

## SPECIFICATIONS (See notes 1 - 3)

**Driver Type:** 1 in. / 25 mm exit, high frequency

**Operating Range:** 1.8 kHz - 18 kHz  
1.8 kHz - 18 kHz (+/-3.3dB)

**Max Input Ratings:**

20W continuous, 50W Program  
13 volts RMS, 28 volts momentary peak  
Recommended Power Amplifier:  
40W to 60W @ 8 Ohms

**Sensitivity 1W/1m:**

111 dB SPL (2 kHz - 16 kHz 1/3 octave bands)

**Maximum Output:**

124 dB SPL / 131 dB SPL (peak)

**Nominal Impedance:** 8 Ohms

**Min Impedance:** 9.5 Ohms @ 7160 Hz

**Compression Ratio:** 4:1

**Lowest Crossover Frequency:**

1.8 kHz

**Optimum Crossover Frequency:**

2.5 kHz to 5 kHz

**Recommended LF Protection Capacitor: \***

16 mfd non-polar (for 2.5 kHz crossover)

**Diaphragm:**

Diameter: 2 in. / 51 mm O.D. x 1.75 in / 44 mm I.D.  
Material: Non-metallic

**Voice Coil:**

Diameter: 2 in. / 51 mm  
Material: Copper-clad aluminum edgewound wire

**Input Connection:**

(2) 3/16 in. widetabs

**Bolt Pattern:**

(4) 1/4-20 threaded holes on 3 in / 76 mm bolt circle

**Required Accessories:**

Electronic crossover

**Supplied Accessories:**

(2) 1/4-20 washer / lockwasher / nut sets  
(2) 1/4-20 threaded studs

**Recommended Community Horns:**

PC694 - 90 x 40 high frequency horn  
PC664 - 60 x 40 high frequency horn  
PC642 - 40 x 20 high frequency horn

**Dimensions (without mounting studs):**

Depth: 1.8 in. / 46 mm  
(2.8 in. / 71 mm with mounting studs installed)

Diameter: 5.25 in. / 133 mm

**Weight:** 5.9 lb. / 2.7 kg

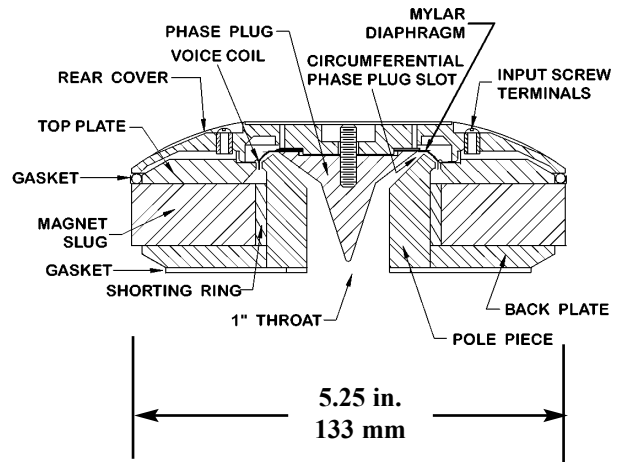
**Shipping Weight:** 7 lb. / 3.2 kg

**1. Sensitivity:** Free field pink noise measurement at 15 ft / 4.6 m at 75% power; extrapolated to 1 meter and an input of 2.83 volts RMS.

**2. Watts:** All wattage figures are calculated using the rated nominal impedance.

**3. Data:** All performance data measured on a PC694 90 x 40 horn

\* Capacitor is only for protection against DC voltage or catastrophic amplifier failure and not to be used as a crossover.



## APPLICATIONS:

- Two, Three and Four-Way Component Systems

## FEATURES:

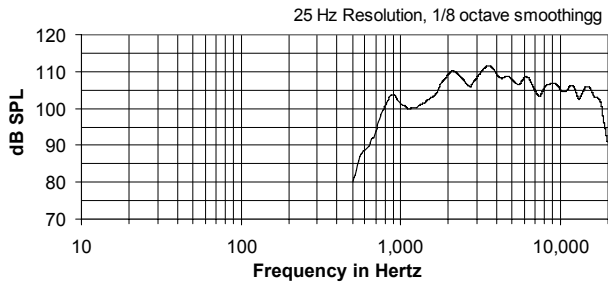
- 1 In. (25 mm) Throat Exit
- Very Low Distortion, High Efficiency
- High Peak Capability
- VHF Output Exceeds That of Most HF and VHF Drivers

## DESCRIPTION

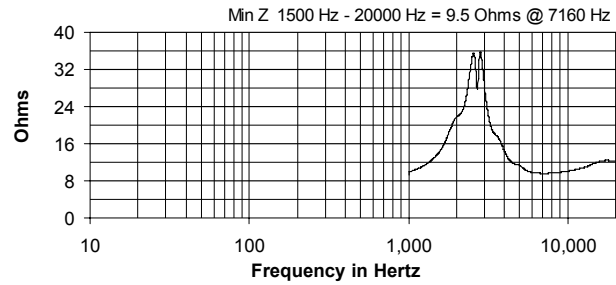
The VHF100 high frequency compression driver is a high output, high sensitivity loudspeaker excelling in applications requiring extended high frequency response with minimal distortion. The VHF100 is a ring-type radiator with a unique, non-metallic, suspensionless diaphragm designed to exhibit unparalleled transient response. The voice coil is wound on the outer periphery of the diaphragm. This results in a large diameter voice coil to improve power handling while providing very low inductance to prevent reactance-induced high frequency roll-off. There is a single, annular phase plug slot that, coupled with the 0.25 in. / 6.4 mm width diaphragm, ensures all frequencies arrive at the driver exit in phase.

Community drivers incorporate large area, low compression phase plug loading and large magnet structures for extremely low distortion at high outputs while maintaining high efficiency and low power compression. There is a two year warranty.

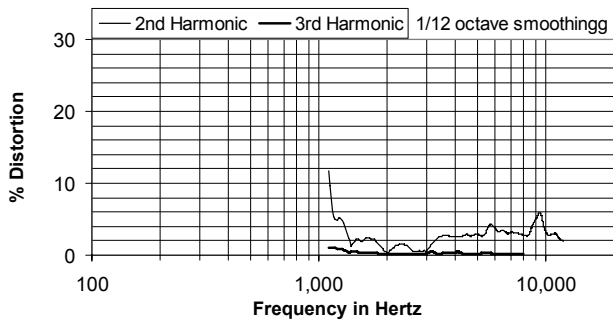
## FREQUENCY RESPONSE



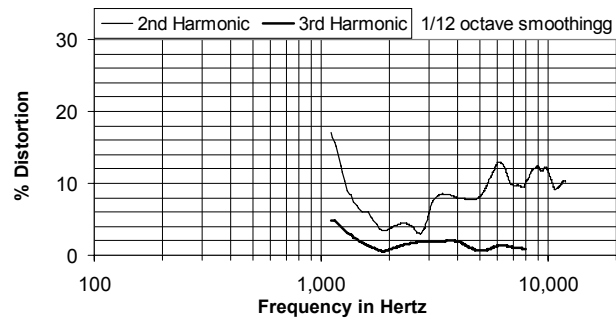
## IMPEDANCE



## HARMONIC DISTORTION (10% POWER)

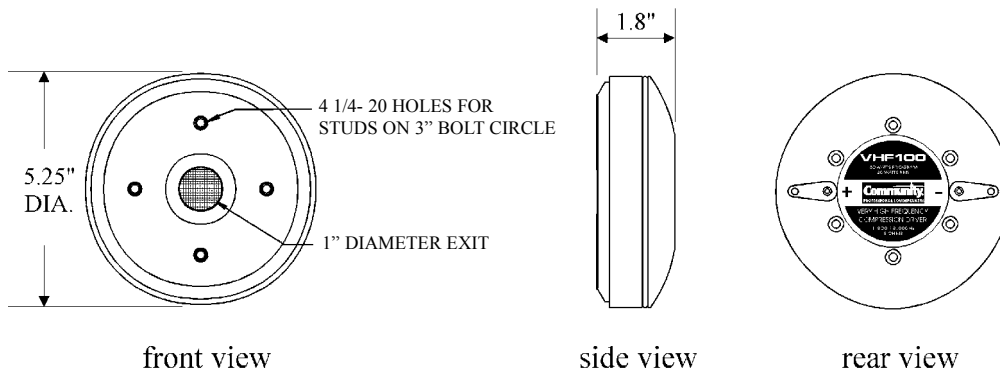


## HARMONIC DISTORTION (100% POWER)



Note: all graphs measured on PC694 horn.

## DIMENSIONS



## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The driver shall be a 1 in. (25 mm) exit compression type, specifically designed for extended high frequency response. On a PC694 horn the driver shall have an amplitude response of 1.8 kHz - 18 kHz (+/- 3.3 dB), input capability of 13V RMS, 111 dB sensitivity at 1 meter / 2.83V, and a nominal impedance of 8 Ohms. The driver shall incorporate a large magnet structure, a one-piece non-metallic ring diaphragm and a copper-clad aluminum edgewound voice coil. The compression ratio shall be 4 to 1. The driver assembly shall be field replaceable. The driver shall be 5.25 in. (133 mm) in diameter, 1.8 in. (46 mm) depth plus 1 in. (25 mm) mounting stud projection, and weigh 5.9 lb (2.7 kg).