

Microphone Transformer / D-I Box Transformer LL1530

LL1530 is a microphone input transformer used for matching a 200 or 800 Ω microphone to 10 kΩ or for matching a high impedance source to a microphone input.

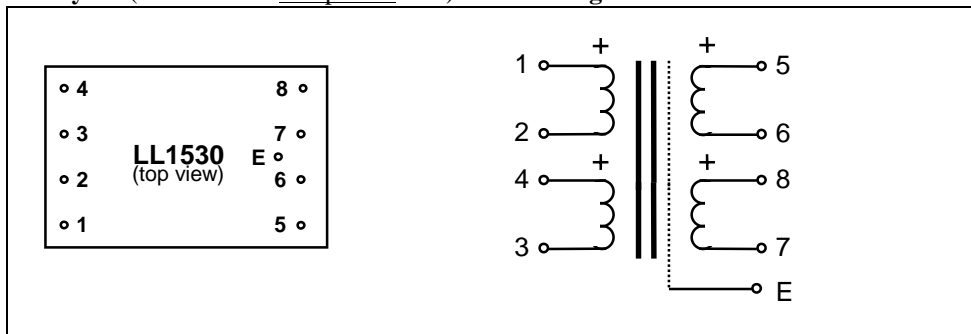
The transformer consists of two coils, each with one primary and one secondary winding separated by an electrostatic shield, and a high permeability mu-metal core. The transformer is encapsulated in a mu-metal case for magnetic shielding.

For best performance, the high impedance side of the transformer (3.5 + 3.5) should be connected in series.

Turns ratio: 1 + 1 : 3.5 + 3.5

Dims (Length x Width x Height above PCB (mm)): 38 x 23 x 16

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



Spacing between pins: 5.08 mm (0.2")

Spacing between rows of pins: 27.94 mm (1.1")

Offset of earth pin from adjacent row: 2.54 mm (0.1")

Weight: 46 g

Rec. PCB hole diameter: 1.5 mm

Static resistance of each primary: 42Ω

Static resistance of each secondary: 790Ω

Distortion (primaries connected in series, source impedance 800Ω): + 6 dBU (primary level) 0.1% @ 50 Hz
+16 dBU (primary level) < 1% @ 50 Hz
> 100 kHz

Self resonance point :

Recommended termination for best square-wave response:

connection 1:3.5 10 kΩ in series with 220 pF

connection 3.5:1 2 kΩ in series with 2.2 nF

connection 7:1 1 kΩ

Frequency response

(1:3.5, source 800Ω, load 10kΩ in series with 220 pF): 20 Hz -- 30 kHz +/- 0.3 dB

Isolation between windings/ between windings and shield: 4 kV / 2 kV

Connection alternatives (Component side view):

