

Mic/Line Input Transformer Transformers LL7905

The LL7905 is a large, high level, high performance audio transformer, made for extraordinary requirements. The transformer combines very high secondary level capability (+37 dBu [54.5V rms] @ 50 Hz) with low copper resistance and is designed for the most demanding applications. The LL7905 consists of two coils, each with two primary and one secondary windings separated by electrostatic shields. The core is a high permeability mu metal lamination core.

The transformer is magnetically shielded by a mu metal case.

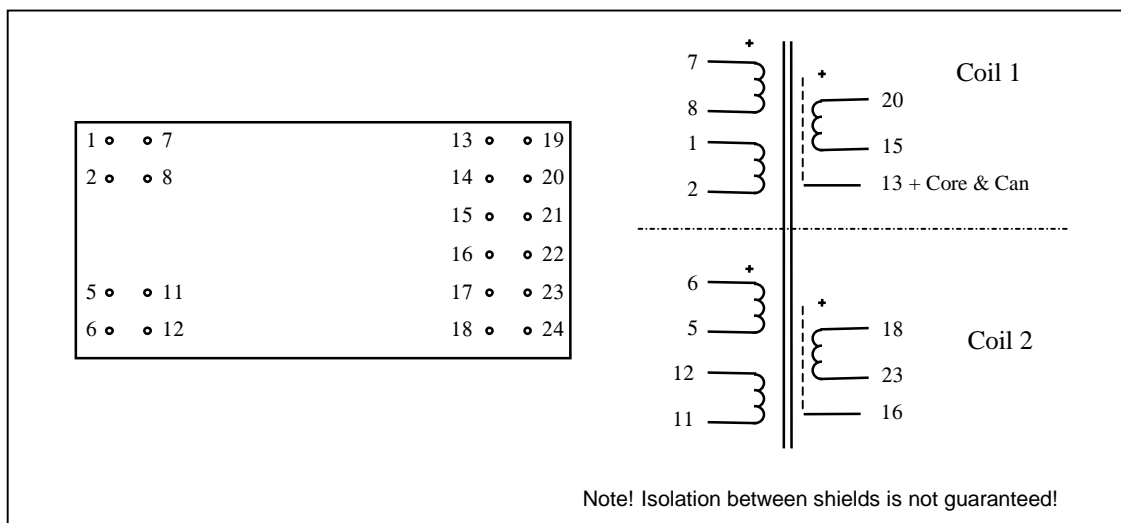
Turns ratio:

1 + 1 + 1 + 1 : 5.6 + 5.6

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

66 x 32 x 21

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



Spacing between pins:

5.08 mm (0.2")

Spacing between rows of pins:

5.08 / 45.72 mm (0.2 / 1.8")

Weight:

155 g

Rec. PCB hole diameter:

1.5 mm

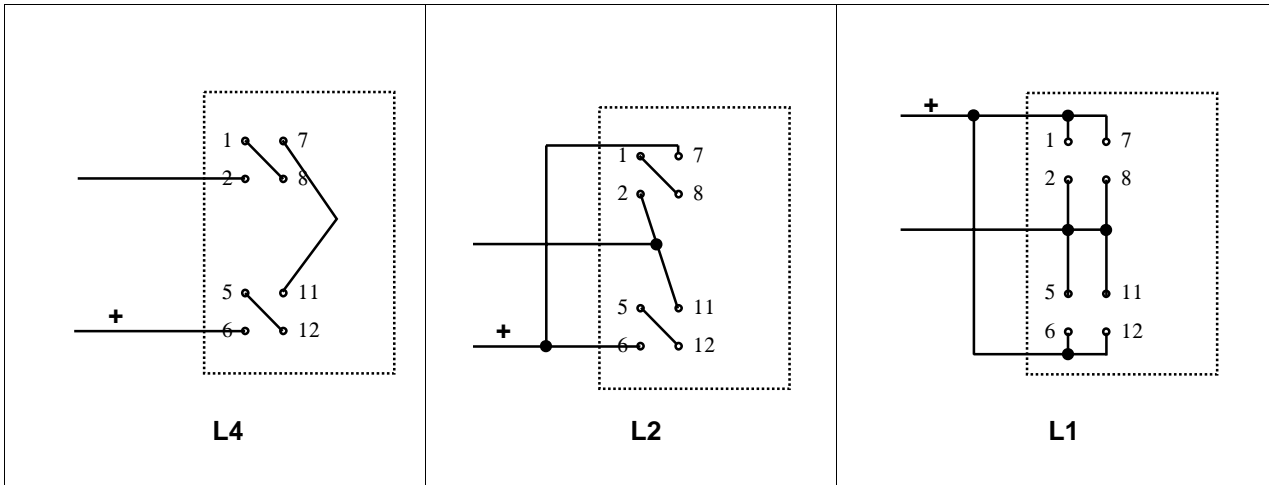
Static resistance of each primary (average):	28Ω
Static resistance of each secondary (average):	395Ω
Distortion (primaries connected in series, source impedance 600Ω):	+ 10 dBu primary level, 50 Hz: 0.1 %
	+ 28 dBu primary level, 50 Hz: 1 %
Self resonance point :	80 kHz
Optimum termination for best square-wave response (Connections L4-R2 , source imp. 600Ω) :	30kΩ in series with 100pF
Frequency response (source and load as above, connection L4-R2, secondary side balanced with or without grounded centertap.	10 Hz - 55 kHz +/- 1 dB
Frequency response (source and load as above, connection L4-R2, secondary side unbalanced with pin 23 grounded)	10 Hz - 30 kHz +/- 1 dB

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

Connection alternatives, LL7905

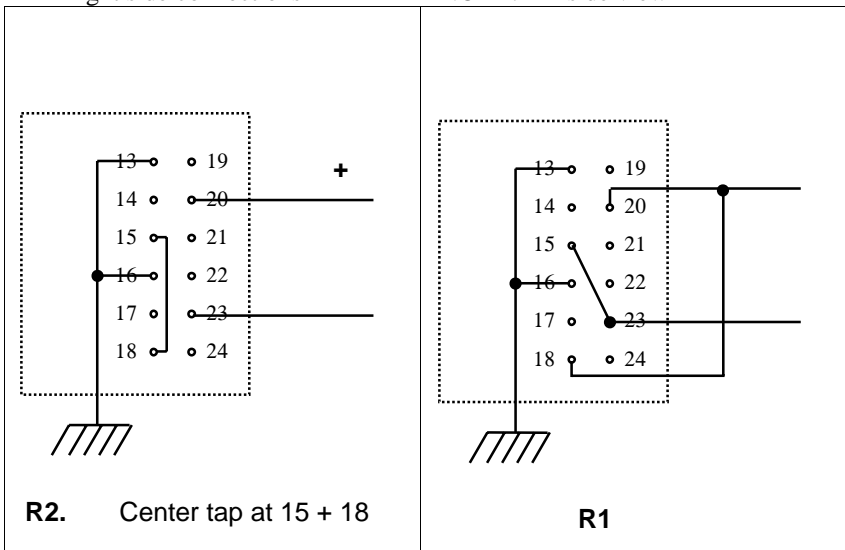
Left side connections

NOTE! Pin side view



Right side connections

NOTE! Pin side view



Suggested applications using LL7905

Application	Connections	Max primary level, < 1% THD@50 Hz	Corresponding secondary level
Microphone / line input 1:2.8	L4 – R2	+28 dBU (19.5 V rms)	+37 dBU (54.5V rms)
Microphone / line input 1:5.6	L2 – R2	+22 dBU (9.7 V rms)	+37 dBU (54.5V rms)
Microphone / line input 1:11.2	L1 – R2	+16 dBU (4.9 V rms)	+37 dBU (54.5V rms)