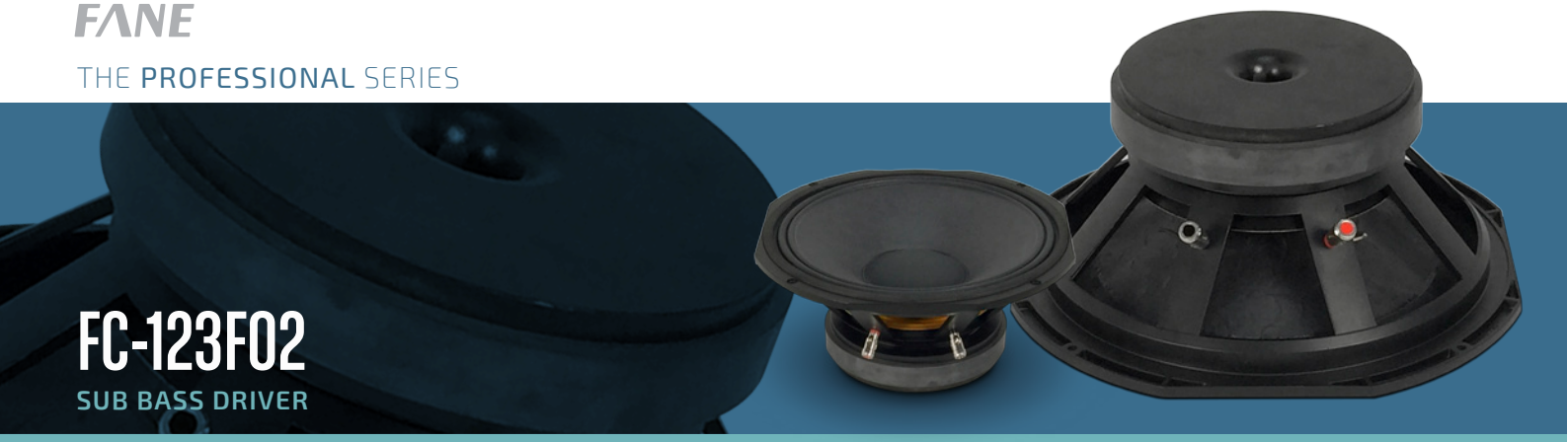


FC-123F02

SUB BASS DRIVER

12” / 304.8 mm	550 W (A.E.S.)	40 Hz - 4 kHz	3.0” / 76.2 mm	98 dB	8 mm Xmax
CHASSIS DIAMETER	AES POWER HANDLING	FREQUENCY RESPONSE	CCAW - INSIDE/ OUTSIDE WINDINGS VOICE COIL	SENSITIVITY (1W/ 1m)	MAXIMUM LINEAR EXCURSION

The FC-123F02 is intended for use as a very high output bass mid driver in two-way ported enclosures and also as a bass driver in multi-way systems. The unit features a 3 inch ‘sandwich’ inside and outside windings voice coil driven by a non-inductive motor system which dramatically reduces third-harmonic and intermodulation distortion. The cone membrane is state of the art material that allows the driver to combine high sensitivity with the structural integrity required to produce undistorted low frequencies at high output levels. The mechanical and electrical properties of the unit have been carefully optimised to allow extended low frequency output up to its rated power handling of 550 Watts (A.E.S) continuous, with peak power handling in excess of 2200 Watts. The driver exhibits an average sensitivity of 98 dB and is best used in ported enclosures of 25 to 80 Litres.

- Versatile unit for bass applications or 2 - way ported enclosures.
- Dynamic, smooth detailed bass reproduction.
- Extended frequency range.
- Copper shorting ring.
- Inside outside CCAW windings.
- Optimised for warm tonal character.

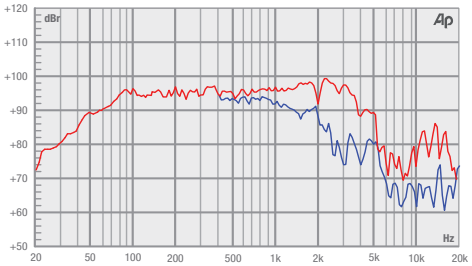
ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	12” / 304.8 mm
Impedance	8 Ohm
Power Handling	550 W (A.E.S.)
Peak Power (6dB Crest Factor)	2200 W (A.E.S.)
Usable Frequency Range -6dB	40 Hz - 4 kHz
Sensitivity (1 w - 1 m)	98 dB
Moving Mass inc. Air Load	52 grams
Minimum Impedance Zmin	8.4 Ω
Effective Piston Diameter	10.31” / 261.87 mm
Magnet Weight	91.71 oz
Magnetic Gap Depth	0.35” / 9.00 mm
Flux Density	1.16 Tesla
Coil Winding Height	0.75” / 19.00 mm
Voice Coil Diameter	3.0” / 76.2 mm

THIELE SMALL PARAMETERS

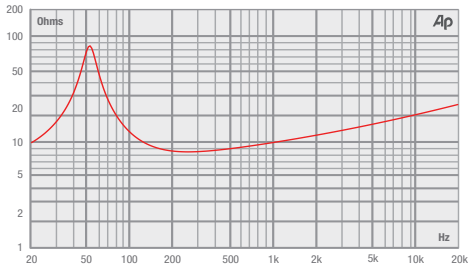
FS Hz	51 Hz
RE Ohms	5.6 Ω
Qms	5.100
Qes	0.365
Qts	0.341
Vas Ltr	76.00 Litres
Vd Litres	0.420 Litres
CMS (mm/N)	0.191 mm/N
BL T/m	16 T/m
Mms (grms)	51 grams
Xmax (mm)	8 mm
Sd (cm^2)	530 cm^2
Efficiency %	2.700%
Le (1k Hz)	1.17 mH
EBP	139.73 Hz

FREQUENCY RESPONSE DATA†



† Half space response measured in a 975 Litre sealed box.

IMPEDANCE

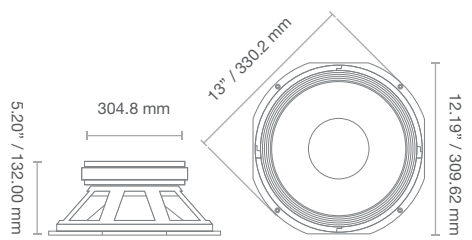


MOUNTING / SHIPPING INFORMATION

Overall Diameter	13” / 330.2 mm
Width Across Flats	12.19” / 309.62 mm
Flange Height	0.305” / 7.8 mm
Baffle Hole Diameter F/M	11.03” / 280.16 mm
Baffle Hole Diameter R/M	10.13” / 257.30 mm
Gasket Supplied	Front & Rear
Outer Fixing Holes	4x Ø 5.5 mm on 317.5 mm PCD
Inner Fixing Holes	N/A
Depth	5.20” / 132.00 mm
Weight	17.20 lb / 7.80 kg
Recommended Enclosure Volume	25 - 50 Litres
Shipping Weight	19.18 lb / 8.70 kg
Packing Carton Dimensions	(W) 330 (D) 330 (H) 170 mm

MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	CCAW - Inside/ Outside Windings
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	Paper
Surround / Edge Termination	Polyvinyl Damped Dbl. Half Roll Linen
Dust Dome	Paper
Connectors	Push-button Spring Terminals
Polarity	Positive voltage at red terminal causes forward motion of cone



* *Please enquire about alternative impedances.*

* *A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 45 Hz and 450 Hz. Driver mounted in free air, test signal applied at rated power for two hours.*

* *Please note that the frequency response measurements are supplied for comparison only and are not a measure of the low frequency performance which may be achieved in a fully optimised system.*