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**Domestic** 0176-13930 0176-13935

## **Audio Transformer** LL1926

LL1926 is an audio transformer with a variety of connection alternatives. It is designed for microphone input (step-up) applications, but can also be used as a line input step-down transformer.

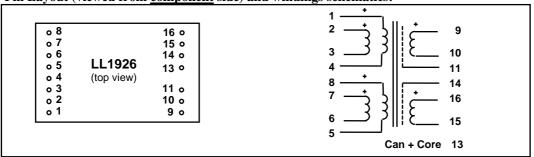
The transformer consists of two coils, each with one high impedance winding surrounded by two low impedance windings, with Faraday shields between all sections. The LL1926 has a mu-metal lamination core and is housed in a mu-metal can.

The LL1926 is pin compatible with the amorphous core transformer LL1550, but LL1926 takes up more board space due to the shape of the mu metal laminations.

Turns ratio: 1+1+1+1:4+4Dims: (Length x Width x Height above PCB (mm)) 37 x 23 x 12

Pin Layout (viewed from component side) and windings schematics:

**TRANSFORMERS** 



**Spacing between pins:** 2.54 mm (0.1") **Spacing between rows of pins:** 22.86 mm (0.9")

Weight: 46 g Rec. PCB hole diameter 1.3 mm

**Static resistance of windings:** 2-3 or 6-7  $30 \Omega$ 1-4 or 5-8  $45 \Omega$ 

9-10 or 15-16  $290 \Omega$ **Self resonance point:** > 100 kHz

Recommended load for best square-wave response

(Connection alternative "C"):  $6.7 \text{ k}\Omega + 470 \text{ pF}$ 

**Frequency response** ("C", source  $600\Omega$ , load  $20 \text{ k}\Omega$ ): 10 Hz - 60 kHz +/- 1.0 dB @ 0 dBU

Mu-metal lamination

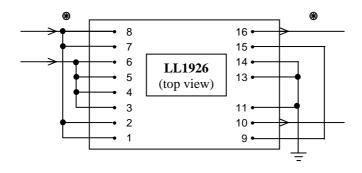
Isolation between windings / between windings and shields: 3 kV / 1.5 kV

## Data at different connection alternatives:

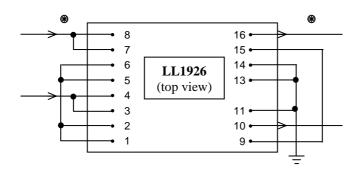
Connection	Turns	Copper	Suggested Use	Max input signal level	THD < 0.2% @50 Hz
Alternatives	ratio	Resistance		(1 % THD @ 50Hz)/	primary level /
		Prim/sec		source impedance	source impedance
A	1:8	$10 \Omega / 580 \Omega$	Microphone input,	$+7~\mathrm{dBU}~/40~\Omega$	$+2~\mathrm{dBU}~/40~\Omega$
			50 - 200  ohm		
В	1:4	$40~\Omega$ / $580~\Omega$	Microphone input	+13 dBU / 150 Ω	$+8~\mathrm{dBU}$ / $150~\Omega$
			200 ohms		
С	1:2	$150 \Omega / 580 \Omega$	Mic. or line input	$+19~\mathrm{dBU}$ / $600~\Omega$	$+13~\mathrm{dBU}$ / $600~\Omega$

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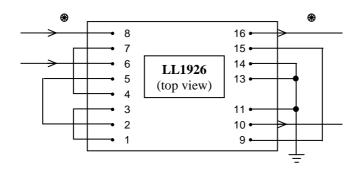
## LL1926 connection alternatives



A. Turns ratio 1:8 (or 8:1 if used "backwards")



B. Turns ratio 1:4 (or 4:1)



C. Turns ratio 1:2 (or 2:1)