

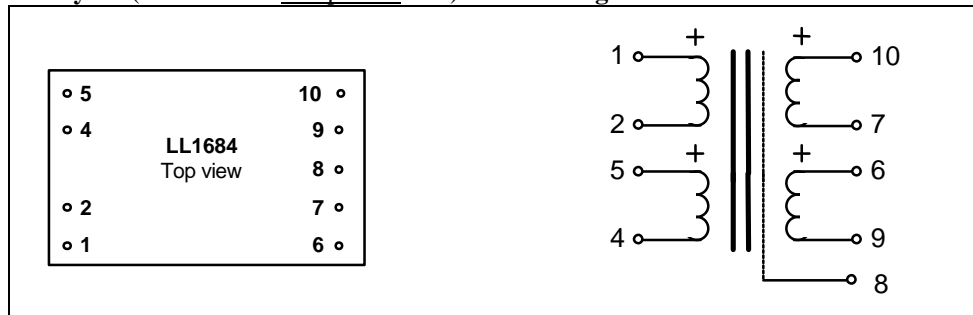
## High Level General Purpose Transformer LL1684

LL1684 is a high-level, general-purpose, amorphous core transformer which can be used for microphone or line input, for line output and for galvanic isolation. The windings are arranged to give perfect symmetry if the transformer is used in phase splitting input applications. The two coils 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:**

41Ω

**Static resistance of each secondary:**

41Ω

**Distortion** (primaries connected in series, source impedance 150Ω):

+ 23 dBU 0.1% @ 50 Hz  
+ 25 dBU < 1 % @ 50 Hz

**Distortion** (primaries connected in parallel, source impedance 150Ω):

+ 16 dBU 0.1% @ 50 Hz  
+ 19 dBU < 1 % @ 50 Hz

**Self resonance point:**

> 250 kHz

**Frequency response** (source 150Ω, load 10 kΩ, serial connection):

10 Hz -- 100 kHz +/- 1.0 dB

**Phase response** (deviation from linear phase)

20 Hz – 20kHz, +/- 0.5°

**Suggested load for best square wave response**

10k // 1k + 3nF

**Isolation between windings/ between windings and shield:**

3 kV / 1.5 kV

### Connection alternatives and suggested applications:

