

# FR421

☀ 4 inch    ☀ 45 Watts  
☀ 87 dB    ☀ 91 ~ 17k Hz



## KEY FEATURES:

- ① 90W continuous program power capacity
- ② 87dB sensitivity, 1w/1m
- ③ 20mm(0.8") high temperature copper clad aluminum voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- ⑤ Shorting copper ring for extended HF response
- ⑥ Strong and light fiberglass cone remains rigid to higher frequencies
- ⑦ Ideal for compact array systems

## GENERAL SPECIFICATIONS

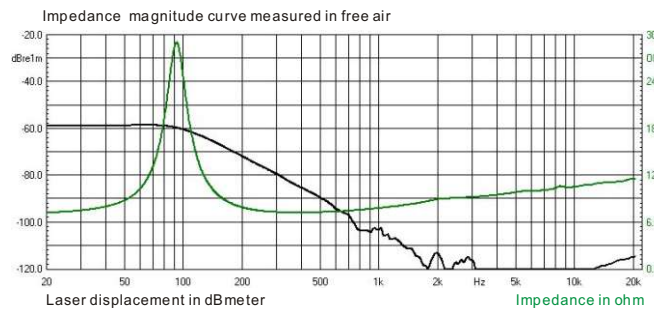
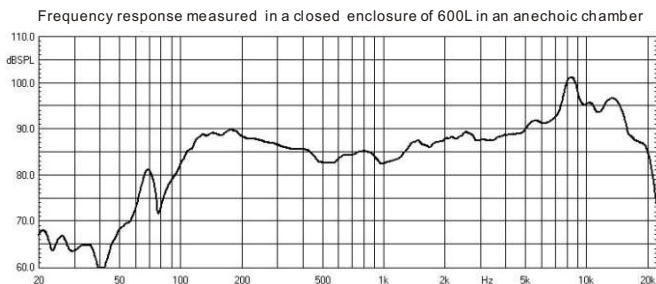
Nominal Diameter	100mm /4inch
Rated Impedance	8 ohm
Nominal Power handling <sup>1</sup>	45 Watts
Program Power <sup>2</sup>	90 Watts
Sensitivity(1w/1m) <sup>3</sup>	87 dB
Frequency Range <sup>4</sup>	91 ~ 17k Hz
Minimum Impedance(Zmin)	7.2 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Cast
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	70mm / 8 oz

## THIELE - SMALL PARAMETERS<sup>5</sup>

Resonance frequency	Fs	92 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	4.0
Electrical factor	Qes	1.1
Total factor	Qts	0.88
Mechanical compliance of suspension losses	Cms	0.65 mm/N
Effective Moving Mass	Mms	4.5 g
Half-space efficiency	Eff	0.18%
BL Factor	BL	3.9 T.m
Equivalent Cas air load	Vas	2.5 liters
Effective piston area	Sd	0.0053 m <sup>2</sup>
Max. linear excursion <sup>6</sup>	Xmax	2 mm
Voice coil inductance	Le1K	0.3 mH
Efficiency Bandwidth Product	EBP	83

## MOUNTING INFORMATION

Overall Diameter	127 mm
Bolt Circle Diameter	115 mm
Bolt Hole Diameter	5 mm
Baffle Cutout Diameter	103 mm
Overall Depth	55 mm
Net Weight(1pc)	0.5 kg
Shipping Weight(24pcs)	14 kg
Shipping Box(24pcs)	430*340*225m m



## NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as:  $(Hvc-Hg)/2+Hg/4$  where Hvc is the voice coil depth and Hg is the gap depth.