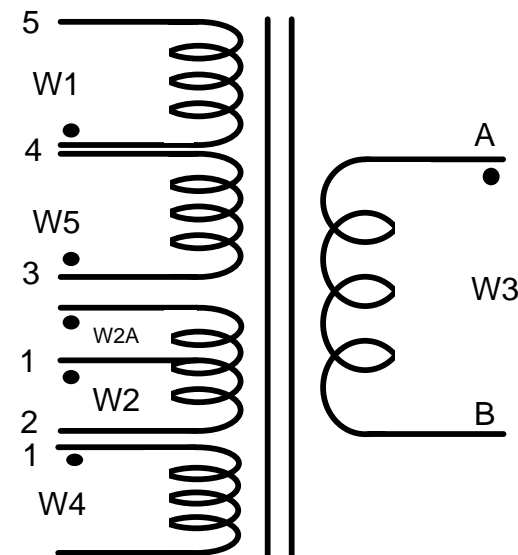


**A: Materials list**

- Ferroxcube RM10/I core set or equivalent
- 3C96 Material Or equivalent
- Pinshine Industrial P-1031 coil former or equivalent. See drawing on page 2.
- 7\*0.2mm Furukawa TEX-ELZ triple insulated wire or equivalent.
- 15 strands of 0.1mm ECW twisted, 100 turns/meter.
- 0.2mm Magnet wire
- 1 Oz (66µm thick) adhesive copper foil
- Mylar tape

**B: Winding table**

Winding	Start pin	Finish pin	Direction	Turns	Wire size/Type
W1	3	4	CW	17	15*0.1mm magnet wire, twisted, 100 T/m
W2	2	1	CCW	4	2 strands of 0.2mm magnet wire
W2A	2	-	CCW	6	5 strands of 0.2mm magnet wire
W3	A	B	CW	6	2 strands of 7*0.2mm TEX-ELZ triple insulated wire
W4	1	-	CW	1	1 turn of 1 Oz copper foil
W5	4	5	CW	17	15*0.1mm magnet wire, twisted, 100 T/m

**C: Schematic****D: Assembly Instructions**

- W2 is to act as a shield so the strands should be evenly spaced across the winding window.
- W4 is a copper foil shield ~8mm wide. This shield should be covered with tape which folds over the edges of the foil. The middle of the winding is connected to pin 1. The two ends should be taped/cut so that they do not short.
- 1 layer of copper foil flux band around assembled core, connect to pin 2. The two ends of the foil should be overlapped so that they are electrically connected. See picture on page 3 for flux band orientation.
- Two layers of mylar tape over the flux band.
- Varnish completed assembly

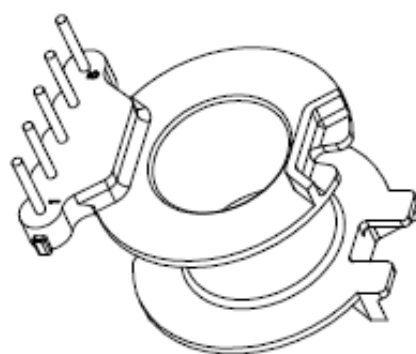
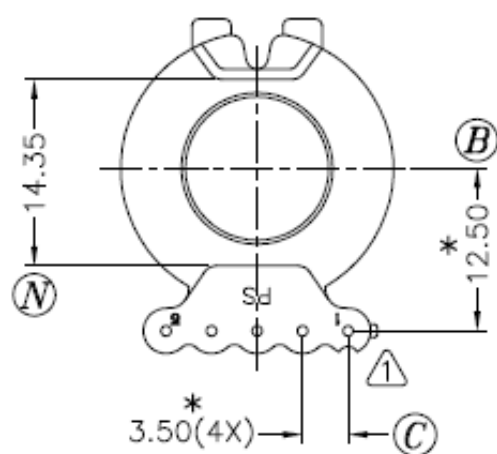
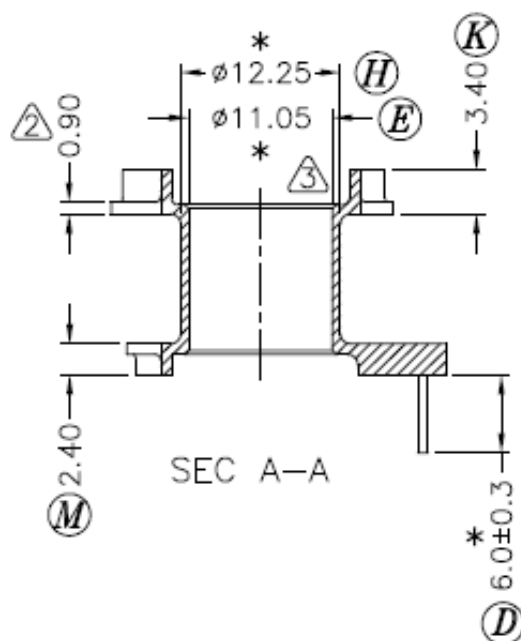
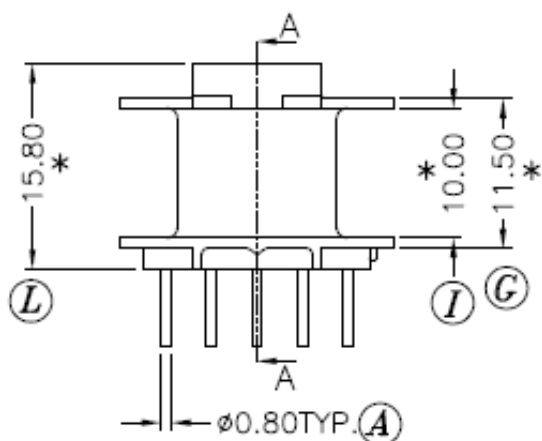
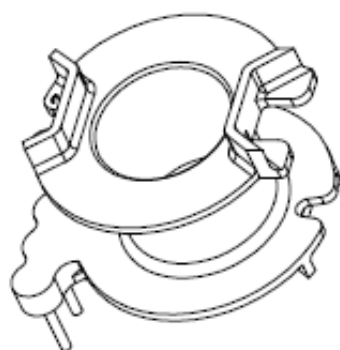
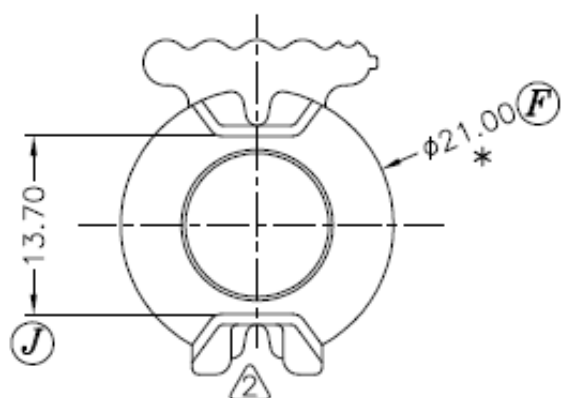
**E: Winding instructions**

- W1, 1 layer across bobbin. Return at 90° to pin 4.
- 1 layer of mylar tape.
- W2 and W2A are wound bifilar. W2 is returned to pin 1 after 4 turns, W2A is left floating after 6 turns. 1 layer of mylar tape over winding.
- W3, start opposite side of bobbin to pins. Wind bifilar in a single layer across the winding window. Leave ends floating as flying leads to be soldered directly into PCB.
- W4 (shield) on top of W1. Connect to pin 1.
- W5, 1 layer across bobbin. Return at 90° to pin 5.
- Two layers of mylar tape on top.

**F: Test Spec.**

- AI: 225 nH +/- 5%
- Leakage inductance. Short ends of secondary winding together. Measure inductance from pins 3-5.
- Inductance check: Per table +/- 5%
- Polarity check: Per Dot notation above
- Turns ratio check :  $(W1+W5)/W3 = 5.66$   
 $W3/W2 = 1.5$

Winding	Inductance	Meas (kHz)
W1+W5	260 µH	100
W3	8.1 µH	100
W4	3.6 µH	100
Primary-Secondary Leakage Inductance	4uH	100



REV.	REVISIONS REC.	DATE	REV.	REVISIONS REC.	DATE
1	(L):16.1→15.8;(M):2.7→2.4; SHAPE THE MODIFIED: (A)	'06.08.02	4	ADD THE 'PS' MARK; UPDATE THE DRAWING.	'08.03.17
2	MARK (A):R0.5→R1.2;0.7→0.9	'06.09.27			
3	SHAPE THE MODIFIED: (B)	'06.11.08			

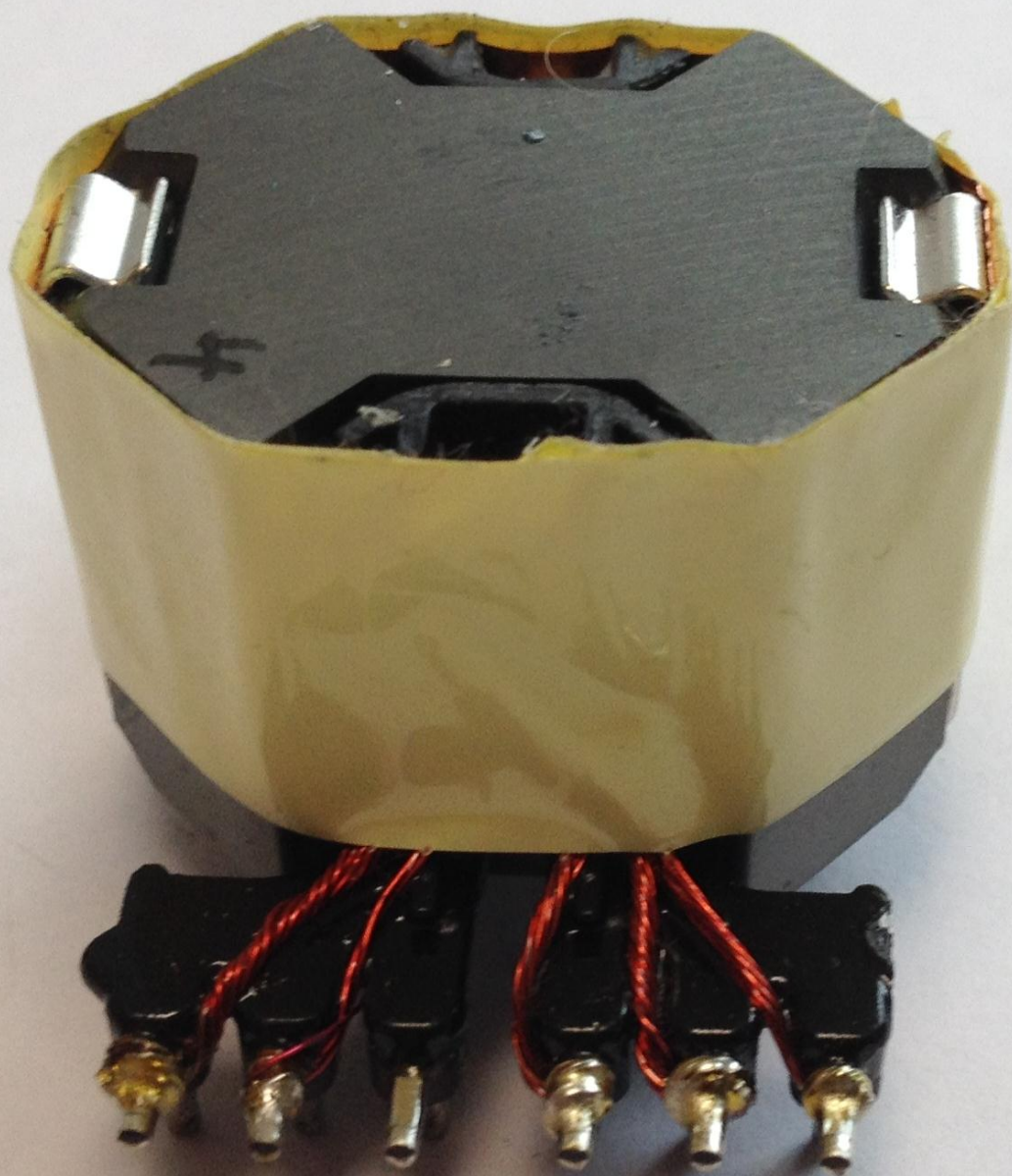
DRAWN & DRAFTED BY	HOU YI MIN	TOLERANCES	ANGLE: $\pm 1^\circ$	TITLE: T-H BOBBIN RM-10	
CHECKED & APPROVED BY		$0 < L \leq 4 \pm 0.1$ $4 < L \leq 16 \pm 0.2$ $16 < L \leq 63 \pm 0.3$	UNIT: MM	BOBBIN MATERIAL: PHENOLIC PM9630	UL REC. UL 94V-0
ORIGIN: SZ			PIN MATERIAL: CP WIRE	PIN TENSION LOAD: 1.0KG MIN	
DATE: OCT.20 '2005			DRAWING NO. P-1031	REV. 4	



PIN SHINE INDUSTRIAL CO.,LTD.

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