Coaxial Ferrite-Neodymium Driver REDC







Key features:

- LF AND HF COMBINED MAGNETIC CIRCUIT
- COMPACT, BUT POWERFUL **SPEAKER**
- MAGNETIC CIRCUIT **COMBINING FERRITE** AND NEODYMIUM MAG-**NETS**

Design notes:

The CX6F-140F is a high efficiency, (93dB 1watt / 1 meter) 6.5inch coaxial speaker with very linear frequency response characteristics and high power handling capability. The mid-woofer utilizes REDCATT developed paper pulp cone that has proven its performance in many our successful designs. The HF section was designed around our most successful dome assembly as used in 140FCD. The mini

waveguide is CNC machined from single piece of aluminum, given the whole assembly incredible precision. The combination of used materials with our state of the art quality production yields in well performing driver even in the most demanding extreme condi-

Magnetic circuit design REDCATT engineers have developed

/1000 Hz

ferrite-neodymium based magnetic circuit, capable of delivering the highest level of performance in a small form factor. The combination of ferrite and neodymium delivers an excellent magnetic performance. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability. Aluminum demodulation ring is assembled in the HF section.

Specifications:

General specs (LF/HF)	
Nom. Diameter:	6"	
Rated Imp.:	8 ohm	
Power handling	(LF/HF)	
AES Power:	100/30 watts	
Program Power:	200/60 watts	
Peak Power:	400/120 watts	
Voice Coil (LF/HF)		

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Diameter:	1.75/1.4 in.	
Winding wire:	CCAR	
Former:	Glass Fiber/	
Winding height:	10/2.5 mm	

1/S Parameters (LF/I	HF)
Resonant frequency:	121
Re:	5.4/

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Qes:	0.52	
Qms:	4.73	
Qts:	0.47	
Vas:	4.4 liters	
Sd:	141 cm2	
Sensitivity:	93.8/101	
Mms:	10.9 grams	
BI:	9.27	
Le:	0.45 mH	

Design details (LF/HF)

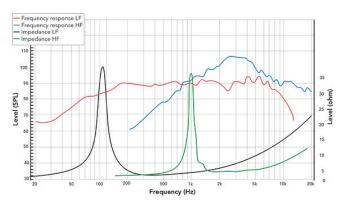
Surround Material:	Fabric/Poly-	
Cone/ dome material	: Paper/Polymer	
Spider:	Nomex/n/a	
Plate thickness:	6 mm	
Peak to peak linear cone displacement	9.2 mm	
Overall diameter:	165.2 mm	
Bolt circle diameter:	157.5 mm	
Baffle cutout dia.:	144 mm	
Number of mounting holes:	8	
Depth (flange to rear):	85.8 mm	
Net weight:	2.1kg	

Ordering	codes:	
	CX6F140X-	361C

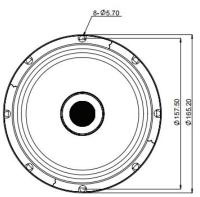
Recone kits:

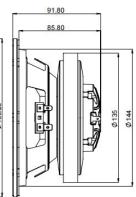
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing





Frequency response measured on IAC baffle