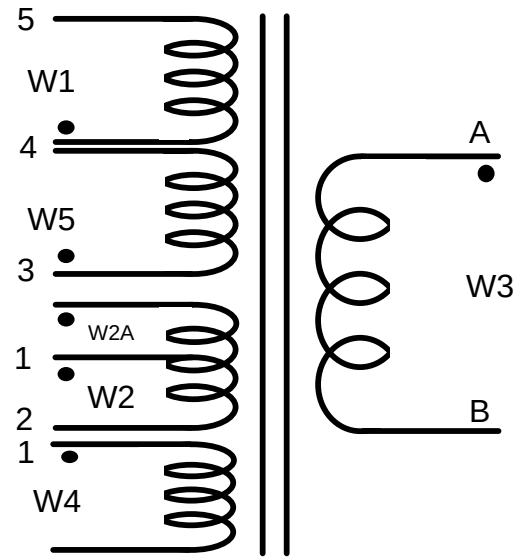
A: Materials list

- Ferroxcube RM10/I core set or equivalent
- 3C96 Material Or equivalent
- Pinshine Industrial P-1031 coil former or equivalent. See drawing on page 2.
- 0.4mm Furukawa TEX-E triple insultated wire or eqivalent.
- 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	8	3 strands of 0.2mm magnet wire
W3	A	B	CW	8	2 strands of 0.4mm TEX-E 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 the 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

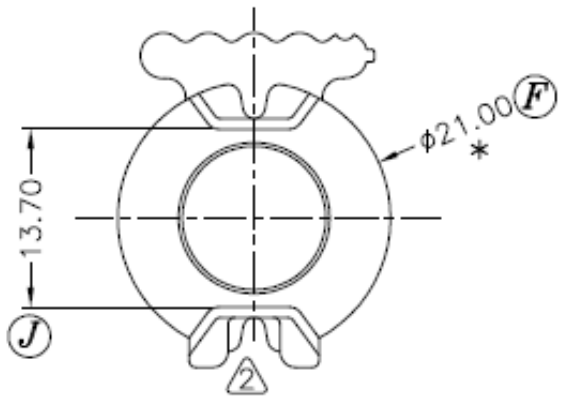
- W1, 1 layer across bobbin. Return at 90º to pin 4.
- 1 layer of mylar tape.
- W2 and W2A are wound bifilar. W2 is returned to pin 1 after 4 turns, W2A is left floating after 8 turns.1 layer of mylar tape over winding.
- W3, start opposite side of bobbin to pins. Wind bifilar in a single layer across 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 90º to pin 5.
- Two layers of mylar tape on top.

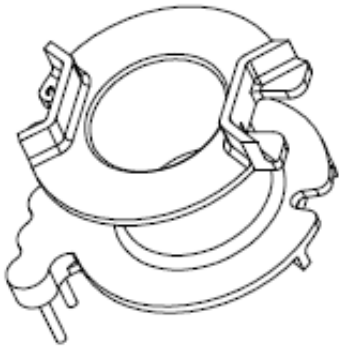
F: Test Spec.

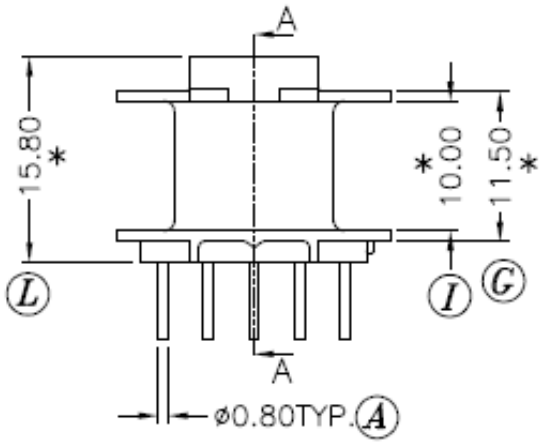
- Al: 225 nH +/- 5%
- Leakage inductance. Short ends of secondary winding together. Measure inductance from pins 3-5.
- Inductance check: Per table +/- 5%
- Polarity check: Per Dot notation above
- Turns ratio check : (W1+W5)/W3 = 4.25
  W3/W2 = 2

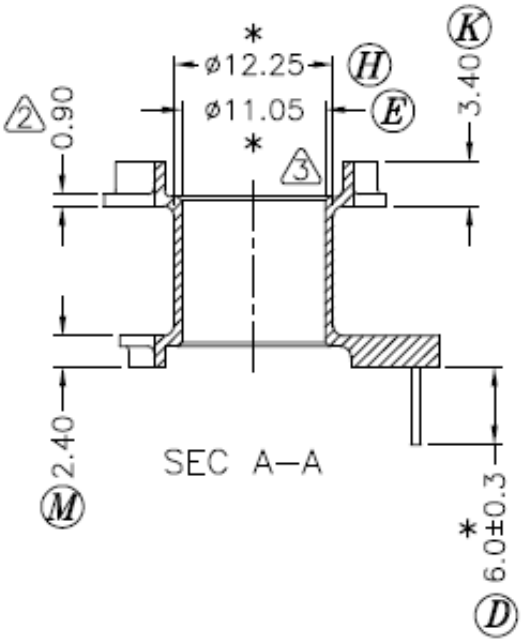
Winding	Inductance	Meas (kHz)
W1+W5	260 µH	100
W3	14.4 µH	100
W4	3.6 µH	100
Primary-Secondary Leakage Inductance	4uH	100

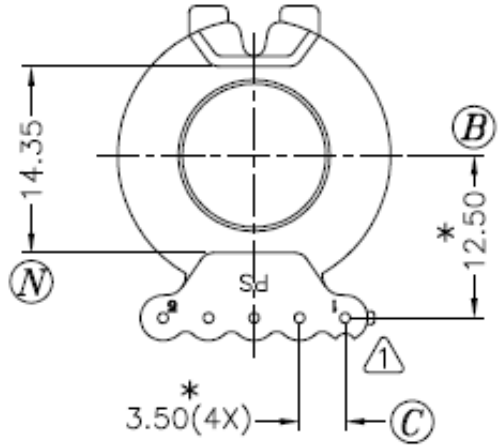
TEXAS INSTRUMENTS	Dimensional tolerance: All dimensions in millimeters (mm) ± 0.1mm. Angle ±0.5deg. No burrs or sharp edges allowed	Part No.	Description: Flyback Transformer		Rev.: A1
		Project: PMP9643	Drawn by: Billy Long	Checked by: Preliminary	DATE: 12 Mar 2014 / PAGE: 1 OF 3

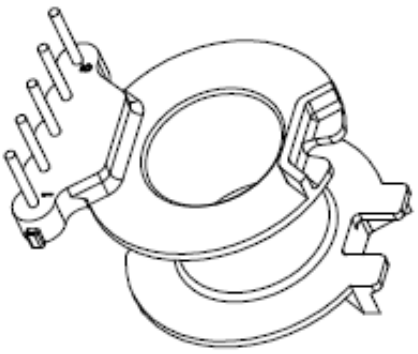






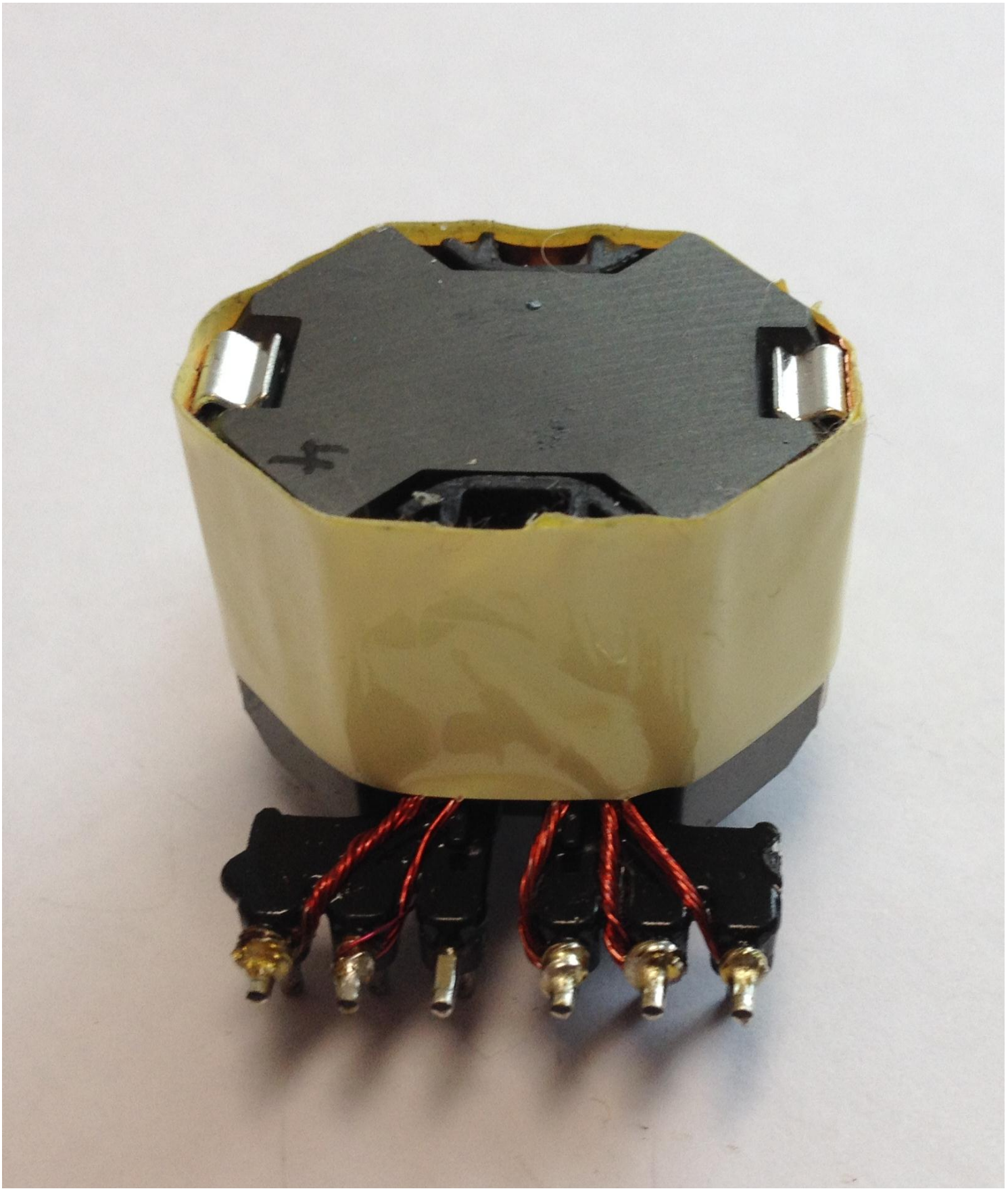






REV.	REVISIONS REC.	DATE	REV.	REVISIONS REC.	DATE
1	(L):16.1–>15.8;(M):2.7–>2.4; SHAPE THE MODIFIED: 1	'06.08.02	4	ADD THE "PS" MARK; UPDATE THE DRAWING.	'08.03.17
2	MARK 2 :R0.5–>R1.2;0.7–>0.9	'06.09.27			
3	SHAPE THE MODIFIED: 3	'06.11.08			

DRAWN & DRAFTED BY	HOU YI MIN	TOLERANCES: 0<L≦4 ±0.1; 4<L≦16 ±0.2; 16<L≦63 ±0.3; pin pitch ±0.2	ANGLE: ±1°	TITLE: T-H BOBBIN RM-10	
CHECKED & APPROVED BY			UNIT: MM	BOBBIN MATERIAL: PHENOLIC PM9630	UL REC. UL 94V-0
PIN SHINE INDUSTRIAL CO.,LTD. TEL:886-2-22990545 FAX:886-2-22990546			ORIGIN: SZ	PIN MATERIAL: CP WIRE	PIN TENSION LOAD: 1.0KG MIN
				DATE: OCT.20 '2005	DRAWING NO. P-1031 / REV. 4



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