

## Transformers for splitting LL1570 and LL1570XL

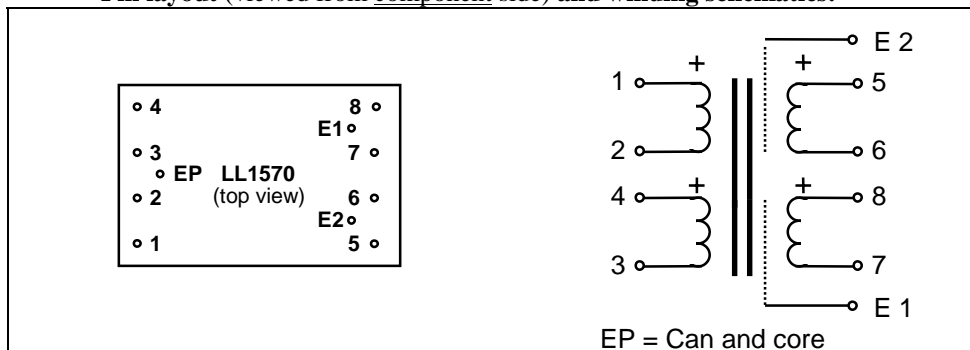
The LL1570 is designed for splitting signals in application where large ground differences may appear, but is also very useful as a general purpose audio transformer. By careful design, the capacitive coupling between the different part of the transformer is kept to a minimum. The three-section winding structure which is necessary for decoupling also results in a very high bandwidth. The transformer is built up from two coils, each with primary and secondary windings separated by electrostatic shields, and a high permeability mu-metal core. The two coil structure in combination with the mu-metal can results in high immunity to external magnetic fields.

In the LL1570XL, the core is about 45% larger than in the LL1570, resulting in a larger level capability.

### Turns ratio:

1 + 1 : 1 + 1

### 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")

Recommended PCB hole diameter:  
1.5 mm

	LL1570	LL1570XL
<b>Dimensions (Max. L x W x H above PCB(mm))</b>	38 x 24 x 17	38 x 24 x 20.5
<b>Weight:</b>	48 g	65 g
<b>Static resistance of each primary:</b>	50 Ω	62 Ω
<b>Static resistance of each secondary:</b>	50 Ω	62 Ω
<b>Distortion (primary level, primaries connected in series, source impedance 800Ω )</b>	0.1% @ + 6 dBu, 50 Hz 1 % < @ +16 dBu, 50 Hz	0.1% @ + 9 dBu, 50 Hz 1 % < @ +19 dBu, 50 Hz
<b>Self resonance point :</b>	> 250 kHz	> 250 kHz
<b>Optimum load for best square-wave response (secondaries, in series):</b>	2.8 kΩ in series with 0.7 nF	2.8 kΩ in series with 0.7 nF
<b>Frequency response (source 600Ω, load as above, serial-serial connections):</b>	10 Hz -- 200 kHz +/- 0.5 dB	10 Hz -- 200 kHz +/- 0.5 dB
<b>Isolation winding-winding / winding-shield / shield-shield</b>	4 kV / 2 kV / 2 kV	4 kV / 2 kV / 2 kV

