

# General Purpose Audio Transformers LL1532 and LL1593

LL1532 and LL1593 are small size medium impedance transformers suitable for splitting and other general purpose applications.

LL1532 consists of two coils each with one primary and one secondary winding separated by an electrostatic (Faraday) shield. The two secondary windings are internally connected in series. The core is a high permeability mu-metal core. The LL1532 is magnetically shielded by a mu-metal housing.

LL1593 is a **low-cost version** of the LL1532, with the same winding structure but without Faraday shields and mu-metal housing.

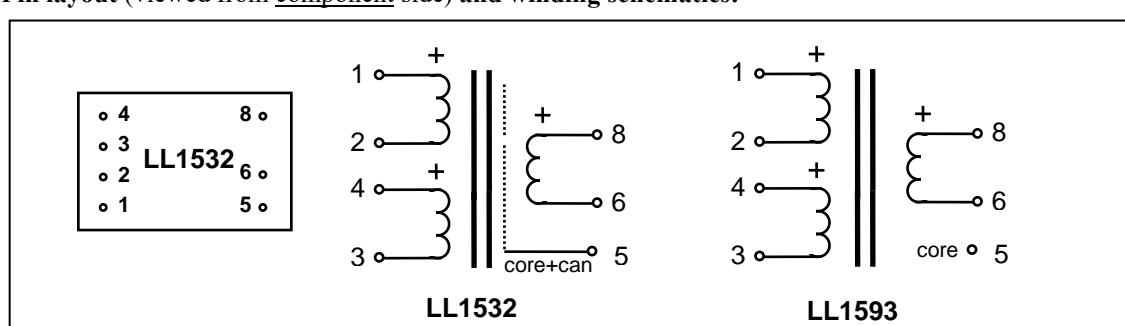
The LL1532 and LL1593 can be used with primaries in series for 1:1 or in parallel for 1:2 turns ratio.

### Turns ratio:

1 + 1 = 2

Dims L11532/L11593 (Length x Width x Height above PCB (mm)): 28 x 17 x 15 / 26 x 16 x 14

**DINs EL1332/EL1333 (Length x Width x Height above PCB (mm))**  
**Pin layout (viewed from component side) and winding schematics:**



### Spacing between pins:

3.81 mm (0.15")

Spacing between rows of pins:

20.32 mm (0.8")

spacing  
Weight:

26.52 mm

Weight: **1.5 g**

25 g, 1  
15 mm

	LL1532	LL1593
<b>Static resistance of each primary:</b>	70Ω	70Ω
<b>Static resistance of secondary:</b>	180Ω	175Ω
<b>Distortion</b> (primaries connected in series, source impedance 600Ω ):	+ 6 dB <sub>U</sub> primary level, 50 Hz: 0.2 %	+ 6 dB <sub>U</sub> primary level, 50 Hz: 0.2 %
	+ 12 dB <sub>U</sub> primary level, 50 Hz: 1 %	+ 12 dB <sub>U</sub> primary level, 50 Hz: 1 %
<b>Self resonance point :</b>	~ 200 kHz	~ 200 kHz
<b>Frequency response</b> (source 600Ω , load 10kΩ )	10 Hz - 60 kHz +/- 0.3 dB	10 Hz - 60 kHz +/- 0.3 dB
<b>Optimum termination for best square-wave response</b> (source imp. 600Ω ):	2 kΩ in series with 1.6 nF	2 kΩ in series with 1.6 nF

### Isolation between windings/ between windings and shield:

3 kV / 1.5 kV

