# **SOVEREIGN 12-500LF**

**BASS DRIVER** 

12" / 304.8 mm

2.5" / 63.5 mm

1000 W

38 Hz - 5 kHz

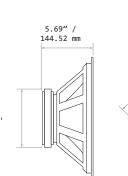
95 dB

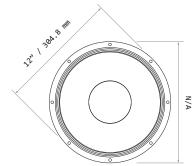
SENSITIVITY (1W/ 1m)

5.5 mm Xmax



- Optimised cone pulp offers increased strength, durability and performance.
- Also works well in monitor or bass guitar applications.
- 2.5-Inch Copper voice coil.





#### **GENERAL SPECIFICATIONS**

Nominal Chassis Diameter	12" / 304.8 mm
Nominal Impedance (1)	8 Ohm
Minimum Impedance Zmin	7.4 Ω
AES Power Handling (2)	500 W (A.E.S.)
Program Power	1000 W
Peak Power (6dB Crest Factor)	2000 W
Frequency Range (-6dB)	38 Hz - 5 kHz
Sensitivity (1W/ 1m)	95 dB
Magnet Material	Ferrite
Magnet Weight	56 oz
Magnetic Gap Depth	0.39" / 10 mm
Flux Density	0.97 Tesla
Former Material	Glass Fibre
Voice Coil Material	Copper
Coil Winding Height	0.74" / 19 mm
Voice Coil Diameter	2.5" / 63.5 mm
Cone/ Dust Dome Material	Straight Poly-cellulose Ribbed / Paper

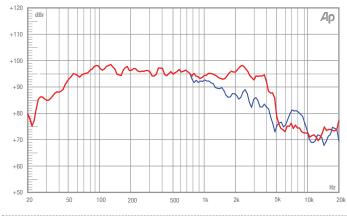
### **TECHNICAL & THIELE SMALL PARAMETERS**

Fs	50 Hz
Re	5.9 Ω
Qms	7.5
Qes	0.53
Qts	0.51
Vas	66 Litres
Vd	0.298 Litres
Cms	0.14 mm/N
BI	16.37 T/m
Mms	75 g
Xmax	5.5 mm
Sd	576.1 cm <sup>2</sup>
Efficiency	1.5 %
Le (1k Hz)	2.36 mH
EBP	94.34 Hz
Effective Piston Diameter	10.67" / 271.01 mm
Rec. Enclosure Volume	1.05 - 2.64 ft3 / 30 - 75 Litres

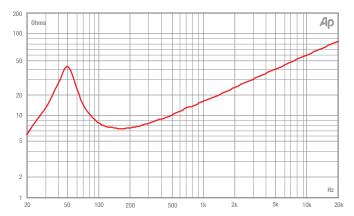
#### MOUNTING / SHIPPING INFORMATION

Overall Diameter	12" / 304.8 mm
Width Across Flats	N/A
Depth	5.69" / 144.52 mm
Flange Height	0.27" / 6.9 mm
Baffle Hole Diameter F/M	11.25" / 285.75 mm
Baffle Hole Diameter R/M	11.25" / 285.75 mm
Chassis Material	Pressed Steel
Gasket Supplied	Front & Rear
Outer Fixing Holes	8x ø 7.0 mm on 11.75" / 298 mm PCD
Inner Fixing Holes	N/A
Inner Fixing Holes Connectors (4)	N/A Solder Tag
Connectors (4)	Solder Tag
Connectors (4) Weight	Solder Tag 11.02 lb / 5.0 Kg

# FREQUENCY RESPONSE DATA (3)



## **IMPEDANCE**



- (3) Half space response measured in a 975 Litre sealed box. Blue line = fundamental 45° off-axis. 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.
- (4) Positive voltage at red terminal causes forward motion of cone.

A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 40 Hz and 400 Hz. Driver mounted in free air, test signal applied at rated power for two hours.