

CMOB-2

LINE OUTPUT TRANSFORMER

Bifilar Windings

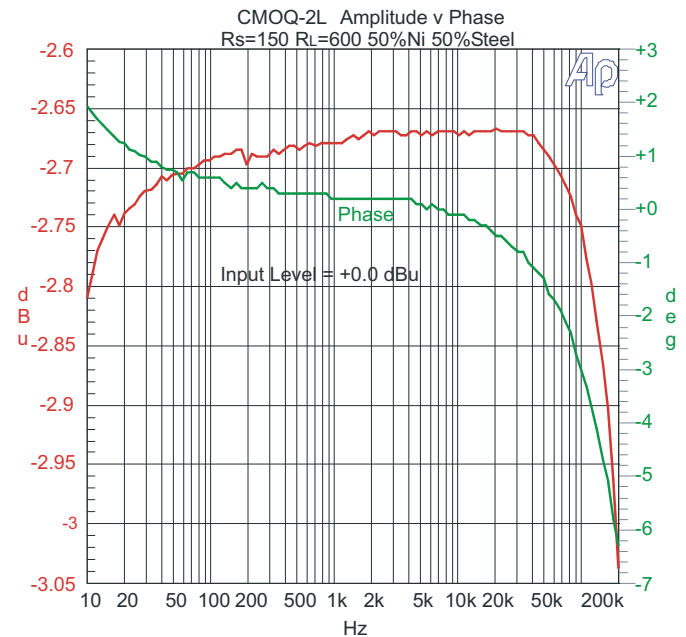
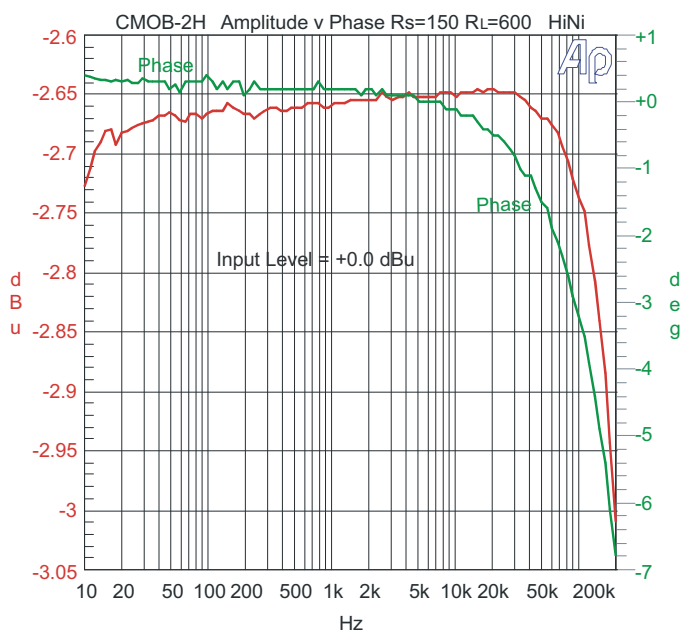
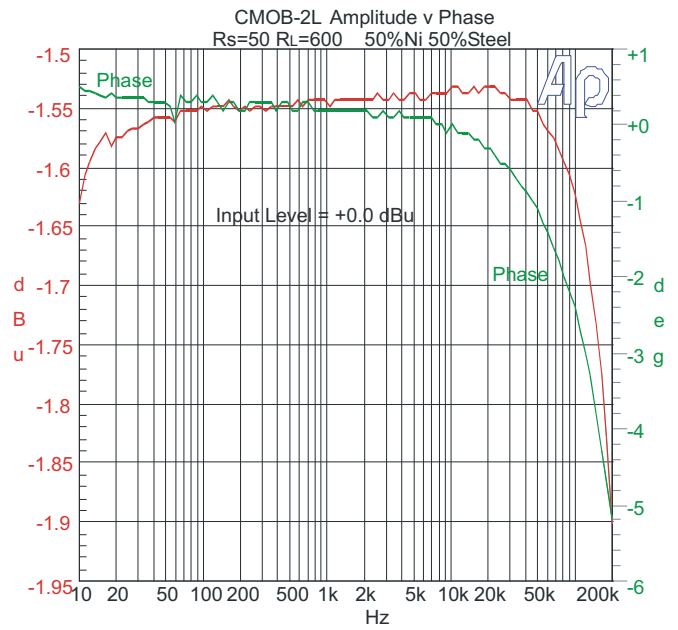
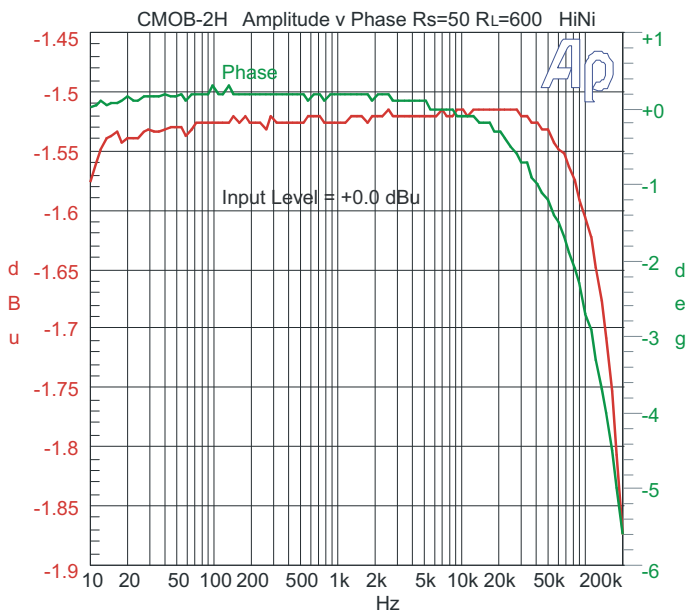
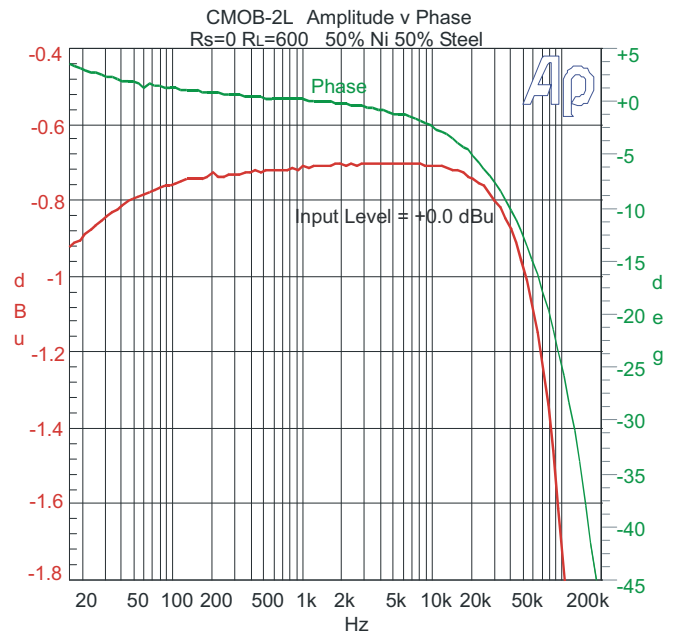
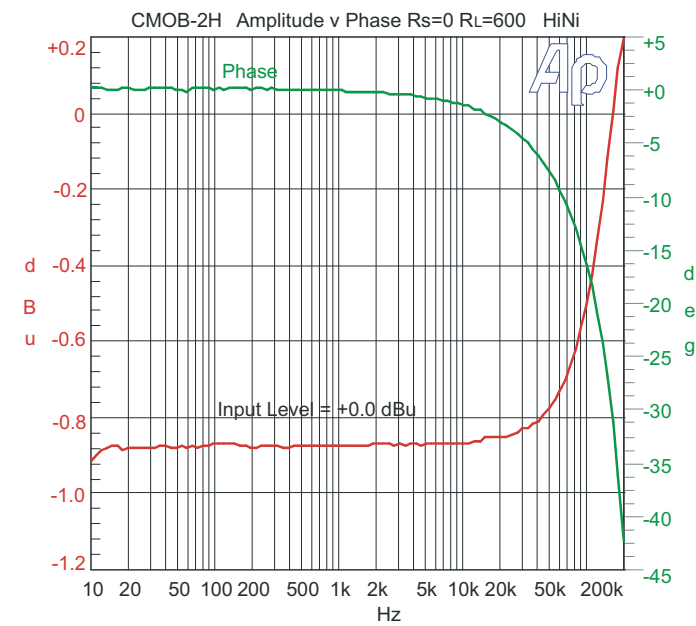
- Excellent bandwidth
- Distortion 0.01% typ at 20 Hz, $R_s=150\Omega$ HiNi
- +22 dBm at 20 Hz
- Low insertion loss

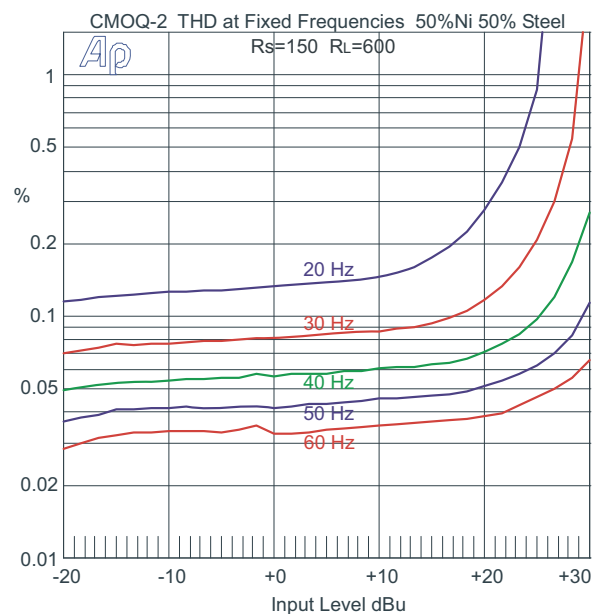
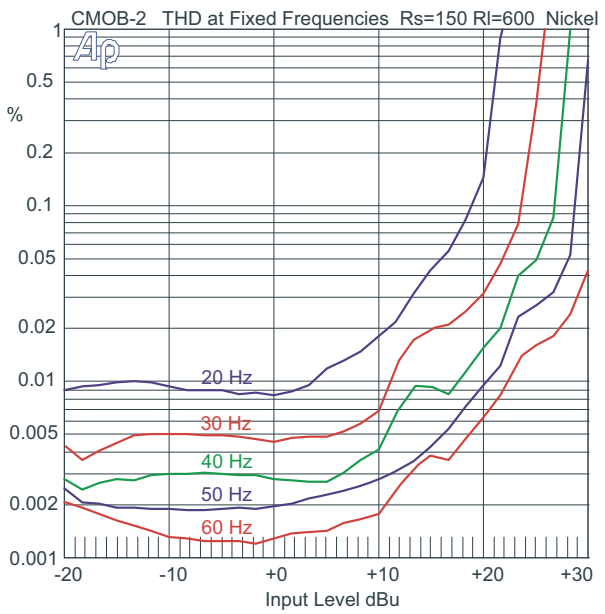
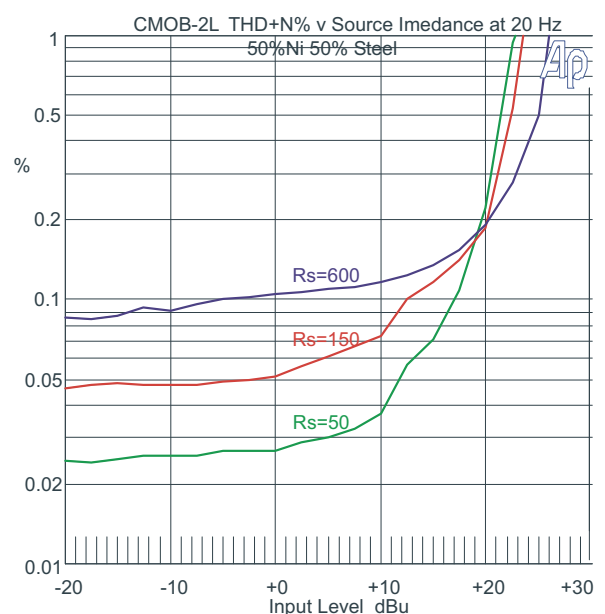
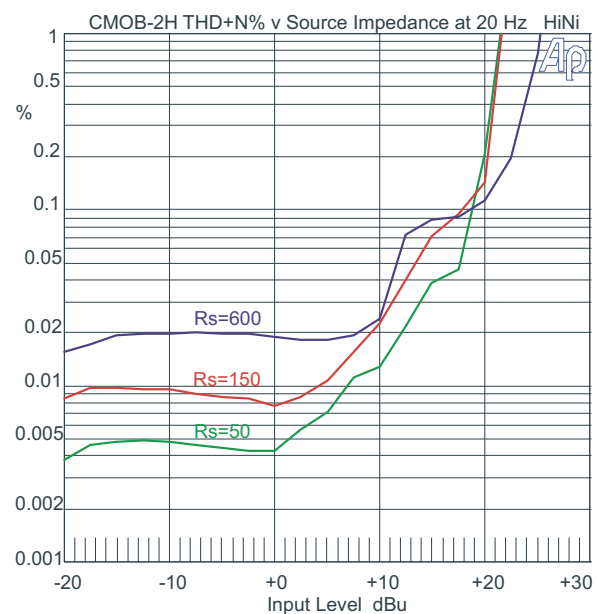
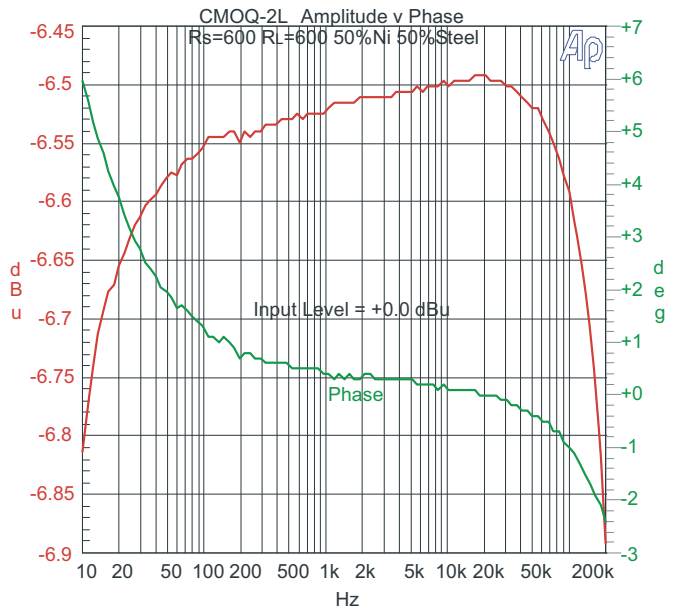
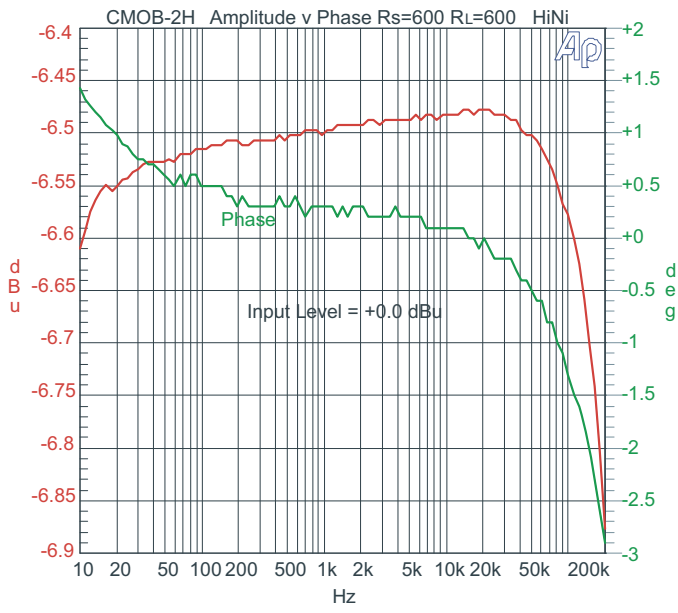
The CineMag CMOB-2 output transformers use multifilar construction techniques for very wide bandwidth. They are available with 80% high-nickel laminations (“H” suffix to the part number; 50% high-nickel + 50% steel (“L”); and steel (“S”) suffixes. Insertion loss is low. They are available with lead wires or printed circuit pins, with and without channel frames. It is recommended that the amplifier driving it have an out impedance of less than 600Ω and good damping.

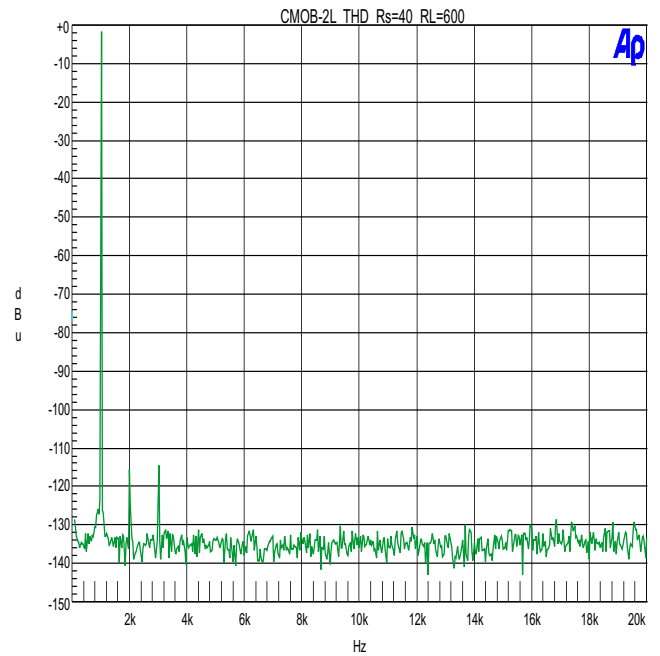
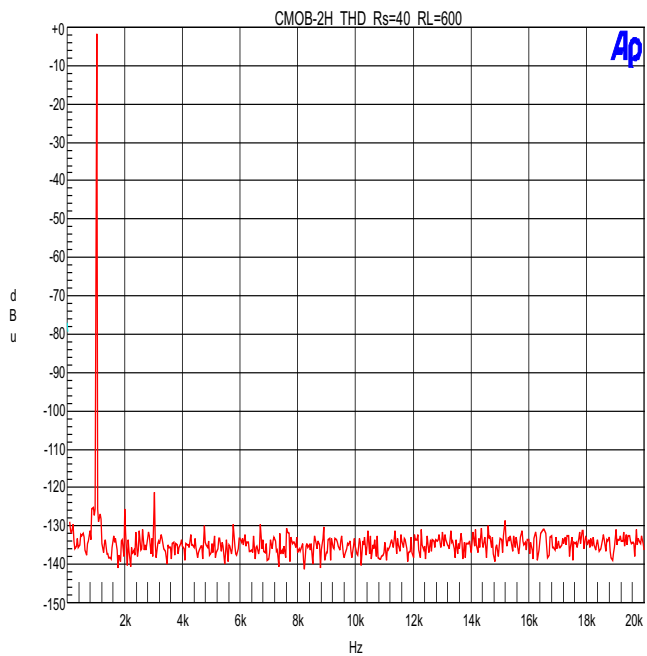
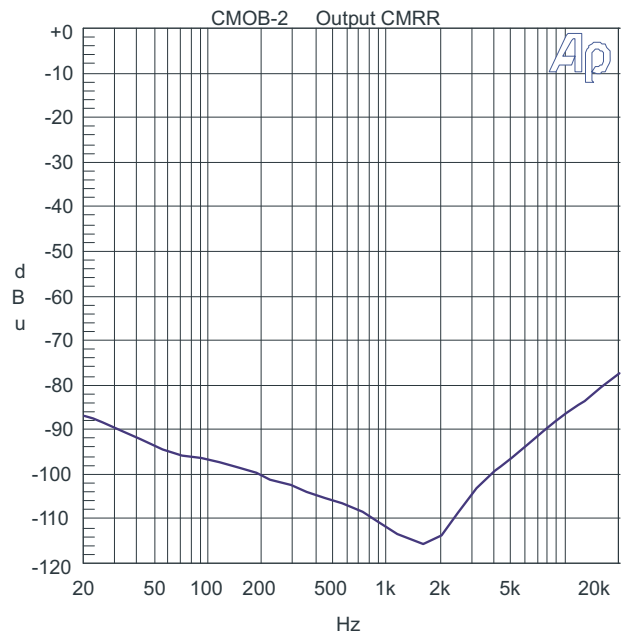
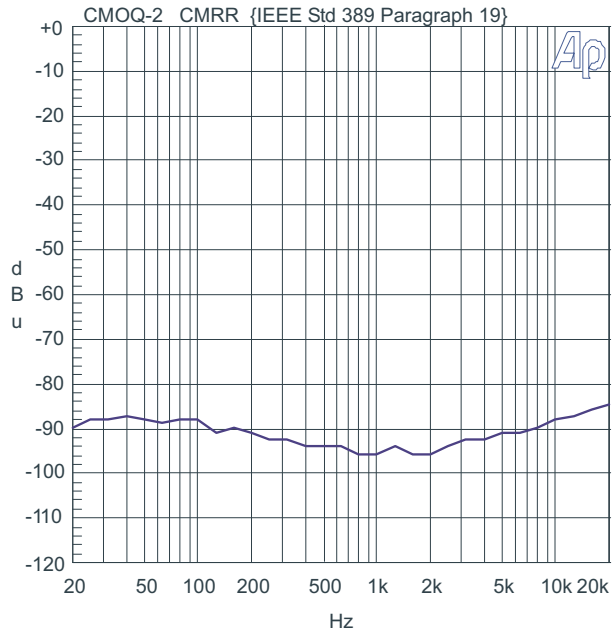
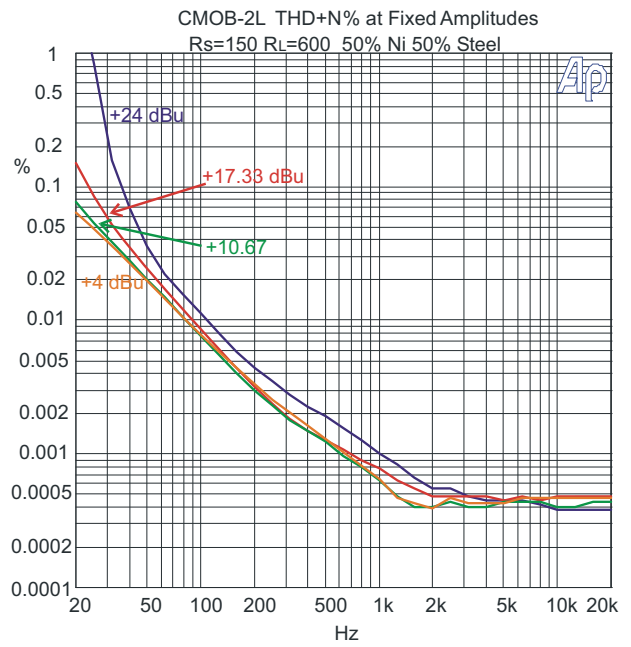
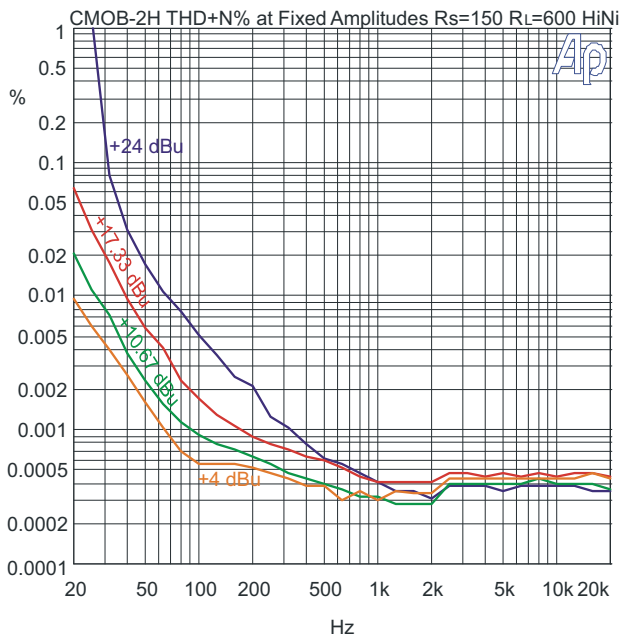
Various lamination properties are available each having its own sonic characteristic, from the “H” (80% high-nickel) version which is minimally colored, to the “S” (steel) at the other end of the spectrum with rich overtones. The “L” version interleaves high-nickel with steel laminations, instead of simply using a 50% alloy. Critical listening tests have proven this to be superior as compared to a 50% alloy. One reason for this is that laminations are heat treated after they are stamped out to relieve stresses in the metal. Steel (iron) and nickel heat treat very differently. CineMag’s proprietary annealing processes maximize acoustic performance.

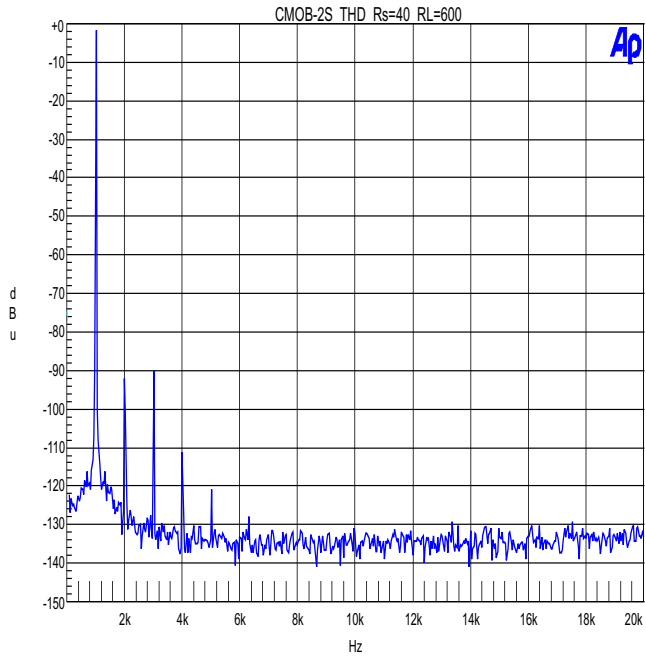
CMOB-2H (High nickel laminations) **CMOB-2L** (50% hi-nickel interleaved with 50% steel) **CMOB-2S** (Steel laminations)

Parameter	Conditions	Typical
Turns Ratio		1 : 1.00
Input Impedance (Z_i)	20 Hz to 20 kHz, 0 dBu Test Circuit 4	680 Ω
Voltage Gain	1 kHz HiNi Core, $R_s=150$ RL=600 Test Circuit 1 1 kHz 50% Nickel/50% Steel Core	-2.85 dB -2.70 dB
Distortion (THD+N%)	1 kHz, +4 dBu, $R_s=150$ HiNi Test Circuit 1 1 kHz, +4 dBu, $R_s=150$ 50%Ni/50% Steel	0.0004% 0.0006%
Max 20 Hz input level	1.0% THD+N, $R_s \leq 150$ HiNi Test Circuit 1 1.0% THD+N, $R_s \leq 150$ 50% Ni 50% Steel	+21 dBm +22 dBm
Response, ref 1 kHz	20Hz $R_s=150\Omega$ HiNi Test Circuit 1 20kHz 200kHz	-0.08dBu -0.01dBu -0.4dBu
Phase Shift at 20Hz Phase Shift at 20 kHz	Referenced to source generator Test Circuit 1	+2° -4°
CMRR	60 Hz Test Circuit 2 per IEEE Std 389- ¶19 1 kHz Test Circuit 2 per IEEE Std 389- ¶19	88 dB 95 dB
Output CMRR	60 Hz Test Circuit 3 1 kHz Test Circuit 3	95 dB 112 dB
Operating Temp Range		0°C - 70°C Max









Notes:

1. All graphs generated from one (1) randomly chosen device. No statistical averaging or weighting. Data from one sweep.

