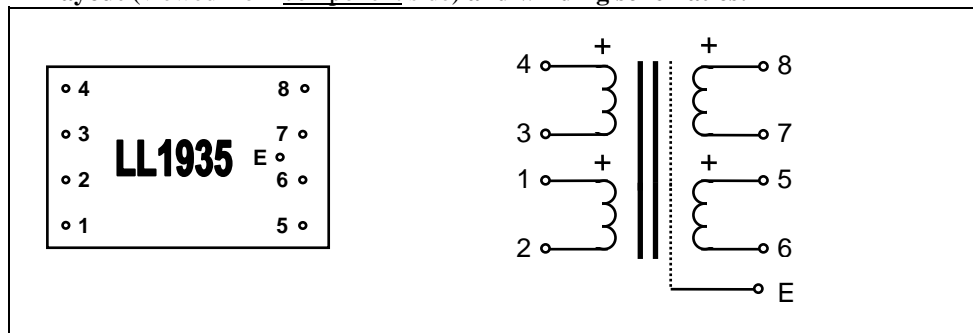


DI Transformer LL1935

LL1935 is a transformer designed for DI (Direct Input) applications, matching high impedance guitar pickups to low impedance microphone preamp inputs, but is also ideal for 1:10 microphone input applications. The transformer consists of two coils, each with one primary and one secondary winding separated by an electrostatic shield, and a high permeability mu-metal core. The high impedance windings are wound using a special low capacitance winding technique. The transformer is encapsulated in a mu-metal case for magnetic shielding.

For best performance, the high impedance side of the transformer (5 + 5) should be connected in series.

Turns ratio: 1 + 1 : 5 + 5
Dims (Length x Width x Height above PCB (mm)): 38 x 23 x 16
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")
Weight:	46 g
Recommended PCB hole diameter:	1.5 mm
Static resistance of each primary (pins 5-6 and 7-8):	650 Ω
Static resistance of each secondary (pins 1-2 and 3-4):	17 Ω
Frequency response (reference 1.0 kHz) 10:1, source 100 kΩ, secondary open: 10:1, source 100 kΩ, load 1 kΩ 1:10, source 200 Ω, secondary open	20 Hz – 20 kHz +0 / -3 dB 10 Hz – 45 kHz +0 / -2 dB 10 Hz – 80 kHz +/- 1dB
Distortion For practical reasons measured in 1:10 configuration. Source 150Ω, load 10k (Audio Precision portable)	-5 dBu input level, +14 dBu output level < 0.1% THD @ 50 Hz +7 dBu input level, +26 dBu output level < 1% THD @ 50 Hz
Self resonance point :	None detected in above configurations
Isolation between windings/ between windings and shield	4 kV / 2 kV

Connection alternatives (Component side view):

