## **CELESTION**

# **Coaxial Loudspeakers**

## **TFX0412**

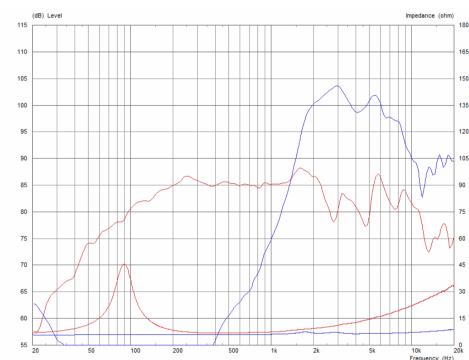






- · Ferrite magnet assembly acts as common motor for both LF and HF
- Rear-mounted compression driver with polyimide diaphragm delivers HF signal
- Ferrite magnet assembly acts as a common motor for both low and high frequency coils
- · Demodulation ring for reduced distortion
- Waterproof cone coating
- 80° nominal HF coverage

#### **Frequency Response and Impedance Curves**



Red: LF response curve | Blue: HF response curve

Power rating: Tested for two hours using a continuous, band-limited pink noise signal as per AES standard. Power calculated on minimum impedance. Loudspeaker tested in free air.

Loudspeaker tested in free air.

HF power rating: Tested for two hours on plane wave tube using a continuous, band-limited pink noise signal as per AES standard. Power calculated on minimum impedance.

Continuous power rating: Defined as 3dB greater than the AES rating.

Sensitivity: Measured on axis at 1W, 1m in 2 anechoic environment.

Xmax: 0.5\*(Hvc-Hg) + 0.25\*Hg

### **General Specifications**

**Nominal Diameter** 100mm / 4in **Power Rating** 100W Continuous power rating 200W Rated impedance  $8\Omega$ Sensitivity 86dB 90-4500Hz Frequency range Chassis type Pressed steel **Ferrite** Magnet type

Voice coil diameter 32mm / 1.25in

Voice coil material Copper clad aluminium

Former material Polyimide

Cone material Reinforced cellulose, waterpro

of coating

Surround material Elastomer
Suspension Single
Xmax 4mm / 0.16in
Gap height (Hg) 6mm / 0.24in
VC winding height (Hvc) 11mm / 0.43in

### **Mounting Information**

Overall diameter 126mm / 4.96in

Overall depth 74.2mm / 2.9in

Cut-out diameter 102mm / 4.02in

Mounting hole dimensions 5x7mm / 0.2x0.28in

Number of mounting holes 4

Mounting hole PCD 114.4mm / 4.5in
Unit weight 0.6kg / 1.3lb

#### **Parameters**

Sd 56.75cm2 / 8.79in2

Fs 95Hz

 Vas
 2.18I / 0.077ft3

 Bi
 5.4Tm

 Cms
 0.478mm/N

 Rms
 0.674kg/s

 Le (at 1kHz)
 0.34mH

 Xmax
 4mm / 0.16in

# Additional HF Specifications

 $\begin{array}{ll} \text{Power rating} & 15\text{W} \\ \text{Continuous power rating} & 30\text{W} \\ \text{Rated impedance} & 8\Omega \\ \text{Sensitivity} & 107\text{dB} \end{array}$ 

Frequency range 2200-20,000Hz

Recommended min. crossove 2500Hz

r 12dB/oct

Voice coil diameter 25mm / 1in

Magnet type Ferrite, common motor

Diaphragm material Polyimide Surround material Polyimide

## **Packed Dimensions & Weight**

Multi pack qty 16

Multi pack size W x D x H 470mm x 240mm x 205mm / 18.5in

x 9.4in x 8.1in

Multi pack weight 35kg / 77lb



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