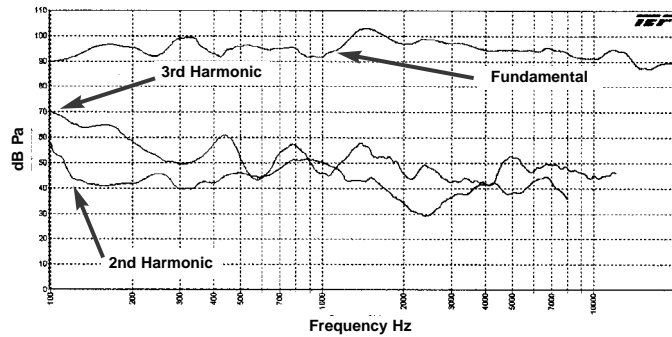
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**GD87 Frequency Response  
(Transformer Bypassed)**

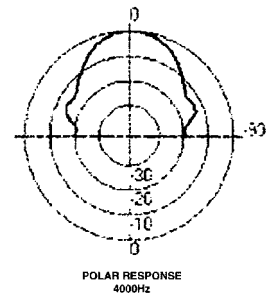
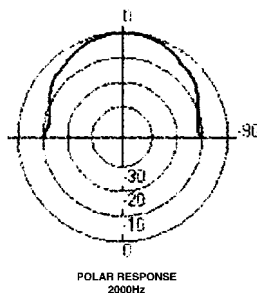
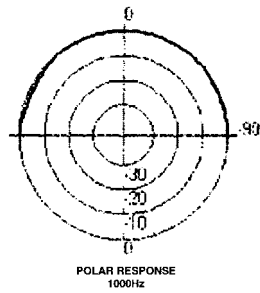
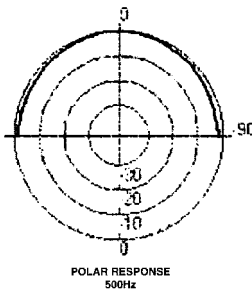


**GD87 Impedance  
(Transformer Bypassed)**



**Fundamental vs. 2nd & 3rd Harmonics  
(Transformer Bypassed)**

**GD87 OCTAVE BAND POLARS**



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