LUNDAHL
– TRANSFORMERS –

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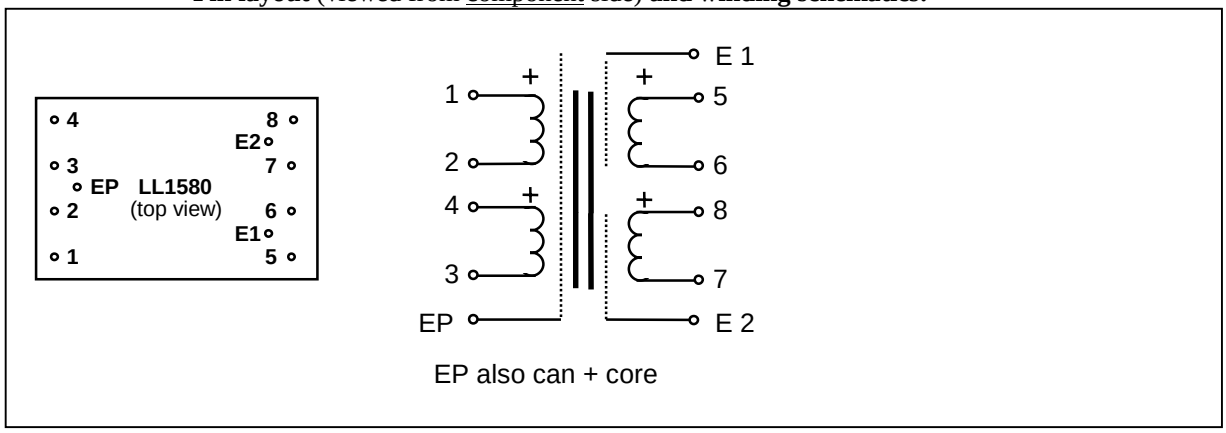
LL1580 Splitting Transformer

The LL1580 is designed for splitting signals in application where large and noisy ground differences appear, but where external magnetic fields are under control. By careful design, including double electrostatic shields, the capacative coupling between the different parts of the transformer is kept to a minimum. The transformer is built up from two coils, each with primary and secondary windings separated by double electrostatic shields, and a high permeability mu-metal core. The two coil structure in combination with the mu-metal can results in high immunity to external magnetic fields.

Turns ratio: 1 + 1 : 1 + 1

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



Spacing between pins	Spacing between rows of pins	Offset of earth pin from adjacent row:	Recommended PCB hole diameter:
5.08 mm (0.2")	27.94 mm (1.1")	2.54 mm (0.1")	1.5 mm

Dimensions (Max. L x W x H above PCB(mm))	38 x 24 x 20.5
Weight:	61 g
Static resistance of each primary:	40 Ω
Static resistance of each secondary:	49 Ω
Self resonance point :	> 200 kHz
Optimum load for best square-wave response (secondaries. in series)**:**	4 kΩ in series with 0.5 nF

Test arrangements for distortion and frequency response tests:

Parallell input - parallel output . Source 150Ω , load 100 kΩ

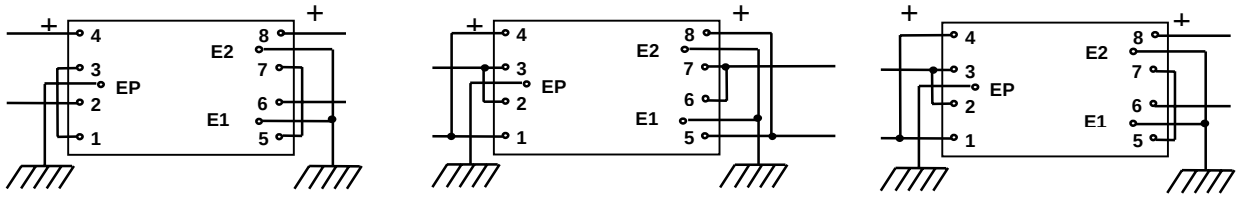
Distortion	0.1% @ + 0 dBU, 50 Hz
	1 % < @ +10 dBU, 50 Hz
Frequency response (Ref : -6 dBu, 1kHz)	10 Hz -- 100 kHz +/- 0.5 dB
Isolation winding-winding / winding-shield / shield-shield	4 kV / 2 kV / 2 kV

Application examples. Viewed from component side

Serial-serial connection (1 : 1) for line input or output

Parallel-parallel connection (1 : 1) (e.g. mic input)

Parallel-serial connection (1 : 2) (e.g. mic. input)



Parallel-split connection with separate grounds (1 : 1 + 1)