

Transformers for splitting LL1570 and LL1570XL

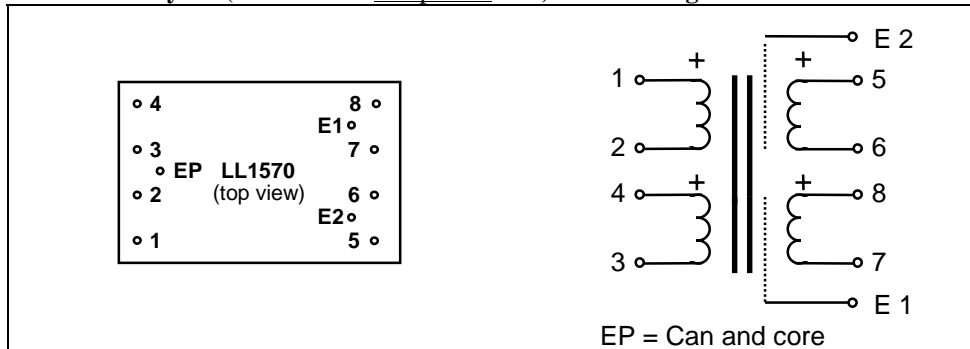
The LL1570 is designed for splitting signals in application where large ground differences may appear, but is also very useful as a general purpose audio transformer. By careful design, the capacitive coupling between the different part of the transformer is kept to a minimum. The three-section winding 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
Dimensions (Max. L x W x H above PCB(mm))	38 x 24 x 17	38 x 24 x 20.5
Weight:	48 g	65 g
Static resistance of each primary:	50 Ω	62 Ω
Static resistance of each secondary:	50 Ω	62 Ω
Distortion (primary level, primaries connected in series, source impedance 800Ω)	0.1% @ + 6 dBu, 50 Hz 1 % < @ +16 dBu, 50 Hz	0.1% @ + 9 dBu, 50 Hz 1 % < @ +19 dBu, 50 Hz
Self resonance point :	> 250 kHz	> 250 kHz
Optimum load for best square-wave response (secondaries. in series):	2.8 kΩ in series with 0.7 nF	2.8 kΩ in series with 0.7 nF
Frequency response (source 600Ω, load as above, serial-serial connections):	10 Hz -- 200 kHz +/- 0.5 dB	10 Hz -- 200 kHz +/- 0.5 dB
Isolation winding-winding / winding-shield / shield-shield	4 kV / 2 kV / 2 kV	4 kV / 2 kV / 2 kV

