## Line Input Transformer 2+2: 1+1 LL1949

LL1949 is a high-level line input transformer normally used 2:1. The windings are arranged to give perfect symmetry if the transformer is used in phase splitting input applications. The two-coil structure also greatly improves immunity to external magnetic fields from e.g. power supplies and motors. Coils are wound using Cardas high purity post annealed audiophile grade copper wire Primary and secondary windings are separated by electrostatic shields. The core is a high permeability mu metal core. The transformer is housed in a mu-metal can.

Turns ratio: $2+2: 1+1$
Pin layout (viewed from component side) and winding schematics:


Dimensions ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ above PCB , in mm)

## Spacing between pins

Spacing between rows of pins
Rec. PCB hole diameter:
Weight:
Static resistance of each primary:
Static resistance of each secondary:
Distortion (primaries connected in series, source impedance $600 \Omega$ ):
Self resonance point:
Frequency response (source $600 \Omega$, load $10 \mathrm{k} \Omega$, serial connection, ref $1 \mathrm{kHz}, 6 \mathrm{dBU}$ input signal):
Phase response (deviation from linear phase)
Isolation between windings/ between windings and shield:
$47 \times 28 \times 24$
5.08 mm ( $0.2^{\prime \prime}$ )
35.56 mm (1.4")
1.5 mm

115 g
$81 \Omega$
$20 \Omega$
$+24 \mathrm{dBU} 0.1 \%$ @ 50 Hz
$+29 \mathrm{dBU}<1 \%$ @ 50 Hz
$>150 \mathrm{kHz}$
10 Hz -- $120 \mathrm{kHz}+/-0.5 \mathrm{~dB}$
$20 \mathrm{~Hz}-20 \mathrm{kHz},+/-0.5^{\circ}$
$4 \mathrm{kV} / 2 \mathrm{kV}$

Connection alternatives and suggested applications:


