

Muse Coils

ITSE-100NX-1010

A high level high-bandwidth interstage
transformer built with the primary idea of
delivering a flow of stunning endless musical
emotions.

For single-ended tube driver stages

Nanocrystalline core

OCC magnet wire

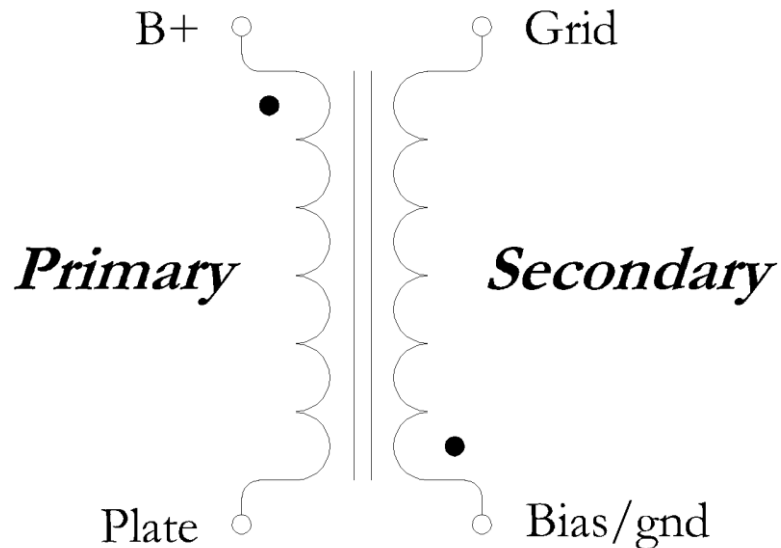
A word of warning:

Please remember you will be installing
your new transformers within a potentially
hazardous area surrounded by lethal voltages
and currents. Respect all safety rules when
handling tube amplifiers. Stay safe and have
fun!

A summary of building philosophy:

A well performing audio transformer
should not be viewed only as an electrical
device with coils and a magnetic core. An
audio transformer should be built like a
musical instrument. Every material plays its
significance in the final audible performance.
The art of sculpting the best sound possible
lies into the hands and mind of the creator to
combine the materials into the ultimate
synergistic way.

USING THE INTERSTAGE TRANSFORMER



Please respect the polarity of the coils indicated. This model is extremely intolerant to phase reversal, leading to performance degradation.

Note: The ***Bias/gnd*** terminal is connected to signal ground for cathode biased output stages, or connected to the negative bias supply for fixed bias output stages.

MAIN TRANSFORMER PARAMETERS

Driver tube recommendations:

Tube Rp ranging from 500R to 3k – E182CC, E88CC, 6N6P, triode stapped E280F, D3A, C3g, C3m

Weight: 2,0kg
Dimensions (mm): 103*84*77

Impedance ratio: 1:1
Primary inductance: 58H
Nominal primary DC current: 25mA

Max. primary Vrms at 25Hz, 25mA DC: 110V
Max. primary Vrms at 25Hz, 20mA DC : 140V

Active primary losses: 187R
Active secondary losses: 187R

DC flux density at 25mA Idc: 0,58T
AC flux density at 110Vrms:** 0,38T

Overall parasitic capacitance (Cp+Cs: 220pF
Cs/Ls resonant frequency: 135kHz

Low-signal frequency response (grounded secondary):

2.4k driver, no load - 7,2 Hz – 240 kHz **(-3dB)**
2.4k driver, 51k load - 6,8 Hz – 250 kHz **(-3dB)**

HIGH FREQUENCY MEASUREMENTS

10kHz square waves, grounded secondary

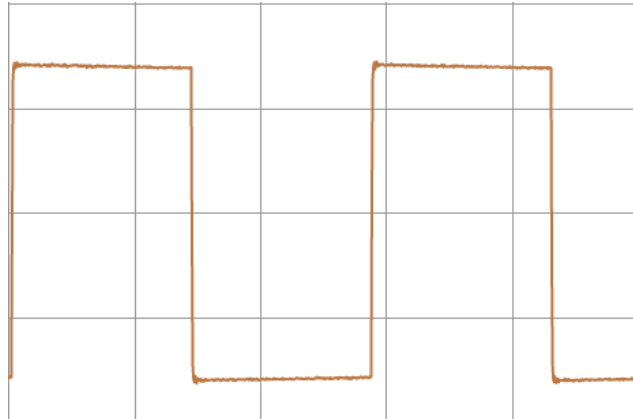


Fig. 1: 1kHz, 2.4k generator, unloaded secondary

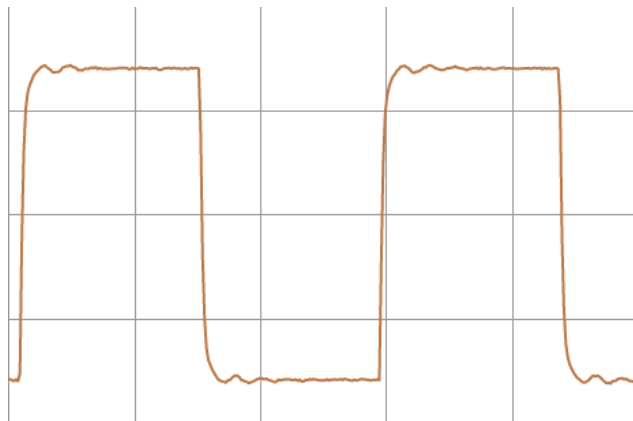


Fig. 2: 10kHz, 2.4k generator, unloaded secondary

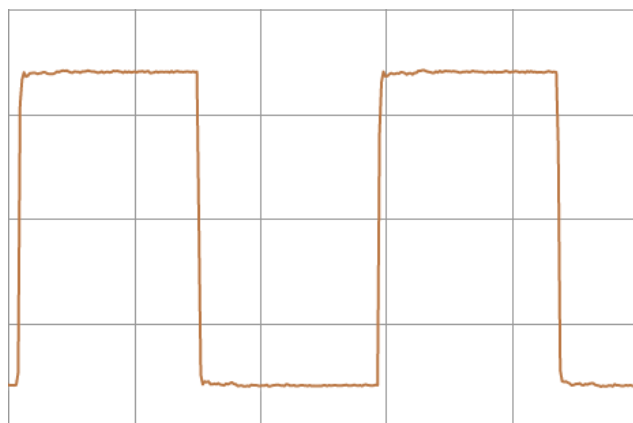


Fig. 3: 10kHz, 400R generator, unloaded secondary