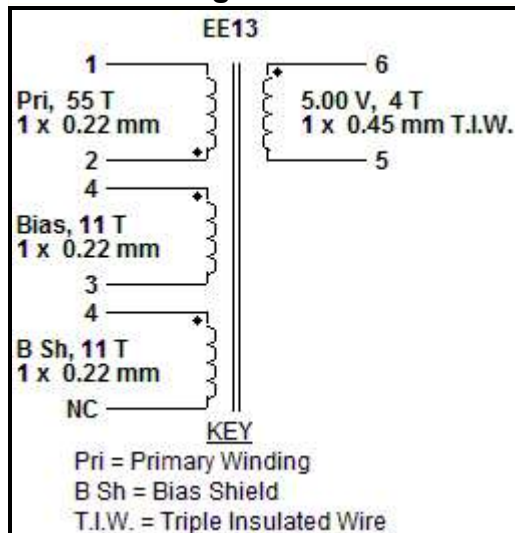
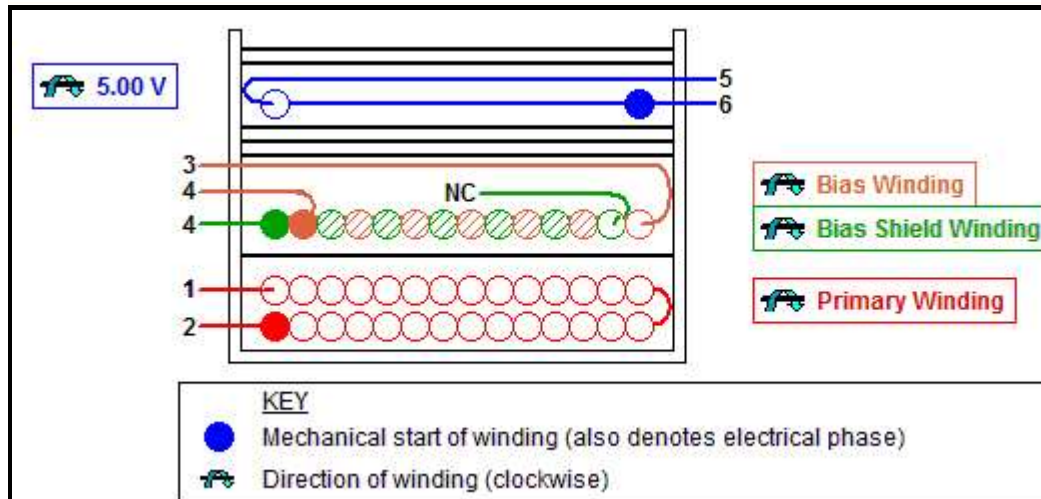


## Electrical Diagram



## Mechanical Diagram



## Winding Instruction

### Primary Winding

Start on pin(s) 2 and wind 55 turns (x 1 filar) of item [5]. in 2 layer(s) from left to right. Winding direction is clockwise. At the end of 1st layer, continue to wind the next layer from right to left. On the final layer, spread the winding evenly across entire bobbin. Finish this winding on pin(s) 1.

Add 1 layer of tape, item [3], for insulation.

### Bias Winding – Interleave with Bias-Shield Winding

Start on pin(s) 4 and wind 11 turns (x 1 filar) of item [5]. Winding direction is clockwise. Spread the winding evenly across entire bobbin. Finish this winding on pin(s) 3.

Add 3 layers of tape, item [3], for insulation.

### Bias-Shield Winding – Interleave with Bias Winding

Start on pin(s) 4 and wind 11 turns (x 1 filar) of item [5] from left to right in exactly 1 layer interleave with Bias Winding. Winding direction is clockwise. Leave this end of Bias-shield winding not connected. Bend the end 90 deg and cut the wire in the middle of the bobbin. Add 3 layers of tape, item [3], for insulation.

### Secondary Winding

Start on pin(s) 6 and wind 4 turns (x 1 filar) of item [6]. Spread the winding evenly across entire bobbin. Winding direction is clockwise. Finish this winding on pin(s) 5.

Add 2 layers of tape, item [3], for insulation.

### Core Assembly

Assemble and secure core halves. Item [1].

### Varnish

Dip varnish uniformly in item [4]. Do not vacuum impregnate.

## Comments

1. For non margin wound transformers use triple insulated wire for all secondary windings.

Materials

Item	Description
[1]	Core: EE13, 3F3, gapped for ALG of 132 nH/T²
[2]	Bobbin: Generic, 4 pri. + 4 sec.
[3]	Barrier Tape: Polyester film [1 mil (25 µm) base thickness], 7.40 mm wide
[4]	Varnish
[5]	Magnet Wire: 0.22 mm, Solderable Double Coated
[6]	Triple Insulated Wire: 0.45 mm

Electrical Test Specifications

Parameter	Condition	Spec
Electrical Strength, VAC	60 Hz 1 second, from pins 1,2,3,4 to pins 5,6.	3000
Nominal Primary Inductance, µH	Measured at 1 V pk-pk, typical switching frequency, between pin 1 to pin 2, with all other Windings open.	387
Tolerance, ±%	Tolerance of Primary Inductance	10.0
Maximum Primary Leakage, µH	Measured between Pin 1 to Pin 2, with all other Windings shorted.	15.49

Although the design of the software considered safety guidelines, it is the user's responsibility to ensure that the user's power supply design meets all applicable safety requirements of user's product.

The products and applications illustrated herein (including circuits external to the products and transformer construction) may be covered by one or more U.S. and foreign patents or potentially by pending U.S. and foreign patent applications assigned to Power Integrations. A complete list of Power Integrations' patents may be found at [www.power.com](http://www.power.com).