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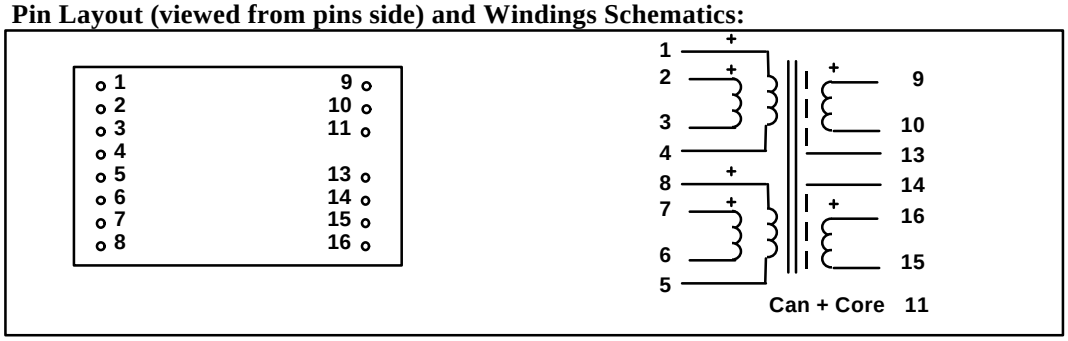
Audio Transformer
LL1545

LL1545 is a general purpose audio transformer, with a variety of connection alternatives. The transformer is built up from two coils, each with a secondary winding surrounded by shields and two primary windings. This structure results in an excellent frequency response. The transformer can be used in many different applications, such as a high impedance line input transformer (accepting signal levels of 22 dBU @ 40 Hz with primaries in series), a split transformer or as a medium impedance microphone input transformer.
The LL1545 is made with a mu-metal core, and is housed in a mu-metal can.
Refer to the back side of this sheet (or separate sheet) for termination alternatives.

Turns ratio: 1 + 1 + 1 + 1 : 2 + 2
Dims: (Length x Width x Height above PCB (mm)) 37 x 22.5 x 14.5
Pin Layout (viewed from pins side) and Windings Schematics:



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: 1.5 mm
Static resistance of <u>each</u> primary (average): 147 Ω
Static resistance of <u>each</u> secondary (average): 295 Ω
Self resonance point: > 220 kHz
Recommended load for best square-wave response (Termination alternative A below): 6.7 kΩ + 470 pF
Frequency response (source 600Ω , load (6.7 kΩ + 470 pF) in parallel with 56 kΩ): 10 Hz - 70 kHz +/- 0.5 dB @ 0 dBU
Loss across transformer (at midband with termination as above): 0.3 dB
Core: Mu-metal
Isolation between windings / between windings and shields: 3 kV / 1.5 kV

Data at different termination alternatives, showed on the back side of this sheet:

Termination Alternative	Turns ratio	Copper Resistance prim/sec	Idle impedance @40 Hz, 0dBU	Suggested Use	THD < 0.2%@40 Hz primary level / real source impedance
A	1:1	590 Ω / 590 Ω	80 kΩ / 80 kΩ	10 kΩ / 10 kΩ	22 dBU / 600 Ω
B	1:1	147 Ω / 147 Ω	20 kΩ / 20 kΩ	600 Ω / 600 Ω	16 dBU / 150 Ω
C	1:2	147 Ω / 590 Ω	20 kΩ / 80 kΩ	600 Ω / 10 kΩ	16 dbU / 150 Ω
D	1:2	37 Ω / 147 Ω	5 kΩ / 20 kΩ	200 Ω / 1 kΩ	10 dBU / 37.5 Ω
E	1:4	37 Ω / 590 Ω	5 kΩ / 80 kΩ	200 Ω / 10 kΩ	10 dBU / 37.5 Ω
F (Split)	2:1+1	590 Ω / 295 Ω + 295 Ω			
G (Split)	1:1+1	147 Ω / 295 Ω + 295 Ω	Left side can also be connected as $B_{CenterTap}$ (1:1+1) or D (1:2+2)		