

Audio Output Transformer LL1517

LL1517 is an audio output transformer for balanced or unbalanced drive. The transformer is built from two three-section coils, with primaries and secondaries separated by electrostatic shields, and a audio C-core of our own production. The transformer is housed in a mu-metal housing.

The LL1517 has sufficient low copper resistance to meet broadcast specifications in a conventional drive configuration, but is (as all output transformers) ideally used with mixed feedback drive circuits. (See separate paper for mixed feedback design principles).

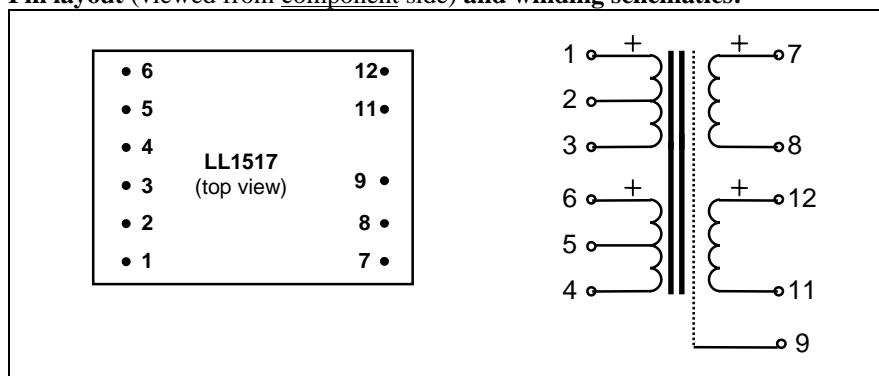
Turns ratio:

1 + 1 : 1 + 1

Dims (Length x Width x Height above PCB (mm)):

47 x 34 x 18

Pin layout (viewed from component side) and winding schematics:



Spacing between pins:

5.08 mm (0.2")

Spacing between rows of pins:

35.56 mm (1.4")

Weight:

105 g

Core:

Audio C-core

Housing:

Mu-metal

Rec. PCB hole diameter:

1.5 mm

Static resistance of each primary:

9.2 Ω

Static resistance of each secondary:

9.5 Ω

Leakage inductance of secondaries (sec. in series):

0.3 mH

No-load impedance:

>1kΩ @ 50 Hz, +20 dBU

Optimum source impedance:

Minus 18 Ω (See above)

Balance of output (according to IRT, source < 10 Ω, Load 600 Ω):

> 60 dB

Maximum output level before saturation (sec. in series, load 600 Ω)

+ 24 dBU @ 30 Hz

Distortion (achieved with mixed feedback drive circuit, load 600 Ω)

< 0.03 % @ 20 dBU, 30Hz

Frequency response (source 10 Ω, load 600 Ω):

10 Hz -- 80 kHz +/- 0.3 dB

Loss across transformer (at midband with 600 Ω load):

0.3 dB

Isolation between primary and secondary windings / between

windings and core:

4 kV / 2 kV

Suggested use

