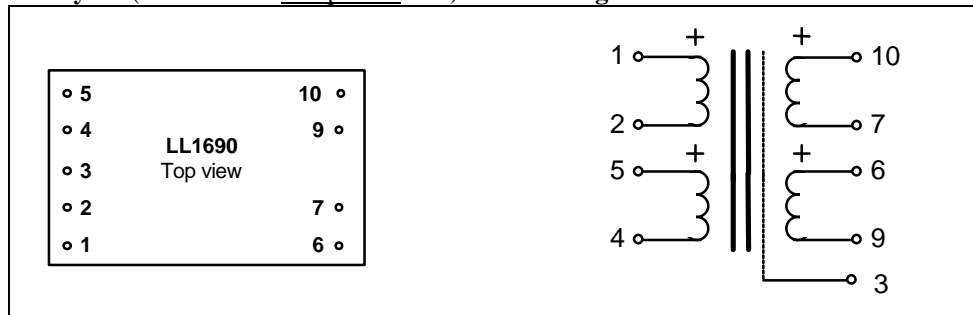


Amorphous Core High Level Line Input Transformer LL1690

LL1690 is a high-level line input transformer with an uncut cobalt-based amorphous strip core. The transformer is designed for high end audio applications such as tube amplifier line input with or without phase splitting. The windings are arranged to give a high degree of symmetry if the transformer is used for phase splitting. The dual-coil structure also greatly improves immunity to external magnetic fields from e.g. power supplies and motors. Primary and secondary windings are separated by electrostatic shields.. The transformer is housed in a mu-metal can.

Turns ratio: 1 + 1 : 1 + 1

Pin layout (viewed from component side) **and winding schematics:**



Dimensions (L x W x H above PCB, in mm)

42 x 28 x 22

Spacing between pins

5.08 mm (0.2")

Spacing between rows of pins

30.5 mm (1.2")

Rec. PCB hole diameter:

1.5 mm

Weight:

81 g

Static resistance of each primary:

150 Ω

Static resistance of each secondary:

150 Ω

Distortion (primaries connected in series, source impedance 600Ω):

+ 23 dBU 0.1% @ 30 Hz
+ 26 dBU < 1 % @ 30 Hz

Self resonance point:

> 150 kHz

Suggested load for best square wave response, serial-serial connection.

40k // 7k + 400pF

Frequency response (serial connection, source 1kΩ, load 40 kΩ in parallel with 7k + 400pF):

10 Hz -- 100 kHz +/- 1.0 dB

Phase splitting balance (connection 2:1+1. Source 1kΩ, load (20kΩ +20kΩ) in parallel with 7k + 400pF):

>55dB, 10Hz – 50kHz

Phase response (deviation from linear phase)

20 Hz – 20kHz, < 2°

(source 600 ohm, load 10k (Audio Precision))

Isolation between windings/ between windings and shield:

3 kV / 1.5 kV

Connection alternatives and suggested applications:

