REDCAT

APPLICATION:

• Ideal for two-way and multi-way (line arrays) enclosure designs. Also suitable for vented or double band-pass subwoofers.

12NPM

Ordering code: 12NPM-054

Neodymium Mid-bass Woofer

Cont. Power	Sens.	Fs	Freq. Range	VC Dia.	VC Wire	Cone/Surround/Dome	Magnet type
825 watts	98.9 dB	54 Hz	50 Hz - 2,000 Hz	3" 1in/1out	CCAW	Paper w. CF/ Fabric	Neodymium

The 12NPM is a high efficiency, (98.5 dB 1watt / 1 meter) 12-inch mid bass woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts.- The 12NPM uses a lightweight carbon fiber loaded cone assembly along with a precision double roll constant geometry surround. This combination provides remarkable strength, high efficiency and a excursion linearity of 7.5mm.

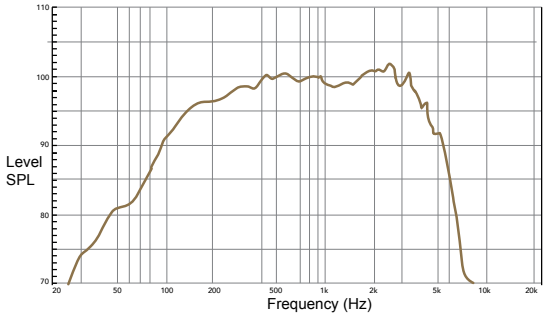
Magnetic Circuit

REDCATT engineers have developed a lightweight, inside-neodymium slug based magnetic circuit capable of delivering the highest level of performance providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

General Specifications

Nominal Diameter:	320 mm (12 in.)
Rated Impedance:	8 ohm
Power Handling:	
AES Power:	550 Watts
Power Compression @-10dB	0.7dB
Power Compression @-10dB	1.5dB
Power Compression @Max Power	2.2dB
Maximum Recommended Xover Freq.:	2,000 Hz
Recommended Enclosure Volume:	35 - 45 Liters 1.2- 1.5cuft.
Cone Design:	Exp. Gmtry, Redcatt Cell.
Front Plate Thickness:	10mm
Winding Height:	19mm
Fs	54 Hz
Re	4.62 Ohm
Sd	520 cm^2 (81 $in.^2$)
Qms	4.5
Qes	0.32
Qts	0.3
Vas	89 Liters
Mms	56 g
BL product (force factor)	16.7 Tm
Peak to peak displacement (mm)	6.5
Le (mH @1kHz)	1.0
Overall diameter	315 mm (12.4 in.)
No. of mounting holes	8
Bolt circle diameter	298 mm (11.7 in.)
Front mount baffle cutout dia.	283mm (11.1 in.)
Rear mount baffle cutout diameter	282 mm (11.05 in.)Nominal
Total depth	141 mm (5.5 in.)
Flange and gasket thickness	14 mm (0.55 in.)
Net weight	3.90 kg (8.6 lbs.)
Shipping weight	4.5 kg (9.9 lbs.)
Packing Dimensions	340x340x170mm (13.5x13.5x7 in.)

Frequency Response



Frequency response measurement with transducer mounted in a 40 liter vented enclosure tuned to 65Hz

Impedance Response