

Transformers for mic input, mic splitting and mic and line isolation LL1570 and LL1570XL

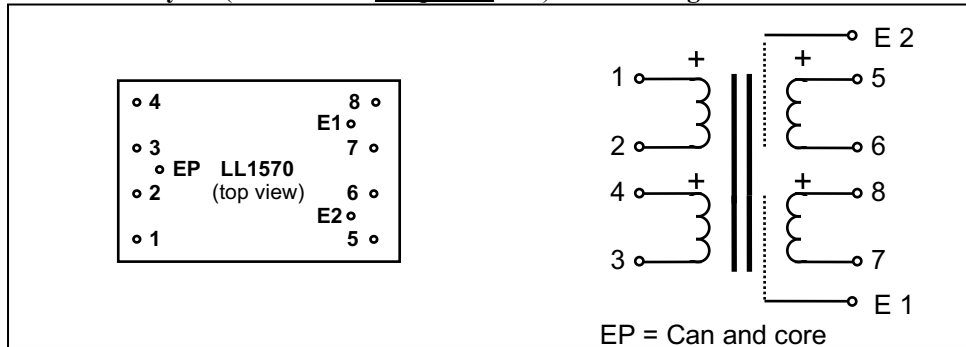
The LL1570 is a very high quality general purpose audio transformer for low turns ratio mic input, for ground isolation, balanced-to-unbalanced conversion and for splitting 1:1+1. By careful design, the capacitive coupling between the different parts of the transformer is kept to a minimum. The three-section winding structure used in the LL1570 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.

In the LL1570XL, the core is about 45% larger than in the LL1570, resulting in a high signal 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

Dimensions (Max. L x W x H above PCB(mm))
Weight:
Static resistance of each primary:
Static resistance of each secondary:
Distortion (primary level, primaries connected in series, source impedance 800Ω)
Self resonance point :
Optimum load for best square-wave response (secondaries. in series):
Frequency response (source 600Ω, load as above, serial-serial connections):
Isolation winding-winding / winding-shield / shield-shield

LL1570
38 x 24 x 17
48 g
50 Ω
50 Ω
0.1% @ + 6 dBu, 50 Hz
1 % < @ +16 dBu, 50 Hz
> 250 kHz
2.8 kΩ in series with 0.7 nF
10 Hz -- 200 kHz +/- 0.5 dB
4 kV / 2 kV / 2 kV

LL1570XL
38 x 24 x 20.5
65 g
62 Ω
62 Ω
0.1% @ + 9 dBu, 50 Hz
1 % < @ +19 dBu, 50 Hz
> 250 kHz
2.8 kΩ in series with 0.7 nF
10 Hz -- 200 kHz +/- 0.5 dB
4 kV / 2 kV / 2 kV

