

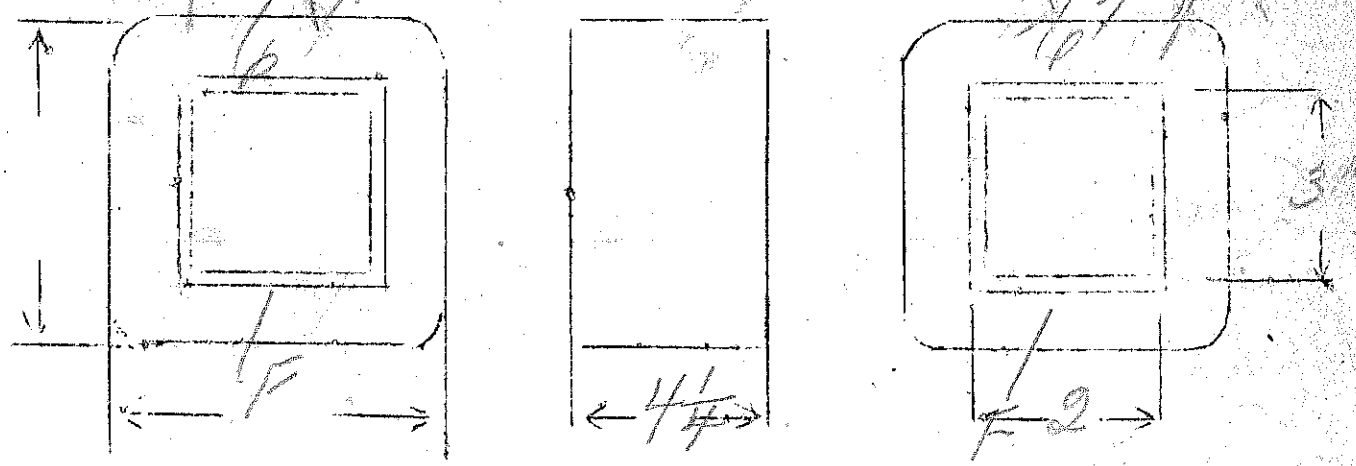
$E_{p1} - 120-110V$
 $E_{p2} - 120-110V$
 $E_s - 12\text{ Volts} - 85\text{amps}$

1KW - 5% Regulation
 for series or parallel
 $\frac{V}{I} = 1.12$

SPEC. NO. 1801

Winding	P ₁	P ₂	SEC			
Turns	134	134	14			
Taps	123	123	-			
Wind. Lgth.	3 3/4					
Wire Size	#12	#12	10 strands #11	if necessary wind 110		
T.P.L.	4L	4L	4 layers	separate winding and parallel		
Kind Term.	Sleeving		wire only.			
Term. Lgth.	10"	10"	10"			
Layer Insul.	KRAFT					
Wrapper	3L005GA	3L005GA	3L005GA			
TUBE	9L007		IMPREGNATION	VAFINSH		
CURE	2 x 3"					

0 Back all leads 8" flexible - supplied with
 110 White
 120 Blue with suitable identification markings

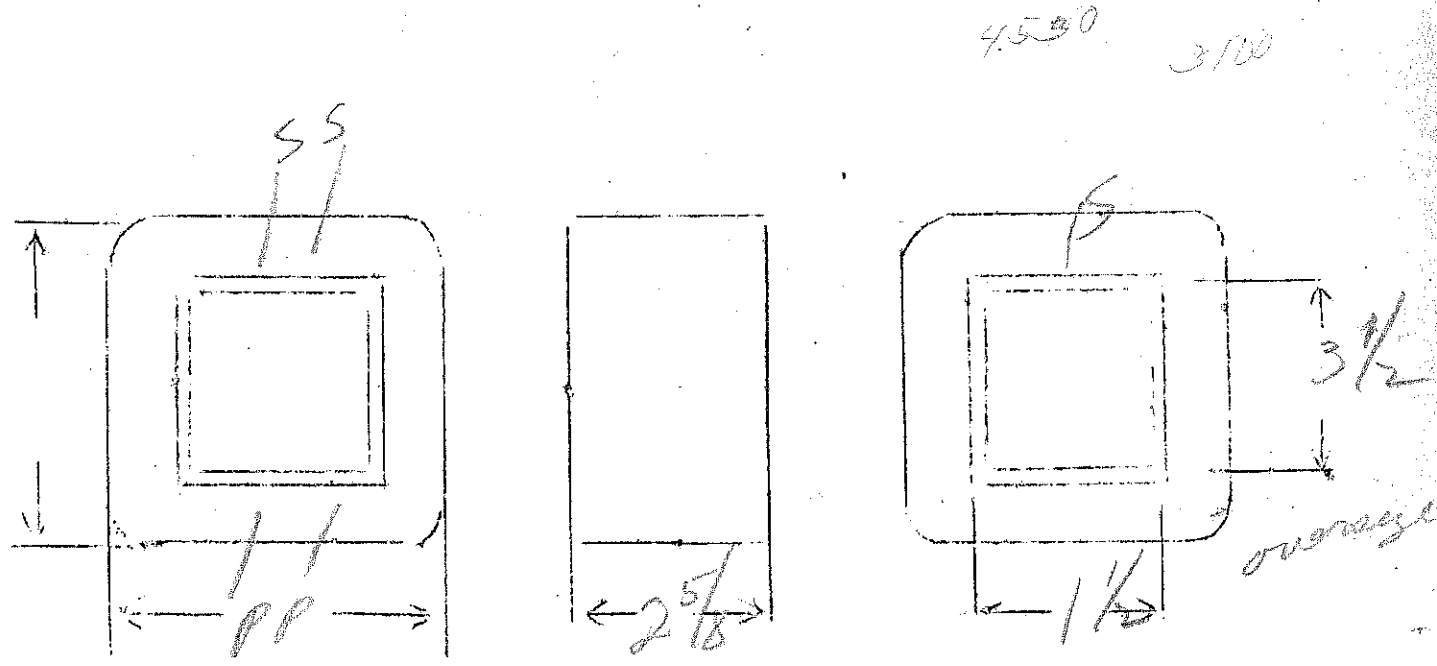


Ep-115
 Es - 4200VCT - 200 Ma

$$\frac{N}{E} = 1.17$$

SPEC. NO. 1802

Winding	PRI	SEC				
Turns	134	5300				
Taps		2650				
Wind. Lgth.	2 3/8	2 1/4				
Wire Size	#double 19	#28				
T.P.L.	5L	157-3 1/4				
Kind Term.	WIRE	ONLY				
Term. Lgth.	6"	6"				
Layer Insul.	Kraft	double 30#				
Wrapper	3L0057VC 2L0056A	3L0057VC 2L0056A				
TUBE	102007		IMPREGNATION		VARNISH.	
CURE	1 1/2 x 3 1/2					



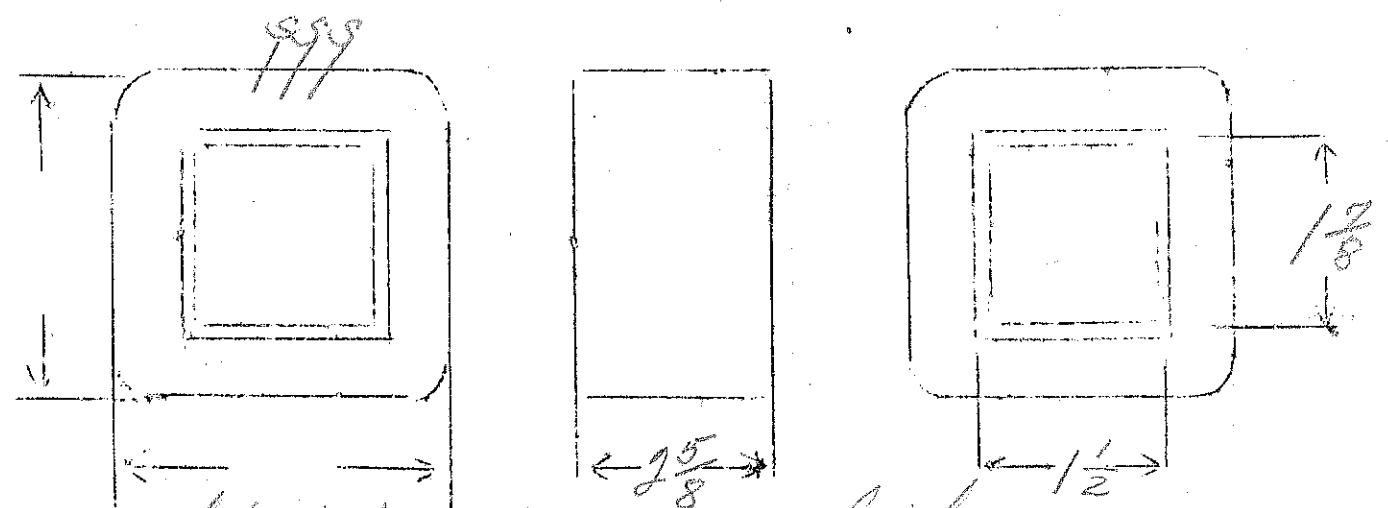
Ep - 110, 125V
 Es - 750VCT. - 175MA
 EF1 - 5V - 3Amps
 EF2 - 63V - 4amps

224

SPEC. NO. 1803

Winding	SEC	SHIELD	PRI	F ₁ ⁵⁷	F ₂		
Turns	1800	1	280	12	15		
Taps	900		247	-	-		
Wind. Lgth.	2 1/4		2 1/4				
Wire Size	#28	Copper Shield	#18	#17	double #17		
T.P.L.	150-12		49-6	one	layer		
Kind Term.	#20 Pencil	sil ca	#20 Pencil				
Term. Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 30W		KBAFT				
Wrapper	32007VC 22.0000	32007VC	32005GA		32005GA		
TUBE	82007			IMPREGNATION		double varnish	
CURE	1 1/2 x 1 3/8						

"SA" mtg - 2 grommets 1 3/8" apart



Pri - start - white start, yellow top, green finish.
 Sec - black - blue ct.
 F₁ - yellow
 F₂ - green

Ep - 110, 125

E₃ - 750 VCT - 175 ma

$\frac{N}{E} - 2.05$

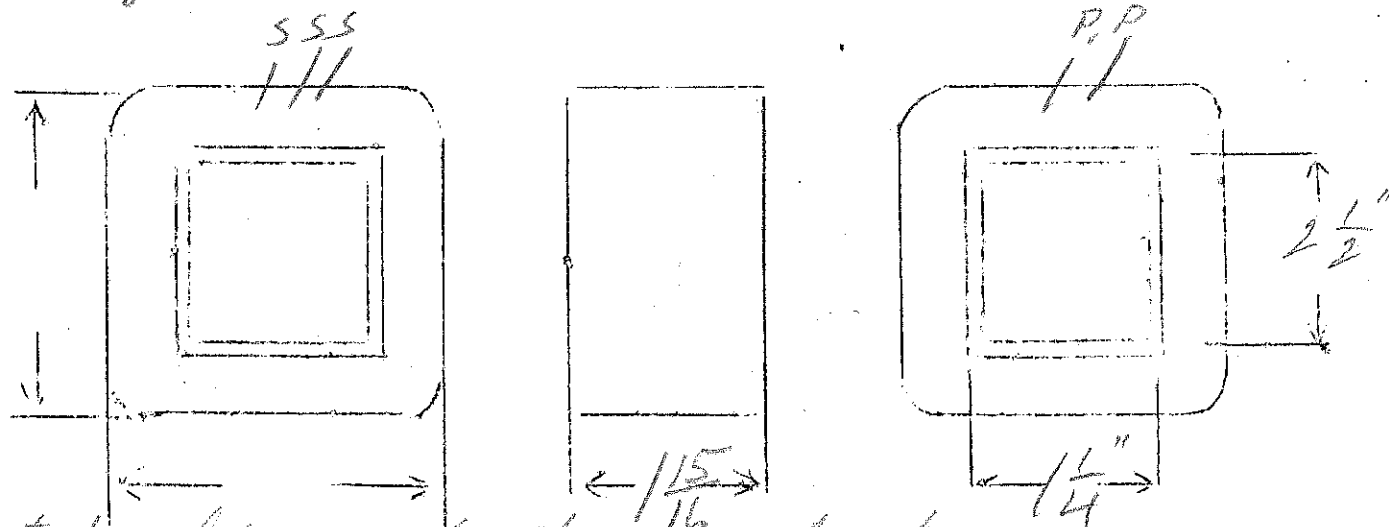
E_{F1} - 5V - 3 amps

E_{F2} - 6.3V - 4 amps

SPEC. NO. 1804

Winding	SEC	SHIELD	PRI	F ₁	F ₂
Turns	1620	1	257	11	14
Taps	810	-	226	-	-
Wind. Lgth.	1.75	-	1.75	-	-
Wire Size	#28	copper shunt	#19	#17	#14
T.P.L.	117-14	-	14-6	one layer	-
Kind Term.	#20 P Braid	sil Braid	#20 P Braid	WIRE	ON 4
Term. Lgth.	9	3	9	9	9
Layer Insul.	50 #	-	KRAFT	-	-
Wrapper	1L007VC 2L007A	1L007VC	2L007GA	-	2L007GA
TUBE	8L007	IMPREGNATION		<i>double sanded</i>	
CURE	1 1/4 x 2 1/2				

"SA" mtg - 2 grooves 1 7/8" apart



Pr - start white - yellow top, green finish
 Sec - black - blue or
 F₁ yellow
 F₂ green

Ep - 110, 125

Es - 750V - 175Ma

Ef1 - 5V - 3amps

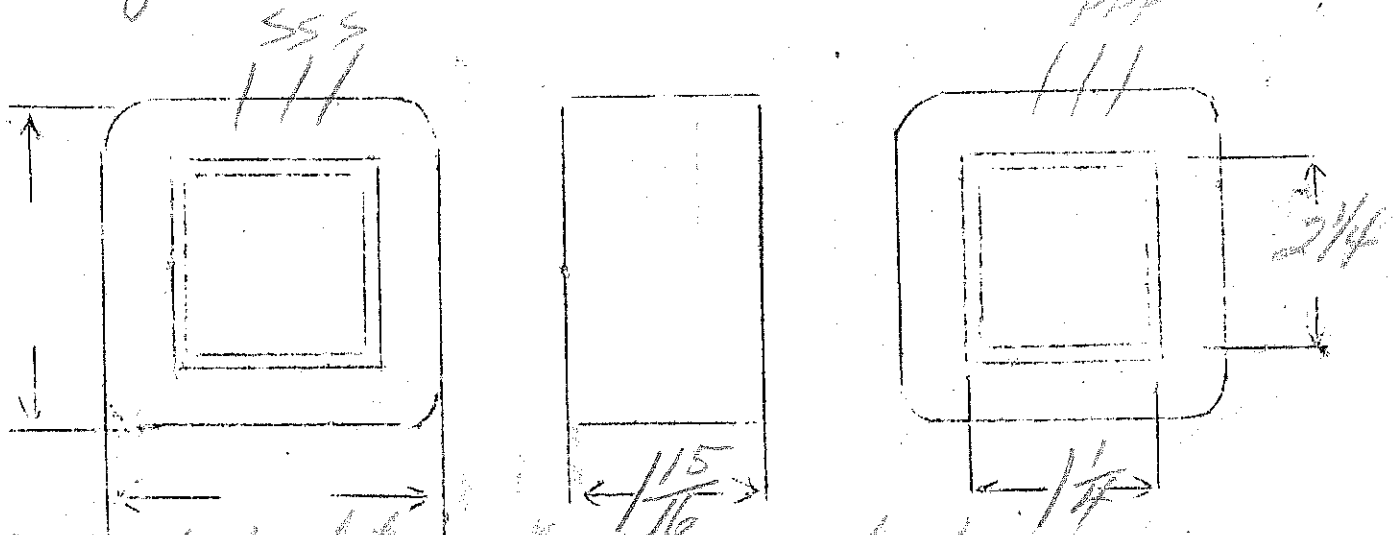
$\frac{N_1}{N_2} = \frac{222}{15}$

Ef2 - 6.3V - 4amps

SPEC. NO. 1805

Winding	SEC	SHIELD	PRI	F1	F2		
Turns	1800	1	278	12	15		
Taps	900		275	—	—		
Wind. Lgth.	1.75	1.75	1.75	—	—		
Wire Size	#29	skin stack	#20	#17	#15		
T.P.L.	130-14	1	42-7				
Kind Term.	#20 Pboard	sil bond	#20 Pboard	WIRE ONLY			
Term. Lgth.	9	3	9	9	9		
Layer Insul.	double 30#		double 40#				
Wrapper	12007VC 3L skin	12007VC	210076A		310076A		
TUBE	7L007			IMPREGNATION		VARNISH - special	
CURE	1 1/4 x 2 1/4						

SA mtg - 2 promete 1 1/8" apart.



Pri - start white, yellow tap - green finish
 Sec - Black, blue CT
 F1 - yellow
 F2 - green

Ep-10-115-125

Es-2500V tap at 750-1250-3500V

Ef1-11VCT-8amps

146

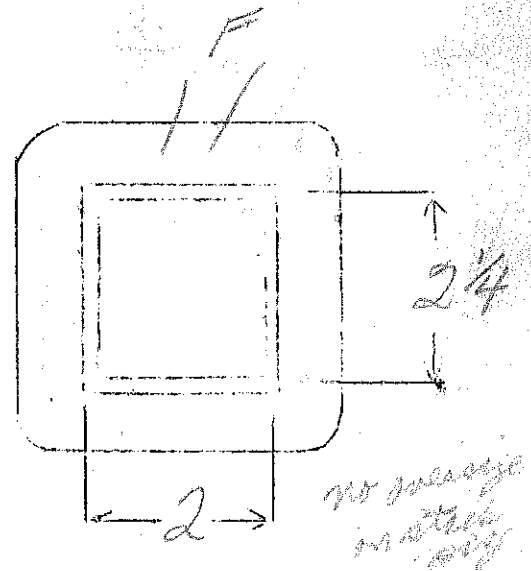
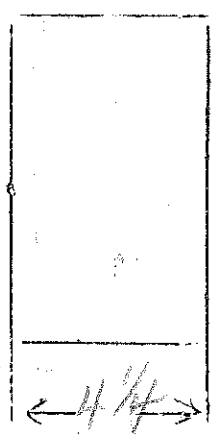
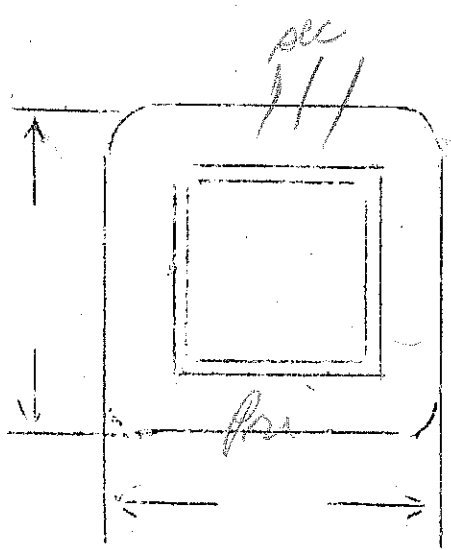
SPEC. NO. 1806

Winding	SEC	SHIELD	FIL	FIL		
Turns	4050	1	18	18		
Taps	2060 1210		16	9		
Wind. Lgth.	35/8	35/8	3/8			
Wire Size	#25	phn #25	#11	#12 cotton covered #12 Polyester		
T.P.L.	173-24					
Kind Term.	WIRE	ONLY				
Term. Lgth.	4"	4"	4"	4"		
Layer Insul.	double 30#		KRAFT			
Wrapper	3100 PVC	2105 GA	3105 GA	2105 GA 16018R		

TUBE 10L007 IMPREGNATION VARNISH

CURE 2 X 2 1/4

Primary side babel tap out



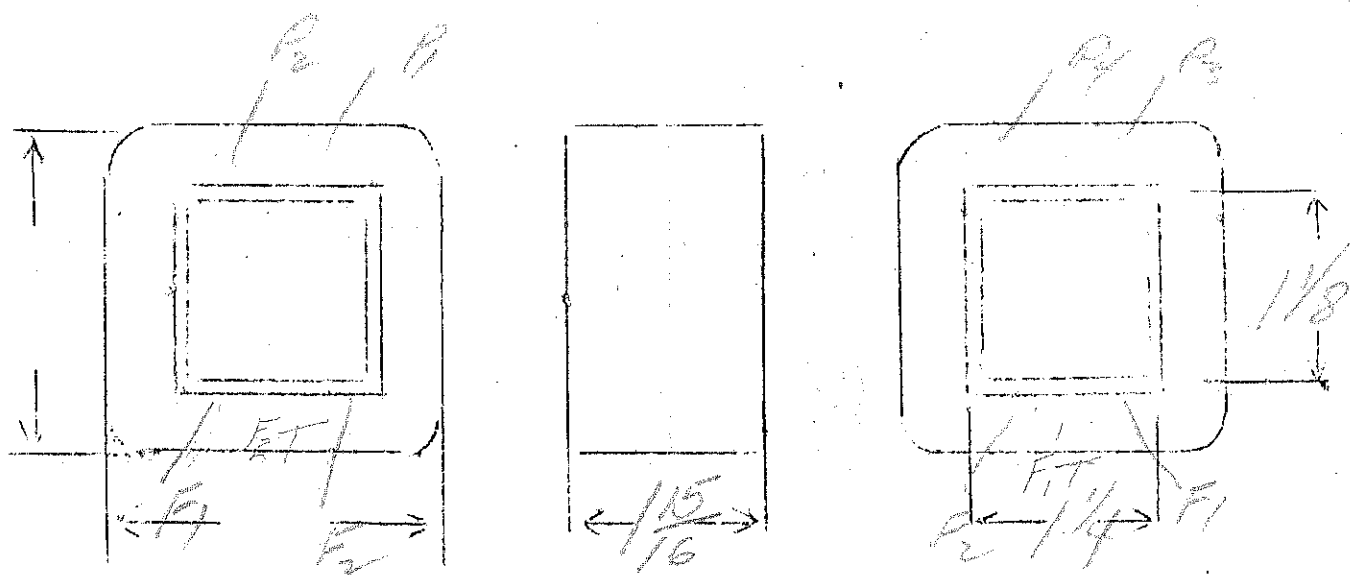
$E_p = 105 - 115 - 125$ *also 280* 5000V Ins.

$E_{F1} - 11V - 8 \text{ amp CT}$

$E_{F2} - 2.5V - 12 \text{ amp CT}$

SPEC. NO. 1807

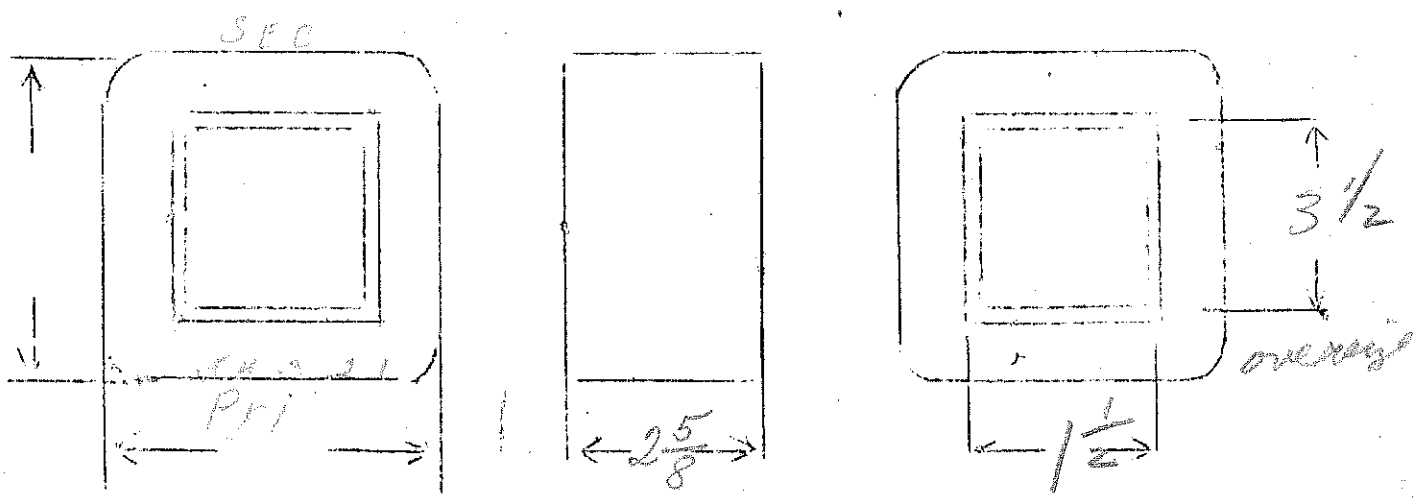
Winding	PR1	F ₁	F ₂				
Turns	500	48	11				
Taps	460	24	5				
Wind. Lgth.	1.75						
Wire Size	#21	#14	#12				
T.P.L.	53-1						
Kind Term.	WIRE ONLY						
Term. Lgth.	3"	3"	3"				
Layer Insul.	5077						
Wrapper	2L007GA	2L007VC	2L007VC				
		2L0070A	2L0070A				
TUBE	7L007			IMPREGNATION		VARNISH	
CURE	1 1/4 x 1/8						



Ep-110-115-120, 125 ✓ $\frac{N}{E} = 1.22$
 Es - 2600 VCT.

SPEC. NO. 1808

Winding	SEC	PR1				
Turns	3500	153				
Taps	1750	146				
Wind. Lgth.	$2\frac{3}{8}$	140-134				
Wire Size	#26	#16				
T.P.L.	26-28	4L				
Kind Term.	WIRE ONLY					
Term. Lgth.	6"	6"				
Layer Insul.	50#	KRAFT.				
Wrapper	2L007VC 2L005GA	2L005GA				
TUBE	10L007HL007VC		IMPREGNATION	VARNISH		
CURE	1 1/2 x 3 1/2					

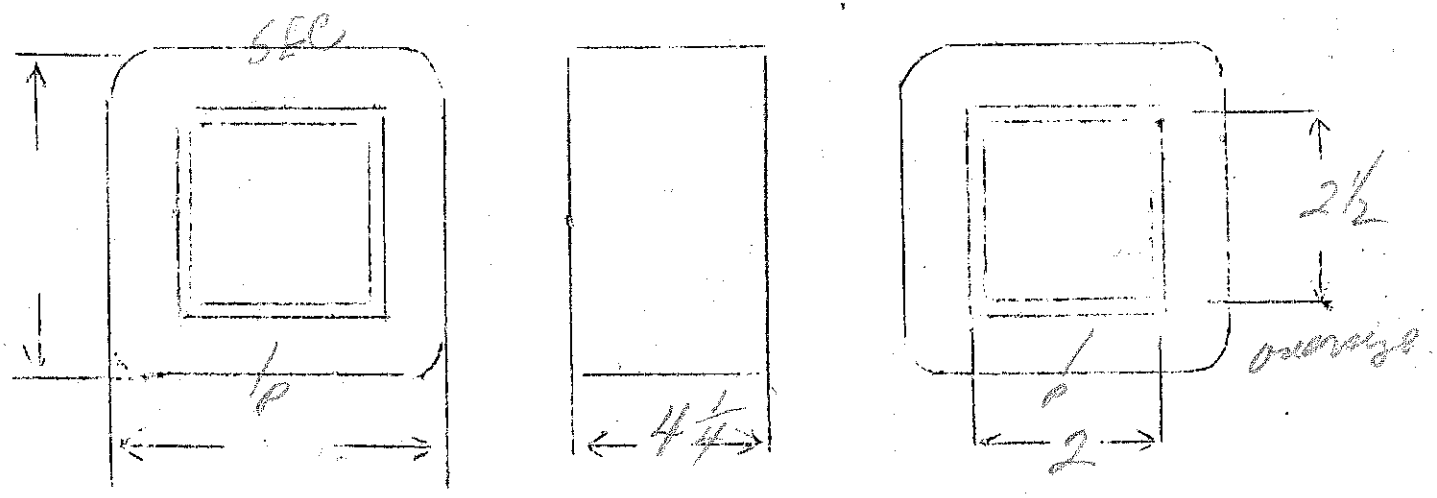


Ep-115
 Es-1000-1500-2000 Vcs side CT - 400 m

125

SPEC. NO. 1809

Winding	SEC	PRI				
Turns	3560 4210	144				
Taps	4130 1370 2750 699					
Wind. Lgth.	3 9/8					
Wire Size	#25	double #15				
T.P.L.	173	5L				
Kind Term.	WIRE ONLY					
Term. Lgth.	6"	6"				
Layer Insul.	double 40#	007 Kraft				
Wrapper	21005GA 21007VC 21056A	21005GA				
TUBE	1/2 1007 + 11007VC		IMPREGNATION	VARNISH		
CURE	2 x 2 1/2					



435

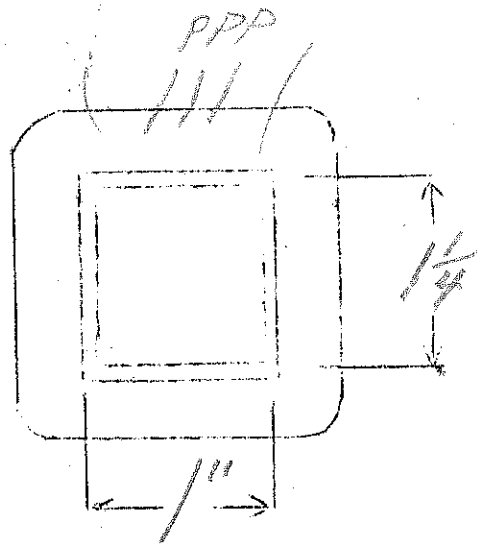
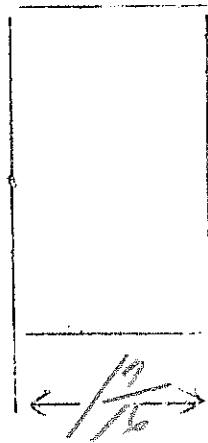
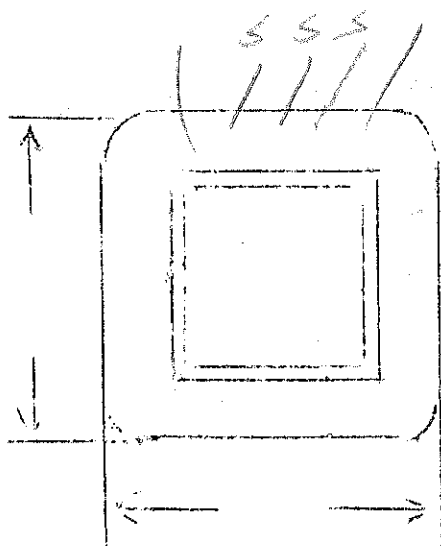
same as 6210A except Ep- 115 or 230V

445

SPEC. NO. 1810

Continuous

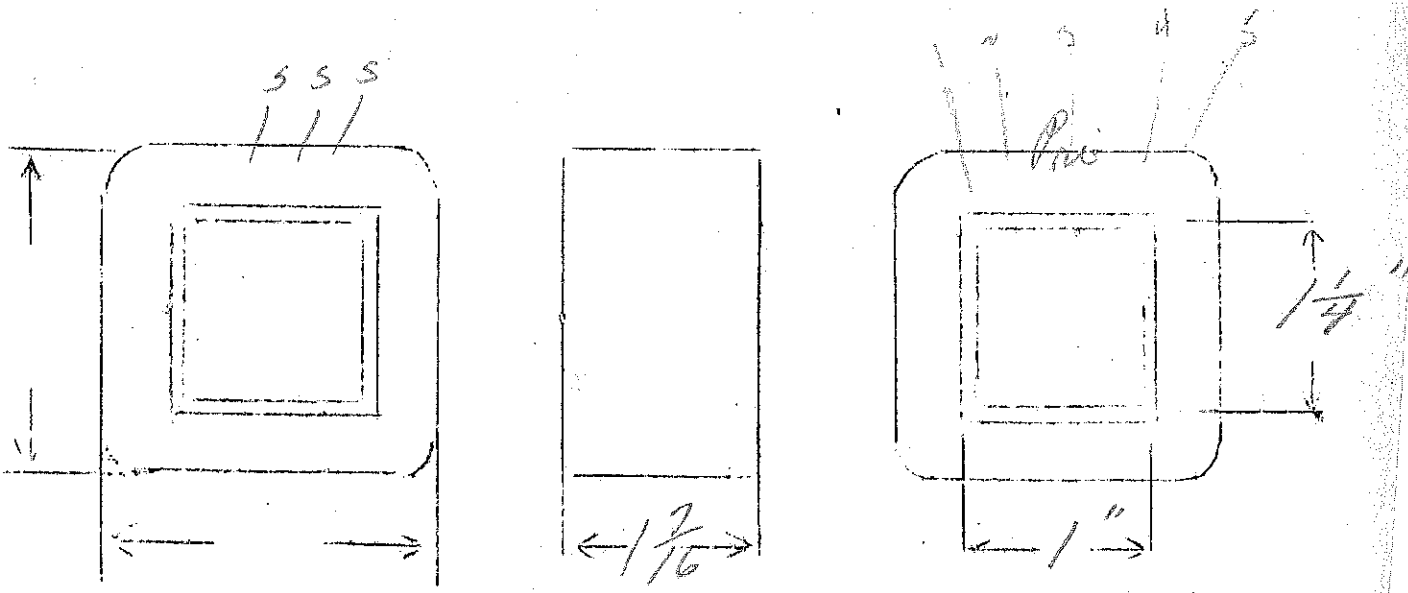
Winding	SEC	SHIELD	PRI ₁	PRI ₂	F ₁	F ₂
Turns	3000	74	510	510	31	25
Taps	1500	—	—	—	—	—
Wind. Lgth.	1.25	1.25	1.25	1.25	—	—
Wire Size	#36	#27	#27	#30	#21	#21
T.P.L.	215-14	74-1	74-7	103-5		
Kind Term.	#20 obrid	al B ₁	#20 obrid	#20 obrid	WIRE ONLY SLEEVING	
Term. Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	30#		40#	40#		
Wrapper	2L007VC	2L005VP		2L005GA	2L005GA	2L005GA
TUBE	162007				IMPREGNATION	VARNISH
CURE	1 x 1 1/4					



Samtac 6210 except $E_p = 115-130-155-230$

Continuous SPEC. NO. 1811

Winding	SEC	SHIELD	PRI	single wind		F ₁	F ₂
Turns	3000	215	575	120	340	31	25
Taps	1500		510			—	—
Wind. Lgth.	1.25	1.25	1.25	—	—	—	—
Wire Size	#36	#36	#27	#29	#31	#21	#21
T.P.L.	215-14		73-8	11-26	3L		
Kind Term.	#20 PPBraid	sil Braid	#20 Par Braid				
Term. Lgth.	9"	3"	9"	9"	9"	9"	9"
Layer Insul.	30#		40#				
Wrapper	2L007VC	2L005VP			2L005GA	2L005GA	2L005GA
TUBE	6L007			IMPREGNATION		VAPNLSH	
CURE	1x1/4						



$E_p - 115V$

106 watts

$E_s - 700V.C.T. - 200MA$

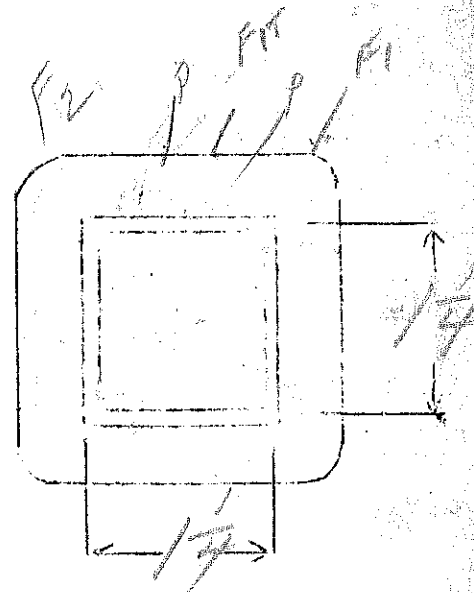
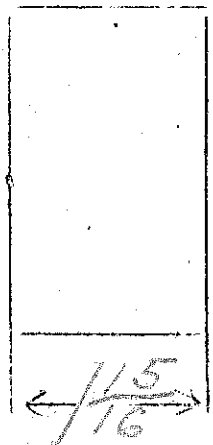
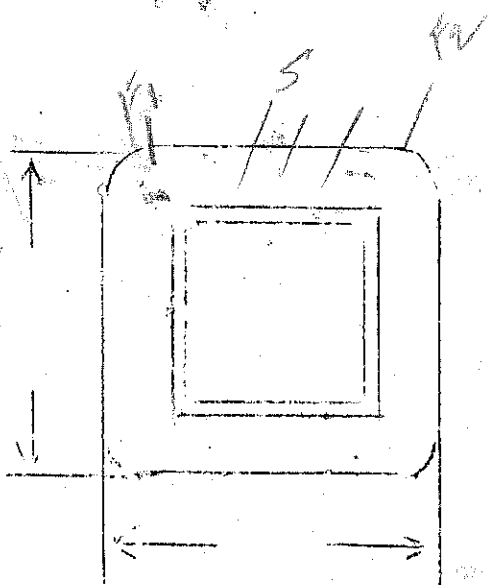
36

$E_{F2} - 5V - 3amp$

SPEC. NO. 1812

$E_{F1} - 6.3V.C.T. - 3amp$

Winding	SEC	SHIELD	PR1	F1	F2		
Turns	2760	138	415	25	20		
Taps	1380	—		12	—		
Wind. Lgth.	1.75	1.75	1.75	—	—		
Wire Size	#29	#29	#22	#18	#18	Use double	
T.P.L.	138-20		60-7				
Kind Term.	sil bond	sil bond	WIRE ONLY	WIRE ONLY			
Term. Lgth.	9	3	9	9	9		
Layer Insul.	30#		50#				
Wrapper	1L007VC	1L007VC	2L0076A	2L0076A	2L0076A		
TUBE	7L007			IMPREGNATION		VARNISH	
CURE	1/4 x 1/4						

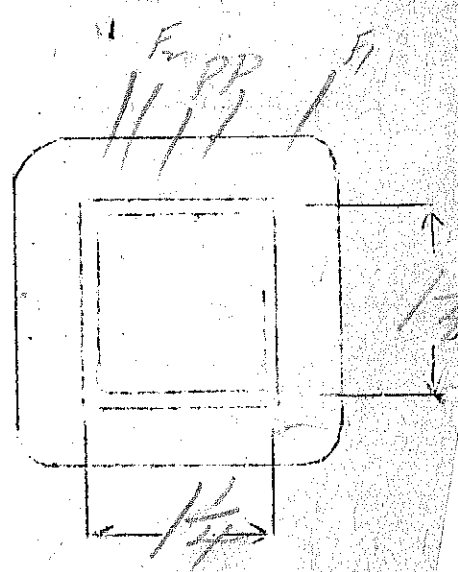
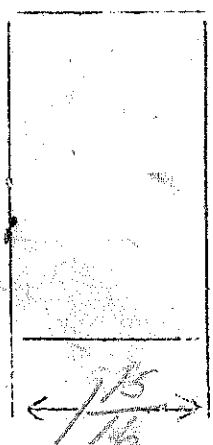
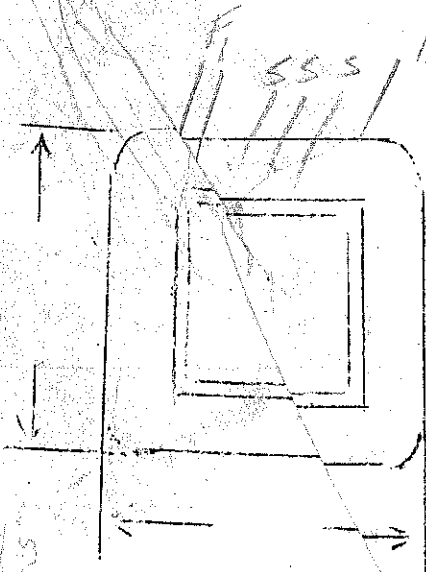


Ep-115
 Es-250V-125Mo
 Ef1-5V-3Amp.T.
 Ef2-0.3V-3Amp.T.

3.8

SPEC. NO. 1913

Winding	SEC	SHIELD	PRI	F2	Green F1		
Turns	3100	175	437	26	21		
Taps	1500	—	—	13	10		
Wind. Lgth.	1.75	1.75	1.75	—	—		
Wire Size	#2	#32	#22	#17	#17		
T.P.L.	12-18	175	55-8				6V
Kind Term.	Shielded	Shield	#20 Shield	WIRE ONLY			#16 yellow
Term. Lgth.	9"	3"	9"	9"	9"		white
Layer Insu.	16#		50#				250
Wrapper	11007KC	11005VP	21007SA	21007SA	21007CA		
TUBE	72007			IMPREGNATION			VARANSH
	1/4 x 1/4						



2.9
 2.35
 5.05

1.75
 1.75
 1.75

15
 16

40

Ep - 115

Es - 1200V CT - 150Ma

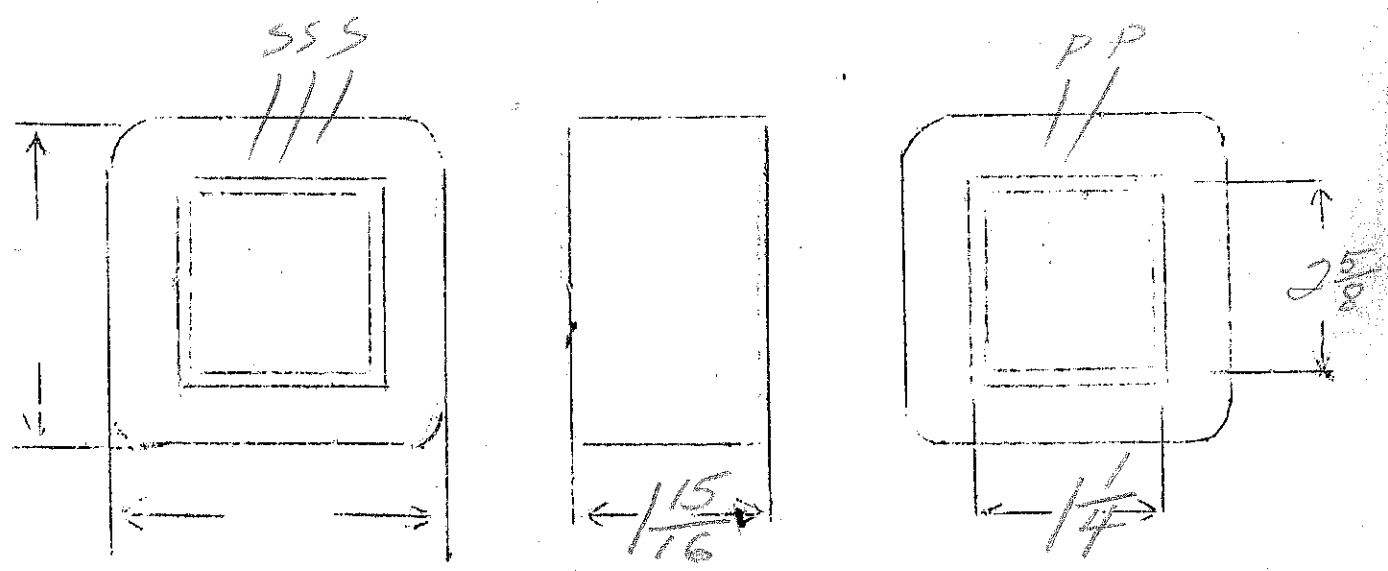
E_{F1} = E_{F2} = E_{F3} = 5V - 3 amps

100
30
310 watts

1.8

SPEC. NO. 1814

Winding	SEC	SHIELD	PRI	F ₁	F ₂	F ₃
Turns	2350	148	207	10	10	10
Taps	1175	-	-	-	-	-
Wind. Lgth.	1.75	1.75	1.75			
Wire Size	#30	#30#	#18	#18	#18	#18
T.P.L.	148-16	148	37-6	✓	✓	✓
Kind Term.	sil braid	WIRE ONLY	→	→	→	→
Term. Lgth.	3"					
Layer Insul.	40#	Kraft				
Wrapper	21007VC 51#	210076A	210076A			210076A
TUBE	210074/1007VC			IMPREGNATION		VARNISH
CURE	1/4 X 2 5/8					



800 V.C.T. - 85 MIA

F₂ 5V - 3 amp

3.40

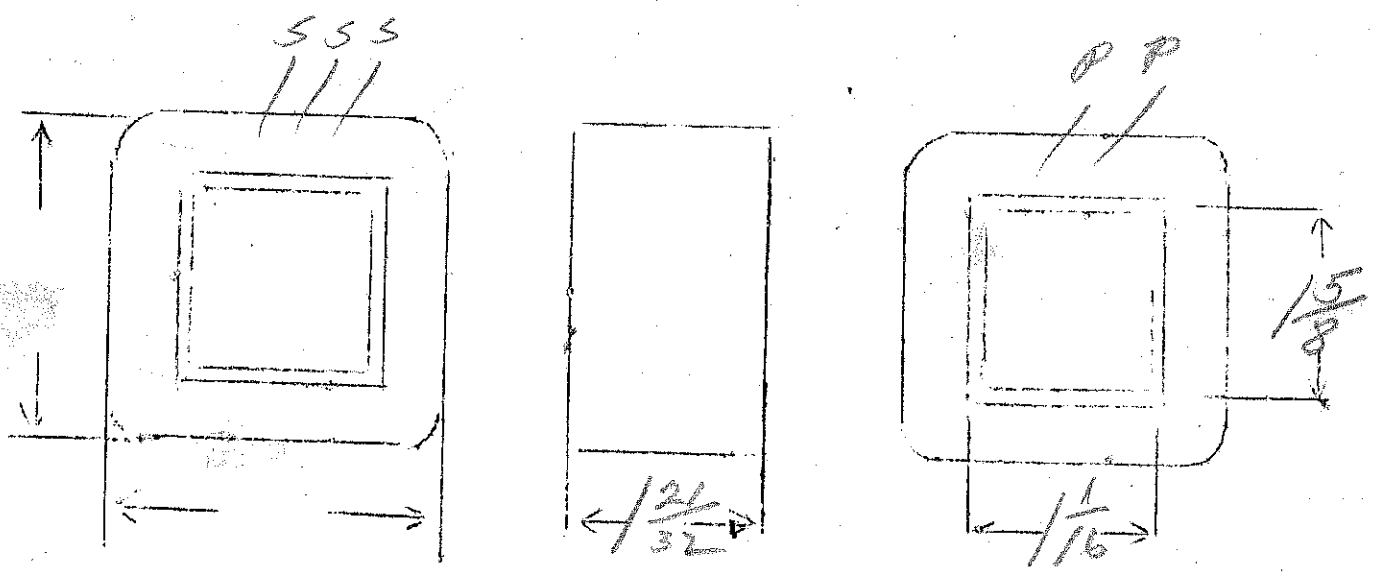
cmly

F₁ 6.5V C.T. - 3 amp

SPEC. NO. 1815

Winding	PRI	SHIELD	SEC	F ₁	F ₂		
Turns	390	56	3000	24	19		
Taps	-	-	1500	12	-		
Wind. Lgth.	1 15/32	1 15/32	1 15/32	-	-		
Wire Size	#23	#23	#33	#18	#18		
T.P.L.	56-7	56	167-18				
Kind Term.	WIRE ONLY		sil Braid	WIRE ONLY			
Term. Lgth.	3	3	3	3	3		
Layer Insul.	50#	-	double 20#	-	-		
Wrapper	1L007V	1L007V	2L005GA	3L005GA	3L005GA		
TUBE	7L007			IMPREGNATION		VARNISH	
CURE	1/16 x 1 7/8						

1300
00
125
34



Ep - yellow black green Red
 110, 115, 120, 125 V_{set}

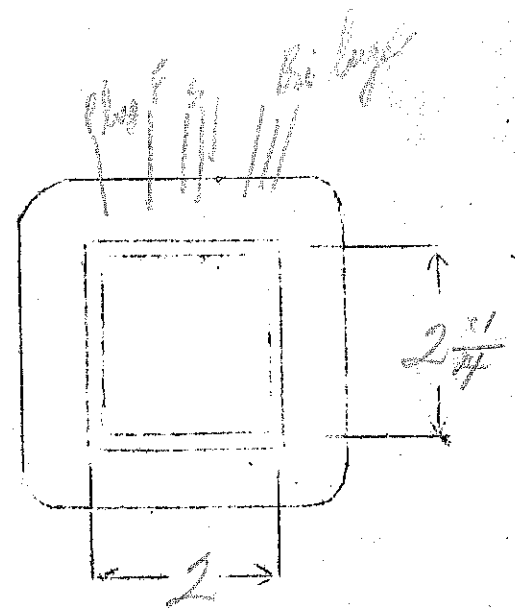
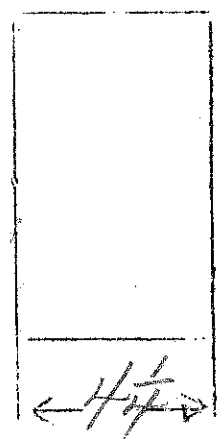
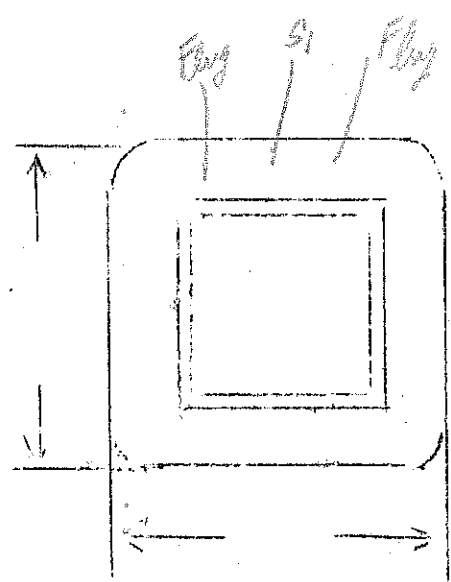
$\frac{N}{E} = 125$

Es - 2165 - 2080 - 1975

Ef - 11V - 7 amp CT.

SPEC. NO. 1816

Winding	SEC	SHIELD	PRI	FIL			
Turns	2960 2840	1	156 150	15			
Taps	2720		144 138	7			
Wind. Lgth.	3 $\frac{3}{4}$	3 $\frac{3}{4}$	—	—			
Wire Size	#25	shim stock	double #13	#14			
T.P.L.	182-17		7L				
Kind Term.	#20 Braid	sil Braid	#16 Braid	WIRE ONE			
Term. Lgth.	9" double	3"	9"	9"			
Layer Insul.	50#		.007 IMAET				
Wrapper	2L005GA 2L007VC 1L005GA	3L005GA	2L005GA	3L005GA			
TUBE	10L007+2L007VC			IMPREGNATION	VARNISH		
CURE	2x2 1/4						



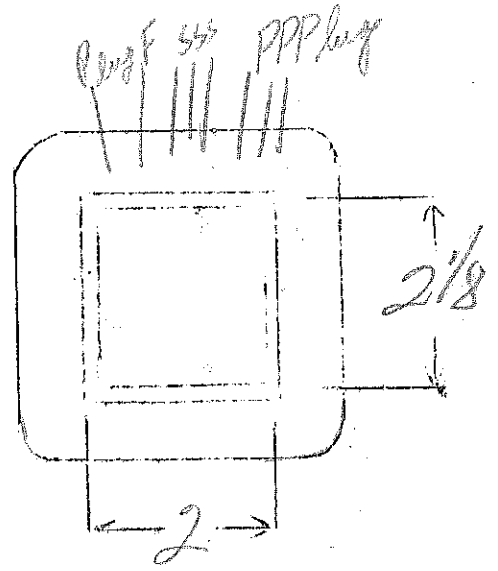
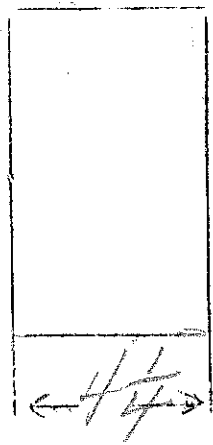
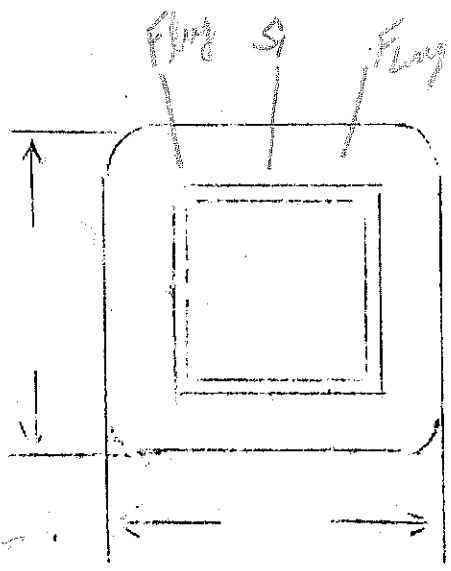
yellow black green red

R Ep - 110, 115, 120, 125V
 Es - 2165-2080-1975
 Ef - 11V - 7amp CT.

$\frac{N}{E} = 133$

SPEC. NO. 1817

Winding	SEC	SHIELD	PR1	FIL			
Turns	3160	1	166	16			
Taps	3020 2880		159 153	8			
Wind. Lgth.	3 3/4	3 3/4	146				
Wire Size	#25	shim stock	#11	#14			
T.P.L.	181		5L				
Kind Term.	#20 Braid	oil Br	#16 Braid	WIRE ONLY			
Term. Lgth.	9	3	9	3"			
Layer Insul.	double 50#		double 107 KRAFT				
Wrapper	21005GA 21007VC 1005GA	31005GA	21005GA	21005GA			
TUBE	101007 / 21007VC		IMPREGNATION		VARNISH		
CURE	2x2 1/8		2x2				



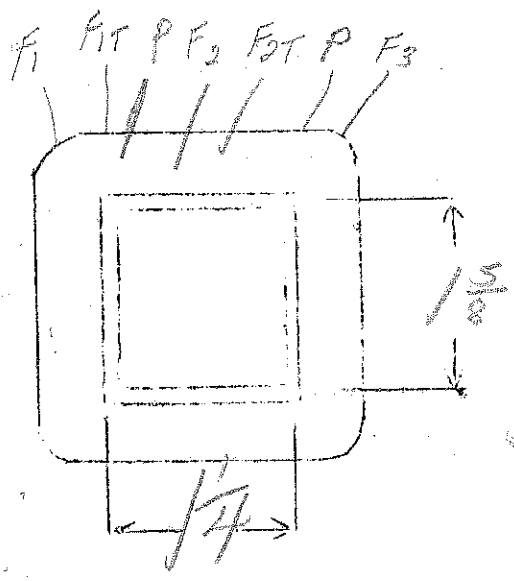
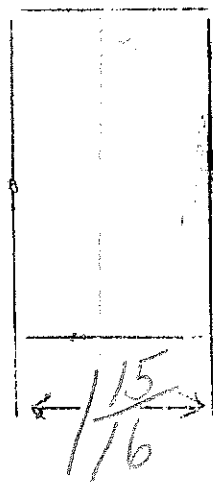
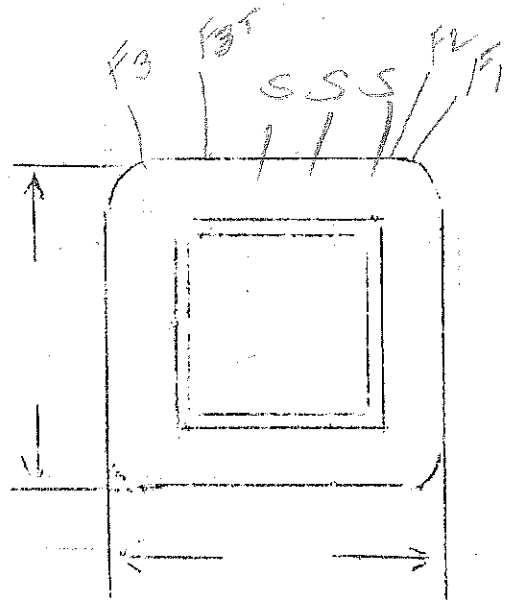
$E_p = 115V$
 $E_s = 350VCT. - 250MA$
 $E_{F1} = 5VCT. - 5amp$

$E_{F2} = 6.3VCT. - 8amps$
 $E_{F3} = 25VCT. - 10amps$

2.9

SPEC. NO. 1818

Winding	SEC	SHIELD	PRI	F ₁ ✓	F ₂	F ₃
Turns	1110	112	334	16	20	8
Taps	555			8	10	4
Wind. Lgth.	1.75	1.75	1.75	—	—	—
Wire Size	#28	#28	#20	#16	#13	Double #16
T.P.L.	1/2-10		48-7	F ₁ & F ₃ on same layer		
Kind Term.	oil B ₂	oil B ₂	WIFE ONLY			
Term. Lgth.	3"	3"	3"	3"	3"	3"
Layer Insul.	40#		50#			
Wrapper	2L007VC	2L007GA	2L007GA	2L007GA		2L007GA
TUBE	7L007	IMPREGNATION			VARNISH	
CURE	1 1/4 x 1 5/8					



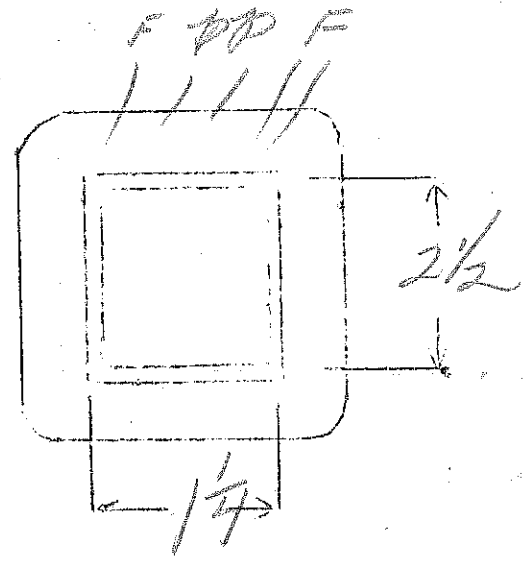
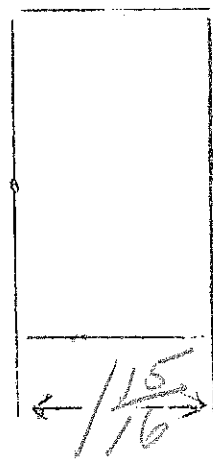
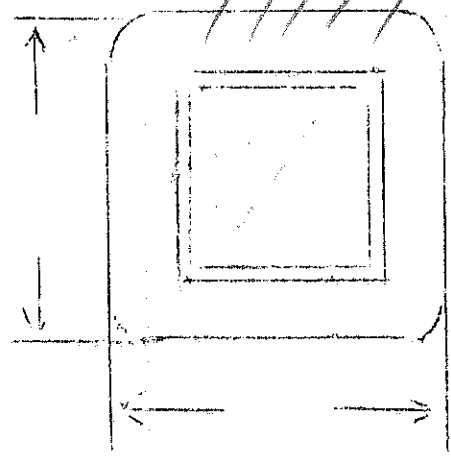
$E_p - 115$
 $E_s - 1000 \text{ V.C.T.} - 250 \text{ MA}$
 $E_{F1} - 5 \text{ V. } 6 \text{ amp}$
 $E_{F2} - 63 \text{ V. } 6 \text{ amp}$

$\frac{N}{E} = 1.84$

SPEC. NO. 1819

Winding	SEC	SHIELD	PRI	F ₁	F ₂		
Turns	2000	1	212	10	13		
Taps	1000		—	—	6		
Wind. Lgth.	1.75	1.75	1.75	—	—		
Wire Size	#28	shim stock	#19	#15	#15		
T.P.L.	120-18		43-5				
Kind Term.	#20 stranded	sil. Br.	WIRE ONLY	WIRE	ONLY		
Term. Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	50#		KRAFT				
Wrapper	21007VC	21007GA	21007GA		21007GA		
TUBE	7L007	IMPREGNATION			VARNISH		
CURE	1 1/4 x 2 1/2						

finishing heavy - 1000 Volt 21007VC
 12010GA
 $\frac{1}{4}$ 555 $\frac{1}{4}$



150V
 145V
 130V
 115V pri
 110

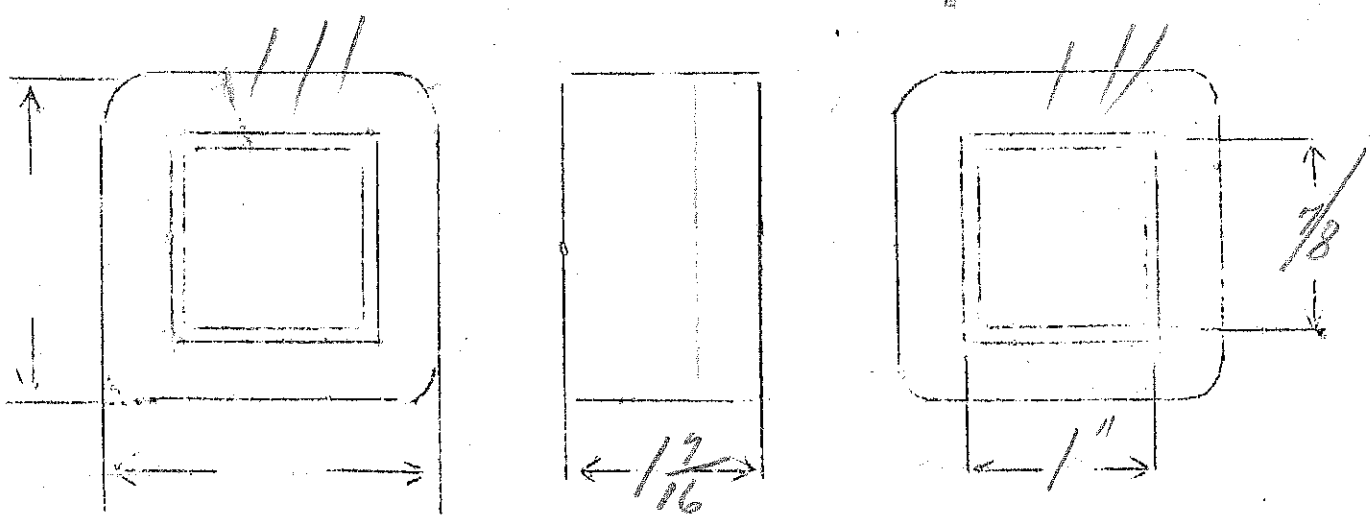
auto transformer 50 watt

65

SPEC. NO. 1820

Continuous

Winding	Primary					
Turns	750	275				
Taps	715	206 - 106				
Wind. Lgth.	1.25	1.25				
Wire Size	#27	#23				
T.P.L.	72-11	2. wind				
Kind Term.	sil Braid					
Term. Lgth.	3"	3"				
Layer Insul.	40#	50#				
Wrapper	210056A					
TUBE	42097		IMPREGNATION	VARNISH		
CURE	1 X 7/8 NW					

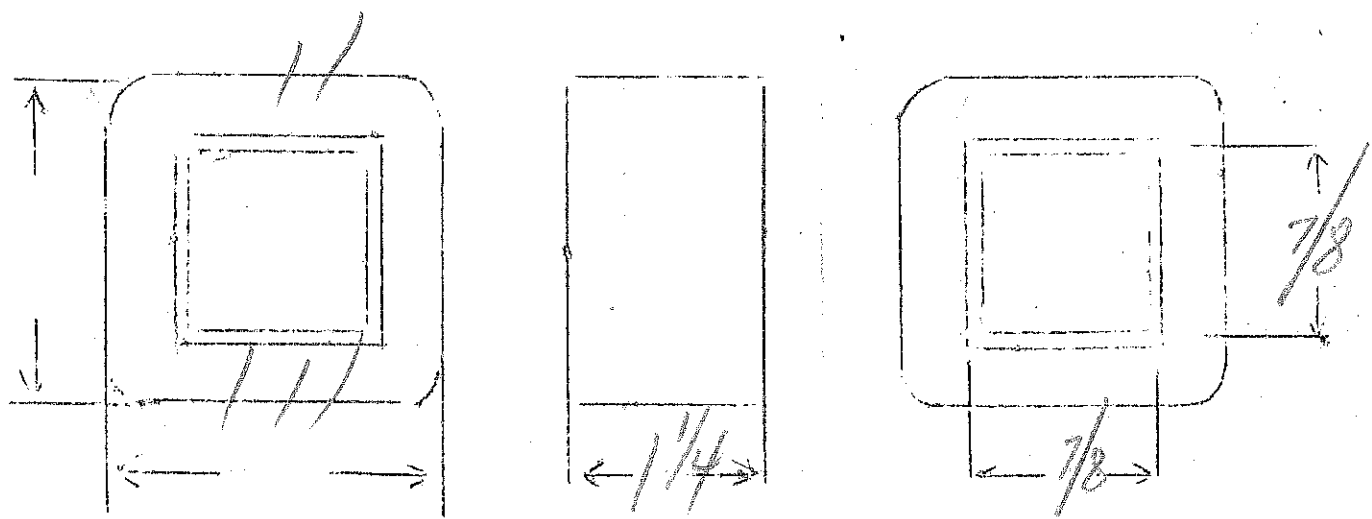


115V. primary
25V - 8amp CT

7.25

SPEC. NO. 1821

Winding	PRI	FIL				
Turns	835	20				
Taps		10				
Wind. Lgth.	17/16					
Wire Size	#28	# double #17				
T.P.L.	70-12	2 layers				
Kind Term.	silb	wire only				
Term. Lgth.	3"	3"				
Layer Insul.	40#	005				
Wrapper	210056A	210056A				
TUBE	7L007		IMPREGNATION	VARNISH		
CURE	7/8 x 7/8	2x2				

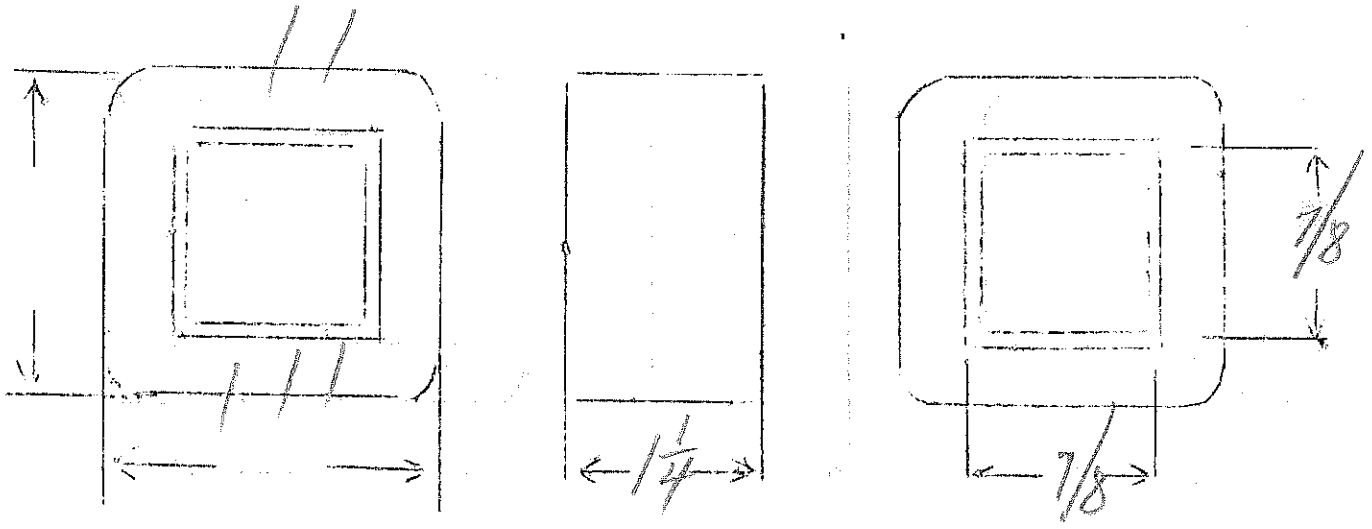


6.3V - 3.25 amps

7.25

SPEC. NO. 1822

Winding	PRI	FIL				
Turns	835	51				
Taps	-	25				
Wind. Lgth.	1 1/6					
Wire Size	#28	#18				
T.P.L.	70-12					
Kind Term.	sil Br	wo				
Term. Lgth.	3"	3"				
Layer Insul.	40#	-				
Wrapper	2L005GA	2L005GA				
TUBE	7L007		IMPREGNATION		VADNISH	
CURE	7/8 x 7/8	2x2				

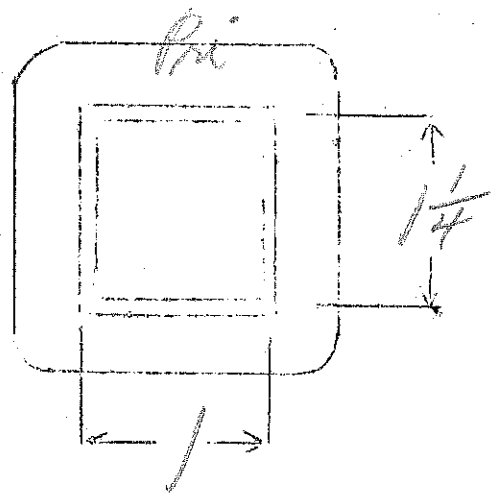
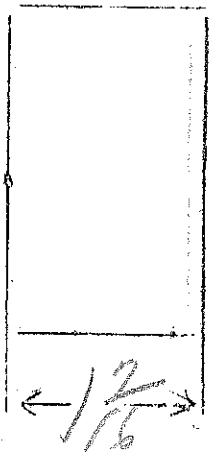
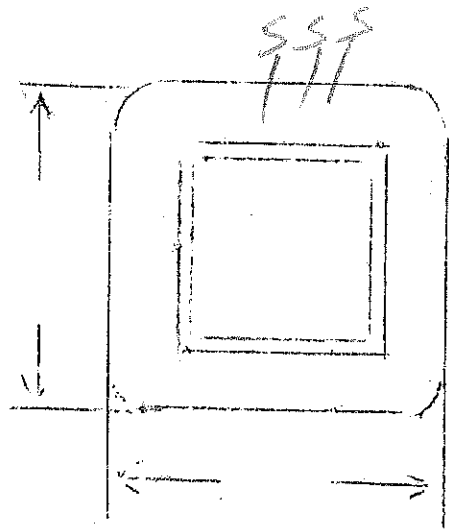


Same as 6210 except Ep - 145,155V/ct.

SPEC. NO. 1823

Continued

Winding	SEC	SHIELD	PRI		F ₁	F ₂	
Turns	3000	215	510	178	31	25	
Taps	1500	—	—	—	—	—	
Wind. Lgth.	1.25	—	1.25	1.25	—	—	
Wire Size	#36	#36	#27	#28	#21	#21	
T.P.L.	215-14	215	73	80	—	—	
Kind Term.	#20 Braid	sil Br	#20 Braid	#20 Braid	WIRE ONLY		
Term. Lgth.	9	3	9	9	9	9	
Layer Insul.	double 16#	—	40#	40#	—	—	
Wrapper	1L007VC	1L005VP	?	2L005SA	2L005SA	2L005SA	
TUBE	6L007			IMPREGNATION			
CURE	1X 1 1/4						



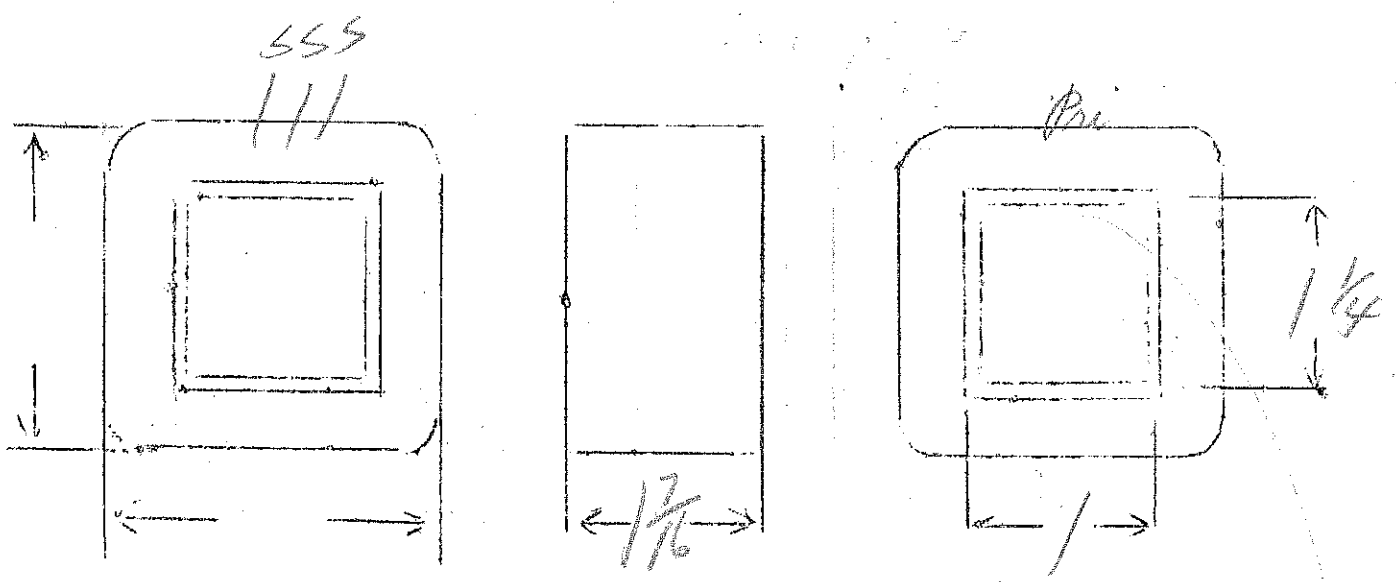
Names 6210 except Ep = 110, 125, 220 230

443

SPEC. NO. 1824

Continuous

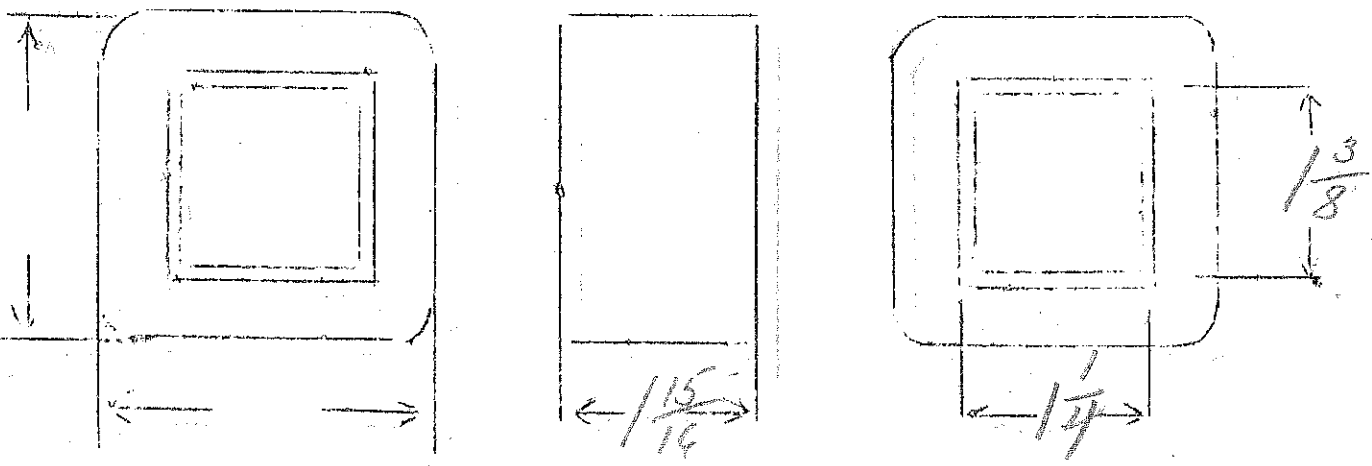
Winding	SEC	SHIELD	DRI	560	F1	F2
Turns	3000	215	560	480	31	25
Taps	1500	-	510	420	-	-
Wind. Lgth.	1.25	-	1.25	1.25	-	-
Wire Size	#36	#36	#27	#30	#21	#21
T.P.L.	215-14	215	93-8	115-5	-	-
Kind Term.	#20 Round	Albr	#20 Round	#20 Albr	WIRE ONLY	
Term. Lgth.	9	3	9	9	9	9
Layer Insul.	double 16#		40#	40#	-	-
Wrapper	KL007VC	1V005VF		2L005GA	2L005GA	2L005GA
TUBE	6L007			IMPREGNATION	VARNISH	
CURE	1x1 1/4		2x2			



Ep - 11.7
 Es - 650 V.C.T. - 250 Ma (650 at 150 Ma)
 Ef1 - 5V - 3 amp
 Ef2 - 2.5V - C.T. - 10 amp
 YAF
 327

SPEC. NO. 1875

Winding	SEC	SHIELD	PRI	F ₁	F ₂		
Turns	2300	130	383	18	9		
Taps	1150	—	—	—	5		
Wind. Lgth.	1.75	1.75	1.75	—	—		
Wire Size	#29	#29	#21	#18	#13		
T.P.L.	130-18	130	55-7				
Kind Term.	#20/br	oil br	#20 4/br	WIRE	ONLY		
Term. Lgth.	9	3	9	9	9		
Layer Insul.	double 20#		50#				
Wrapper	1L007VC	1L007VC	2L007GA	2L007GA	2L007GA		
TUBE	7L007	IMPREGNATION			VARNISH		
CURE	1/4 x 3/8						



334
 176
 20

Ep - 110, 115

E_S - 880V.C.T. 200 ma

300V.d.c. at 180Ma

E_{F1} - 6.3V - 2 amp C.T.

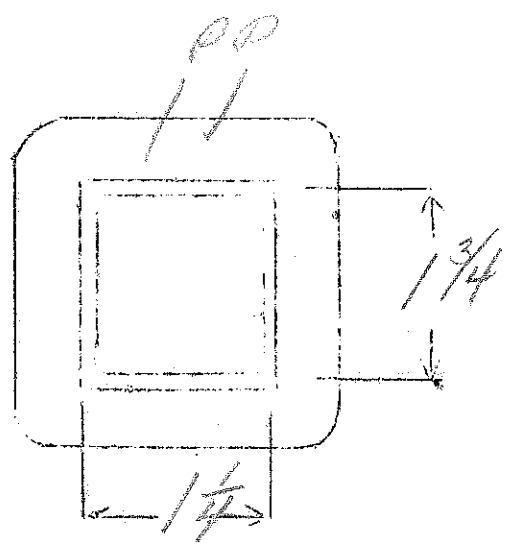
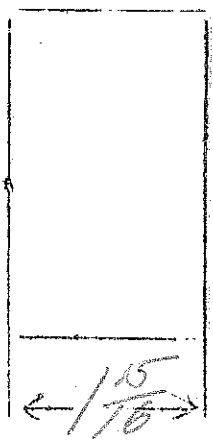
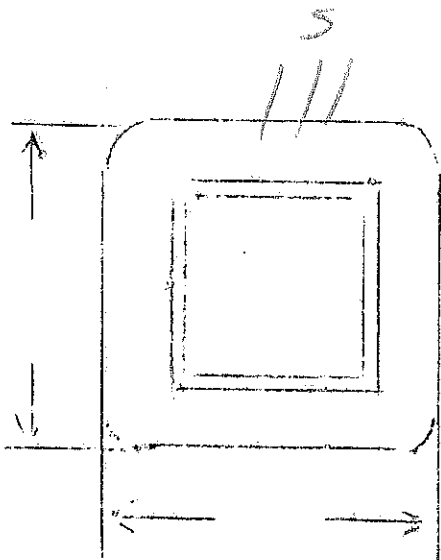
5V - 2 amp

E_{F2} - 6.3V - 2 amp C.T.

2.571

SPEC. NO. 1926

Winding	SEC	SHIELD	PR1	F ₁	F ₂	F ₃
Turns	2450	137	296	14	18	18
Taps	1225				9	9
Wind. Lgth.	1.75	1.75	1.75	—	—	—
Wire Size	#29	#29	#21	#20	#20	#20
T.P.L.	137-18	137	50-6		1 layer	
Kind Term.	#20 Braid	silver	#20 Braid	WIRE	ENCL. SLEEVING	
Term. Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	double 20#		50#			
Wrapper	2L007VC	1L007VC	2L007GA	2W076A	2W076A	2L0076A
TUBE	7L007			IMPREGNATION		VARNISH
CURE	1/4 X 1 3/4					



$E_p - 115V$

$E_s - 850VGT - 75MA$

$E_f - 1.5V - 2amps$

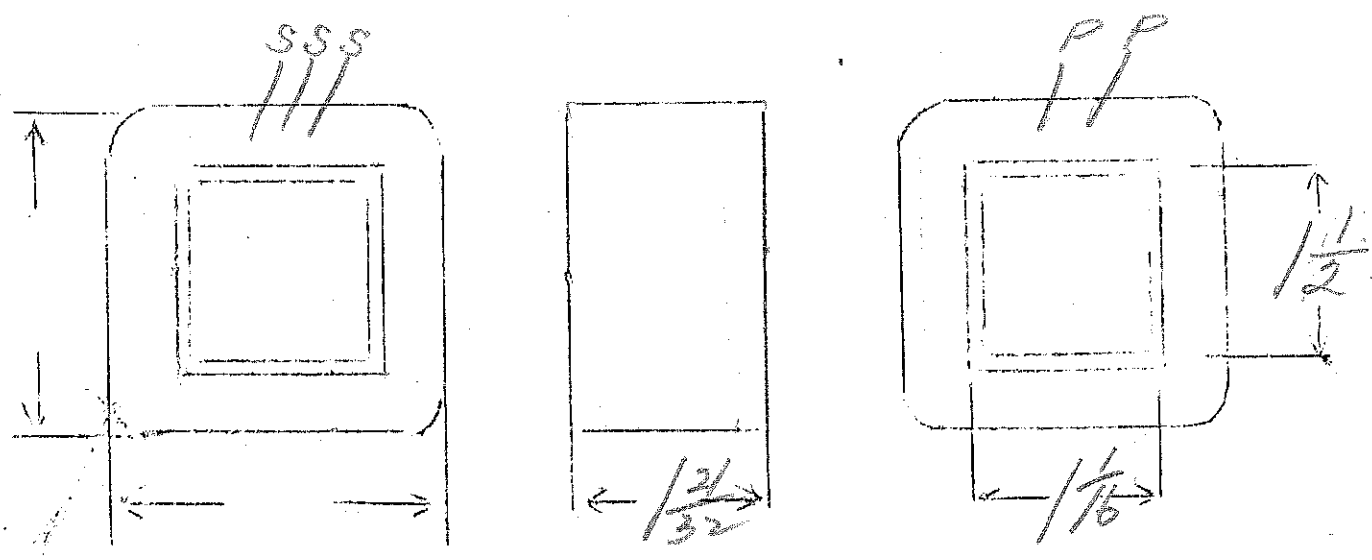
$E_{F1} - 7.5V - 2.25amps$

3.63

$E_{F2} - 7.5V - 4.5amps$

SPEC. NO. 1821

	Layer 0	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5
Winding	SEC	SHIELD	PRI	F ₁	F ₂	F ₃
Turns	3400	190	4/8	30	30	6
Taps	1700		—	15	15	3
Wind. Lgth.	$1\frac{15}{32}$	$1\frac{15}{32}$	$1\frac{15}{32}$	—	—	—
Wire Size	#34	#34	#23	#19	#17	#20
T.P.L.	190-18		53-8	white	Blue	Red
Kind Term.	#20 PBrind	# silver	#20 PBrind	WIRE	ONLY	
Term. Lgth.	9	3	9	9	9	9
Layer Insul.	double 20#	—	50#	—	—	—
Wrapper	2L007VC 2L005GA	1L007VC	2L005GA	2L005GA		2L005GA
TUBE	17L007			IMPREGNATION		VARNISH
CURE	$1\frac{1}{16} \times \frac{1}{2}$					



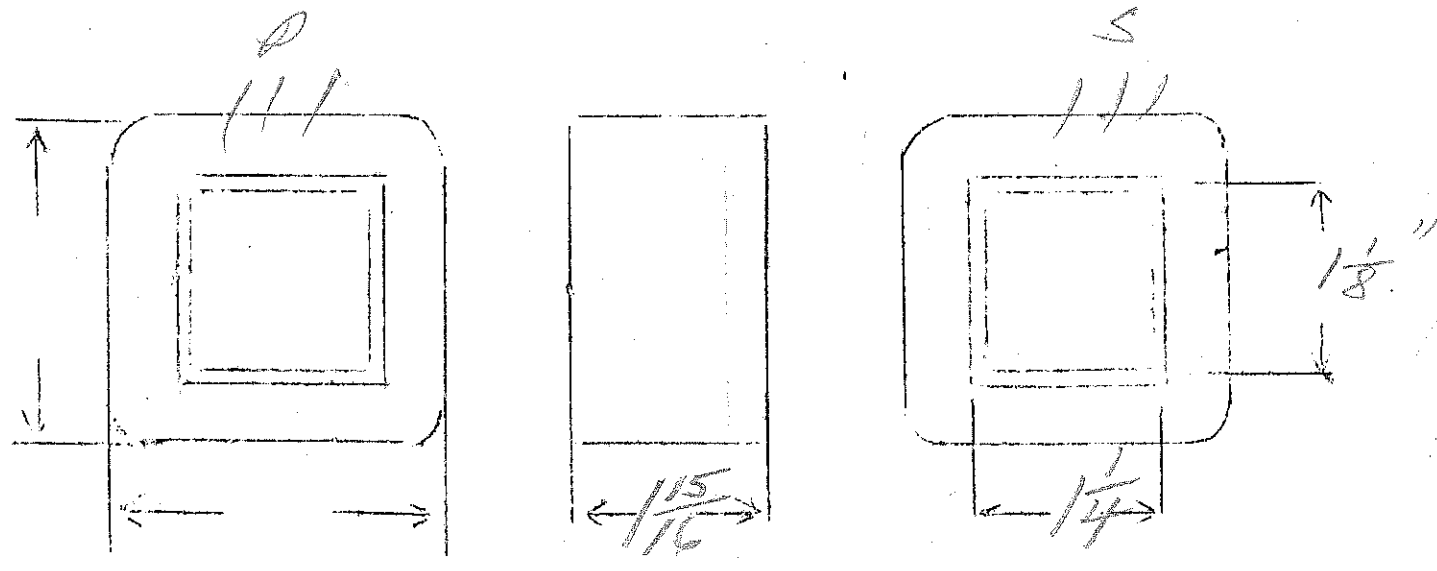
Ep-110-120

5V. CT- 20 amps - 5000 Volt. Insulation

100 watts 40

SPEC. NO. 1828 (F728)

Winding	PRI	FIL				
Turns	480	22				
Taps	440	11				
Wind. Lgth.	1.75	1.75				
Wire Size	#21	double #12				
T.P.L.	55-8					
Kind Term.	WIRE	ONLY				
Term. Lgth.	3"	3"				
Layer Insul.	50#					
Wrapper	210077C 210076A	210077C 210076A				
TUBE	2L007		IMPREGNATION		VARNISH	
CURE	1 1/4" x 1 1/8"					



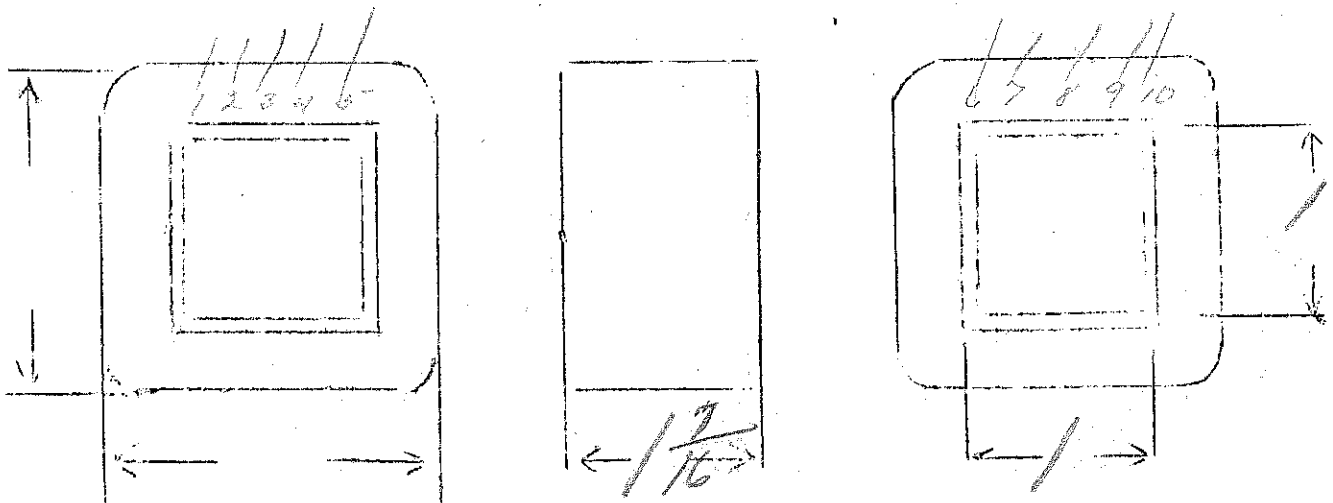
1-wrap sec
 tapped every 5 volts 555
 75 to 115V

Continuous

SPEC. NO. 1929

Winding	PRI						
Turns	415	222					
Taps		194-167-139-111-83-55-28					
Wind. Lgth.	1.25	1.25					
Wire Size	#26	#23					
T.P.L.	60-7	SW					
Kind Term.	WIRE #20 0.18 wind						
Term. Lgth.	6"	6"					
Layer Insul.	4/8"						
Wrapper		20050A					
TUBE	42007		IMPREGNATION		VARNISH		
CURE	1X1						

special req - see SW



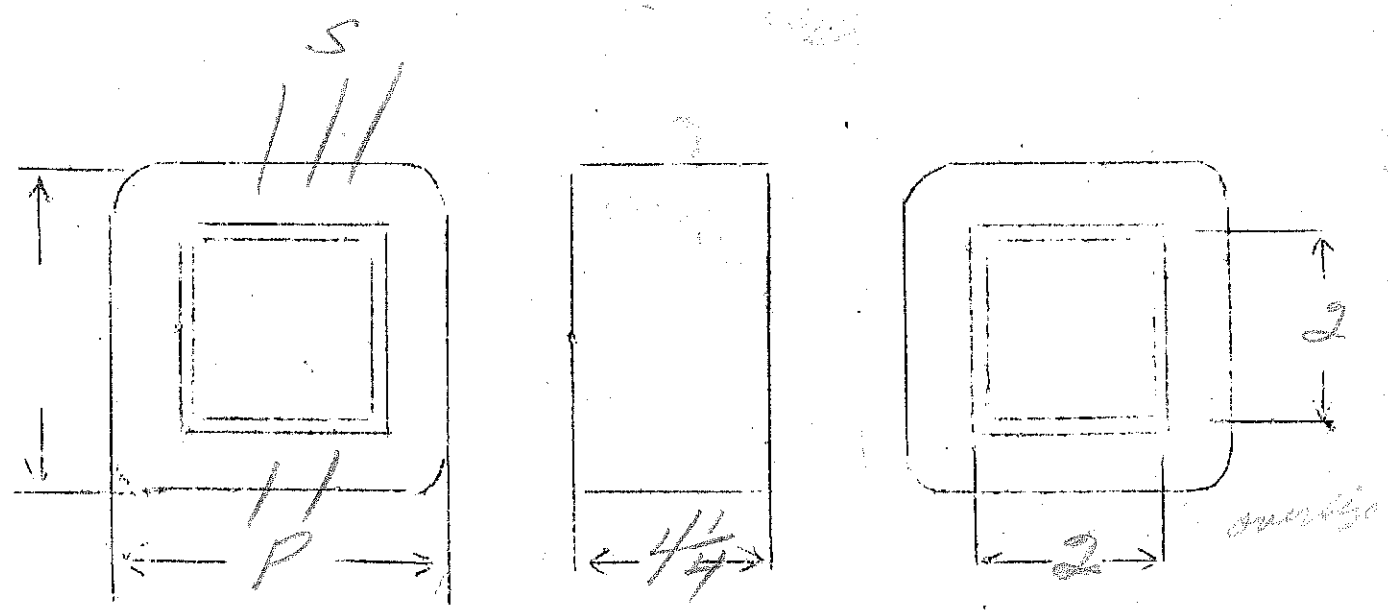
Ep-115
 Es - 3000VCT-500Ma

750 Watts

148

SPEC. NO. 1830

Winding	SEC	FRI				
Turns	4800	170				
Taps	2400					
Wind. Lgth.	3 3/4	3 3/4				
Wire Size	#25	#12				
T.P.L.	172-28	52				
Kind Term.	WIRE ONLY					
Term. Lgth.	6"	6"				
Layer Insul.	double 21007VC	.007 21005GA				
Wrapper	31005GA	14010RR				
TUBE	10L007+21007VC		IMPREGNATION	VARNISH		
CURE	2x2					



Ep-115

$E_{S1} = E_{S2} = 750V, 125MA$

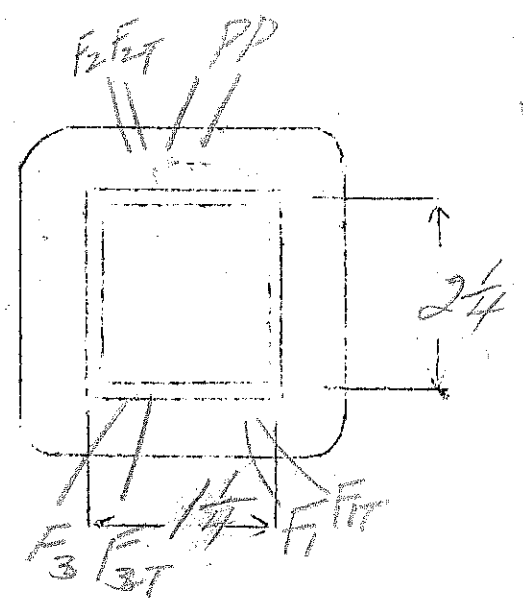
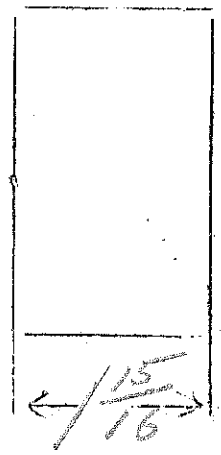
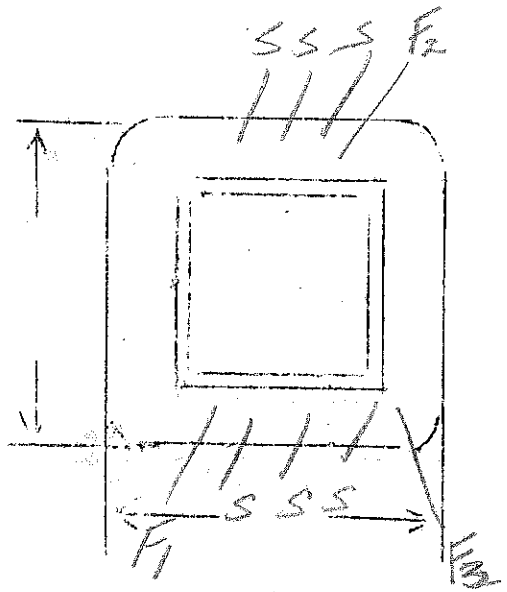
$E_{F1} = E_{F2} = 5V - 3amps CT.$

2.18

$E_{F3} = 6.3V - 4amps CT.$

SPEC. NO. 1831

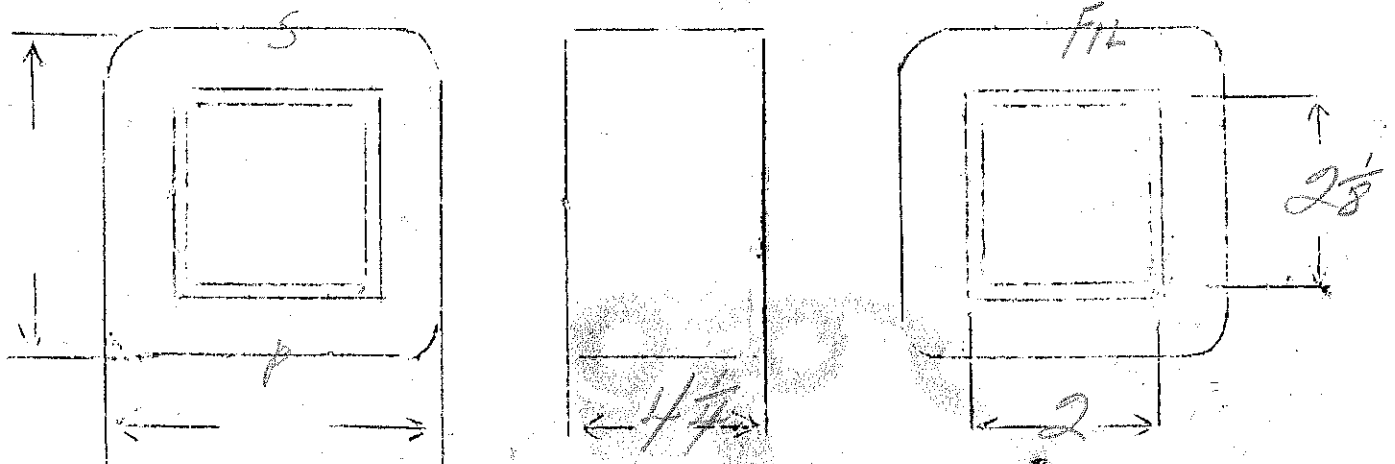
Winding	SEC ₁	SEC ₂	SHIELD	PRI	F ₁	F ₂	F ₃
Turns	1780	1780	179	250	15	12	12
Taps	890	890	—	—	7	6	6
Wind. Lgth.	1.75	1.75	1.75				
Wire Size	#32	#32	#32	#20	double #20	#18	#18
T.P.L.	179-10	179-10	179	50-5			
Kind Term.	#20 PBrand	#20 PBrand	silver	#20 PBrand	WIFE ONLY		
Term. Lgth.	9	9	3	9	9	9	9
Layer Insul.	double 16#	double 16#		50#	—	—	—
Wrapper	2L007VC 2L 2L	2L007VC 2L 2L	1L007VC	2L007GA	2L009GA		2L007GA
TUBE	9L007			IMPREGNATION		VARNISH	
CURE	1 1/4 x 2 1/4						



$E_p = 110, 115, 125V$
 $E_s = 2220, 2000, 1000V - 350Ma$
 $E_f = 5V - 20amp CT.$

SPEC. NO. 1832

Winding	SEC	PRI	FIL			
Turns	3660	183	8			
Taps	3260 1630	170 162	4			
Wind. Lgth.	35/8	—	—			
Wire Size	#26	#11	#10 1/2 Rublon covered			
T.P.L.	204	33-6	.			
Kind Term.	WIPE ONLY	—	—			
Term. Lgth.	6" 11	6"	6"			
Layer Insul.	30# 3L507VC					
Wrapper	3L005GA	3L005GA	2L005GA 1L010RR			
TUBE	10L007 + 1L007VC		IMPREGNATION	VARNISH		
CURE	2 x 2 1/8					



0 110
 0 115
 125 115

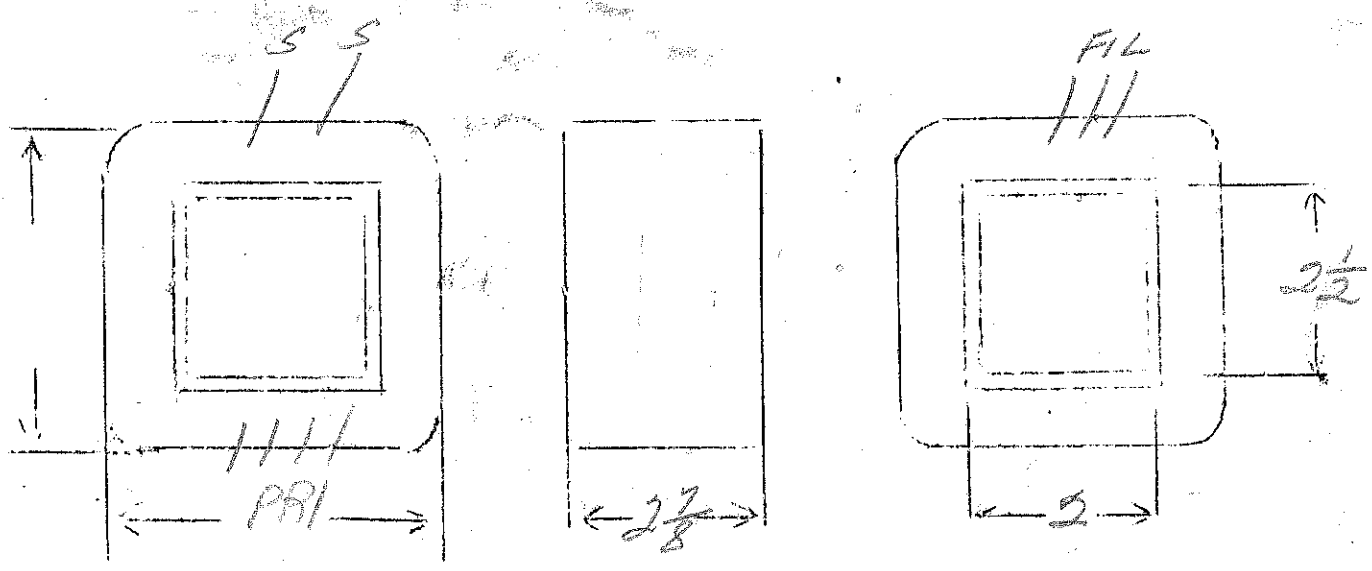
40 02 01
 40 03 00

$E_p = 110, 115, 125$
 $E_s = 1250V - 350 MA$
 $E_f = 10V, C.T. - 7amps$

1.28

SPEC. NO. 1833

Winding	SEC		PR1	FIL		
Turns	1825		160	14		
Taps	—		141	7		
Wind. Lgth.	2 $\frac{3}{8}$		2 $\frac{3}{8}$	—		
Wire Size	#25		#11	double #17		
T.P.L.	115-16		72			
Kind Term.	WIRE ONLY			→		
Term. Lgth.	6"		6"	6"		
Layer Insul.	double 30#		007KP			
Wrapper	21007VC 21005GA		21005GA	21005GA 11010RR		
TUBE	10L007+1L007VC		IMPREGNATION		Varnish	
CURE	2 x 2 $\frac{1}{2}$		cut 1 $\frac{3}{8}$ " off E			



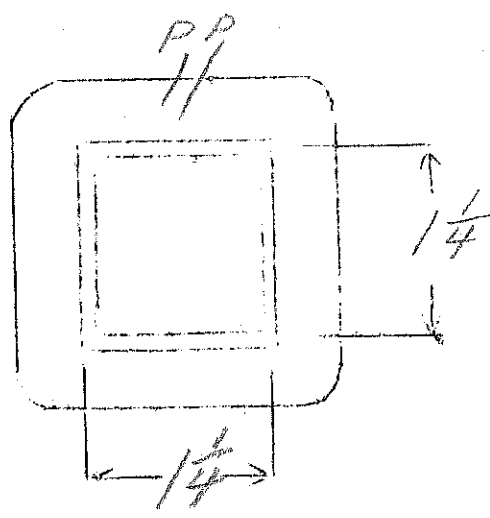
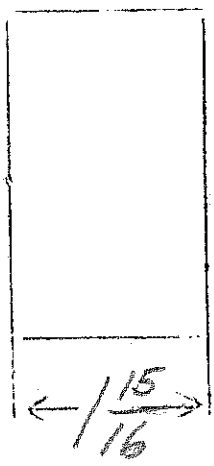
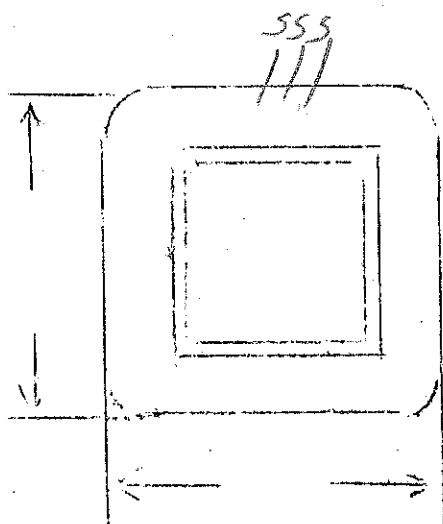
Ep-115
 E₂ - 700V-CT- 80MA
 E₁ - 2.5V - 10amps CT

E₂ - 5V-35amp
 E₃ - 5V-2amps
 E₄ - 6.3V-5amps CT

114 watts

SPEC. NO. 1834

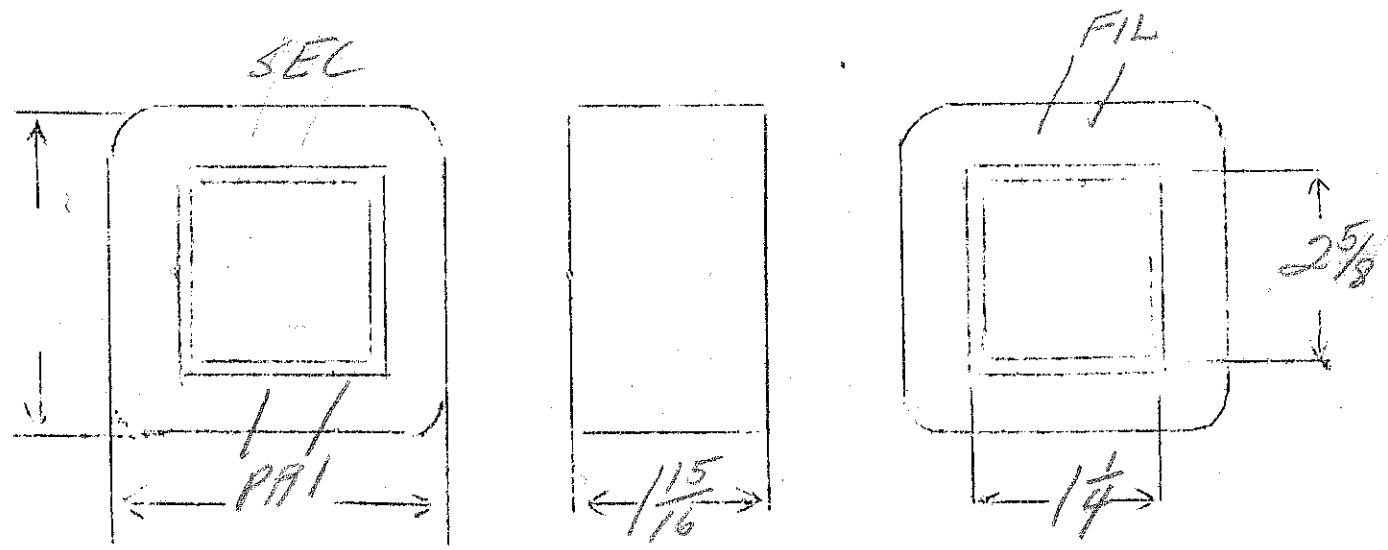
Winding	SEC	SHIELD	PRI	F ₁	F ₂	F ₃	F ₄
Turns	2750	240	418	10	20	20	25
Taps	1375	-	-	5	-	-	12
Wind. Lgth.	1.75	1.75	1.75	-	-	-	-
Wire Size	#34	#34	#21	double #16	#17	#20	#16
T.P.L.	230-12		53-8				
Kind Term.	#20 P Braid	sil Br	#20 P Braid	WIRE ONLY			
Term. Lgth.	9"	3"	9"	9"	9"	9"	9"
Layer Insul.	double 20#	-	50#	-	-	-	-
Wrapper	1L007V	1L007VC	2L007GA				
TUBE	7L007	IMPREGNATION			VARNISH		
CURE	1 1/4 x 1 1/4 2x2						



Ep - 115V
 Es₁ - 2.5V - 16 amps
 Es₂ - 15, 18, 21, 24 - 6 amps
 1.81

SPEC. NO. 1835

Winding	PRI	SEC	FIL				
Turns	208	48 42	5				
Taps	—	36 30	—				
Wind. Lgth.	1.75	1.75	—				
Wire Size	#18	#14	#10 1/2 ribbon (cotton covered)				
T.P.L.	6L	2L	1L				
Kind Term.	WIRES ONLY						
Term. Lgth.	3"	3"	3"				
Layer Insul.	.007 KRAFT						
Wrapper	2L007GA	2L007GA	2L007GA				
TUBE	7L007	IMPREGNATION		VARNISH			
CURE	1 1/4 x 2 5/8						

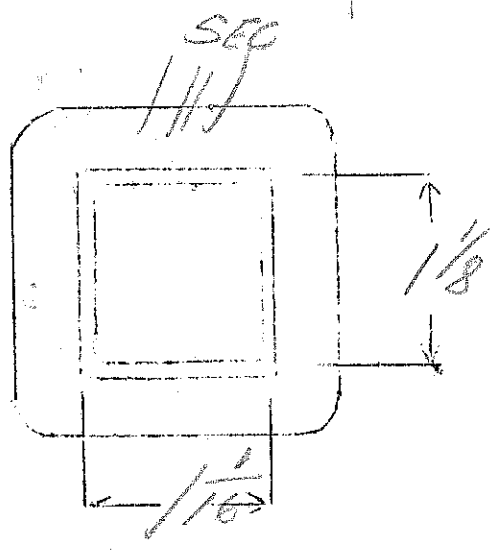
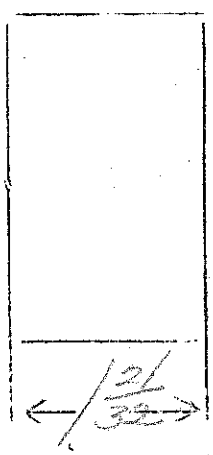
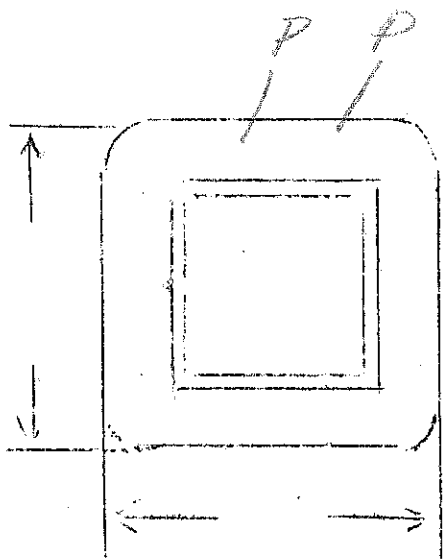


Pri - 112V
 Sec - 112, 117, 122, 127 Volts open circuit

4.9

SPEC. NO. 1836

Winding	PRI	SEC				
Turns	550	630				
Taps	-	605-580-555				
Wind. Lgth.	$\frac{15}{32}$	$\frac{15}{32}$				
Wire Size	#24	#24				
T.P.L.	62-9	62-12				
Kind Term.	WIRE	ONLY				
Term. Lgth.	3"	3'				
Layer Insul.	50#	50#				
Wrapper	1000 PVC 4LWR	2005 GA				
TUBE	2007		IMPREGNATION		VARNISH	
CURE	$1\frac{1}{16} \times 1\frac{1}{8}$					

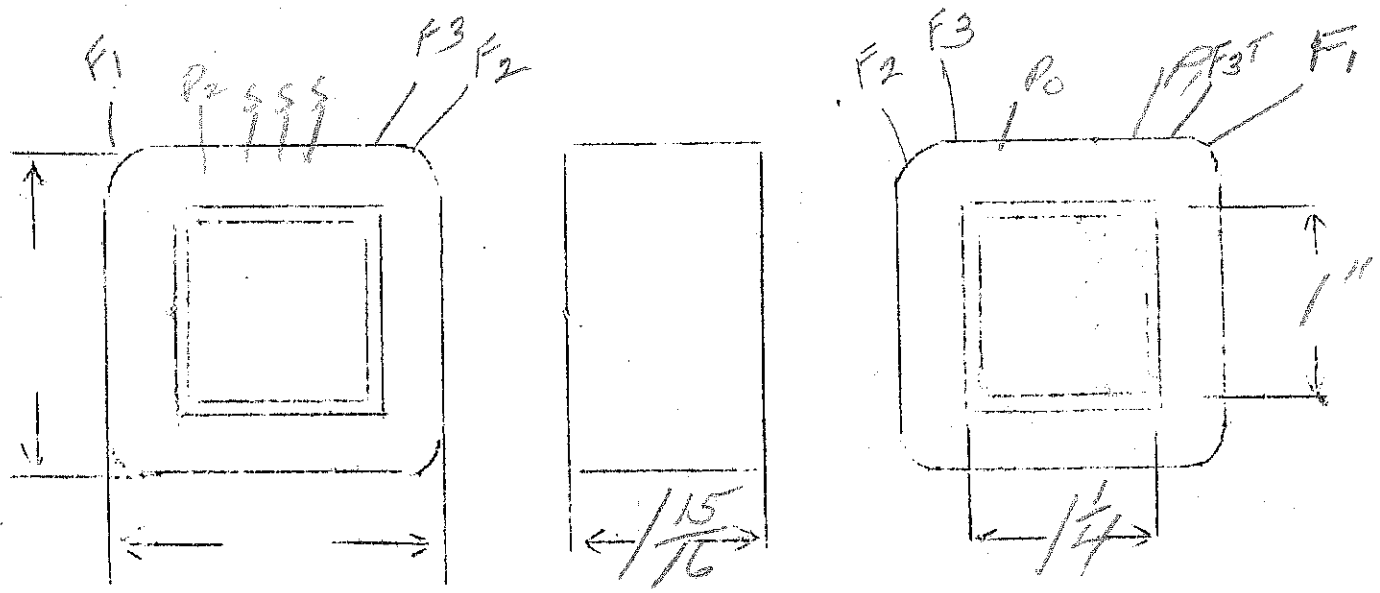


Ep - 110-120V.
 Es - 700V.C.T. - 100MA
 EF₁ - 6.3V - 2 amper
 EF₂ 5V - 3 amper
 EF₃ - 2.5V - 4 amper

Panel same as #145

SPEC. NO. 1837

Winding	PRI	SHIELD	SEC	F ₂	F ₁	F ₃	
Turns	532	205	3600	24	30	12	
Taps	488		1800	—	—	6	
Wind. Lgth.	1.75	1.75	1.75	—			
Wire Size	#22	#33	#33	#18	#18	#16	
T.P.L.	61-9	205-1	202-18				
Kind Term.	W.O	sil Braid		WIRE ONLY			
Term. Lgth.	3"	3"	3"	3"	3"	3"	
Layer Insul.	50#		double 30#				
Wrapper	1L007VC	1L007VC	2L007GA			2L007GA	
TUBE	7L007	IMPREGNATION			VARNISH		
CURE	1 1/4 X 1						



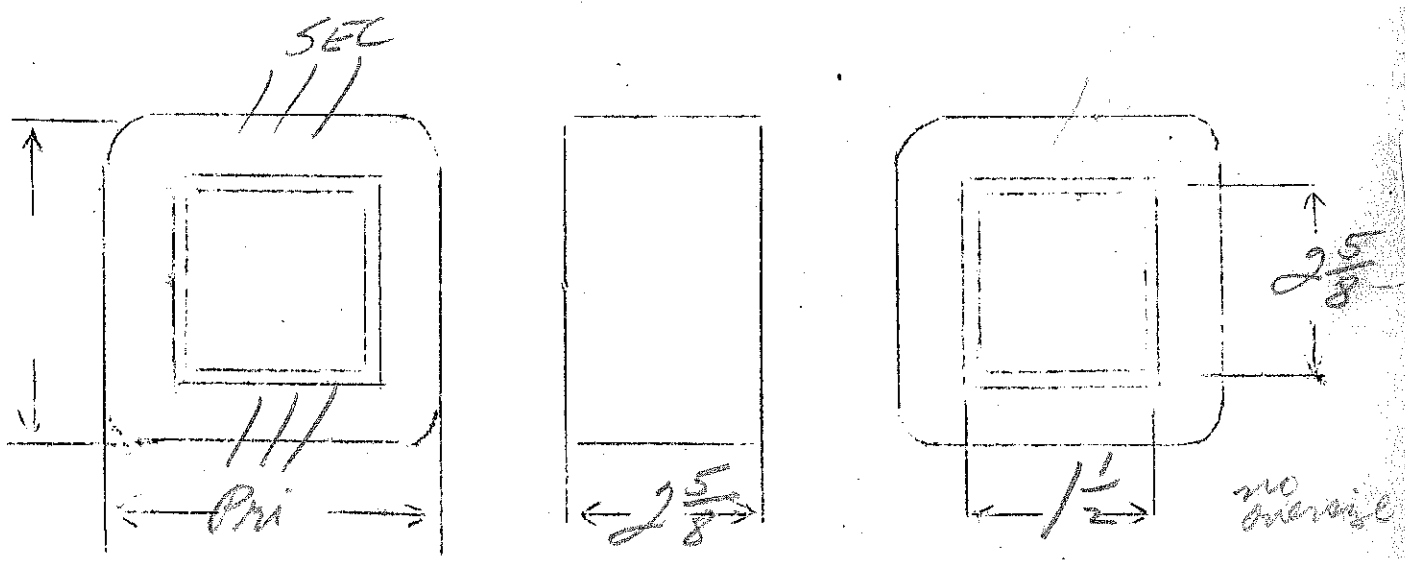
$E_p = 110, 115, 120$
 $E_s = 1500V - 250MA$
 1300

1.48

1650

SPEC. NO. 1838

Winding	SEC	PRI					
Turns	2420	178					
Taps	2180	170-163					
Wind. Lgth.	2 3/8	2 1/4					
Wire Size	#26	#15					
T.P.L.	128-19	5L					
Kind Term.	#20 Pbraid	WIRE ONLY					
Term. Lgth.	9"	9"					
Layer Insul.	double 50#						
Wrapper	2007VC 3L0056A	3L0056A					
TUBE	9L007+1L007VC		IMPREGNATION		VARNISH		
CURE	1 1/2 x 2 5/8						



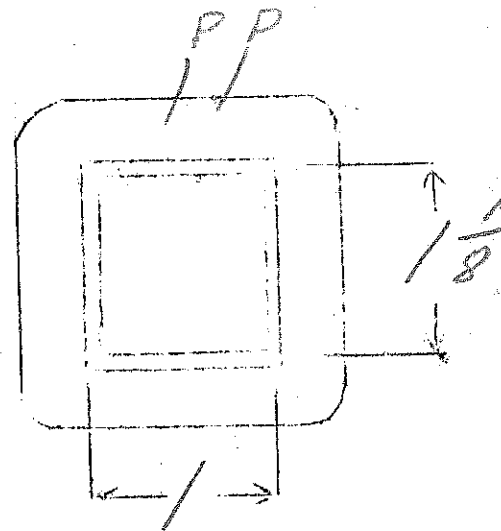
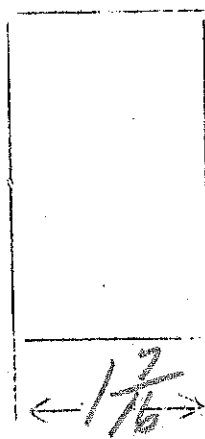
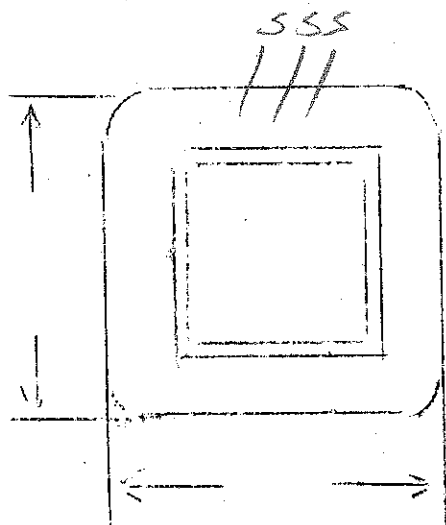
same as 6210 - heavier

495

SPEC. NO. 1839

Winding	SEC	SHIELD	PR1	F ₁	F ₂		
Turns	3280	66	585	28	35		
Taps	1640	—	—	—	—		
Wind. Lgth.	1.25	1.25	1.25	—	—		
Wire Size	#36	#26	#26	#20	#21		
T.P.L.	205-16	66	66-9				
Kind Term.	#22 PBraid	silPz	#22 PBraid	WIPE ONLY			
Term. Lgth.	6	6	6	6	6		
Layer Insul.	double 16#	—	40#	—	—		
Wrapper	1L007VC 2L007	1L007VC	2L005GA	2L005GA	3L005GA		
TUBE	6L007	IMPREGNATION			VARNISH		
CURE	1 x 1 1/8						

2 - "B" brackets only



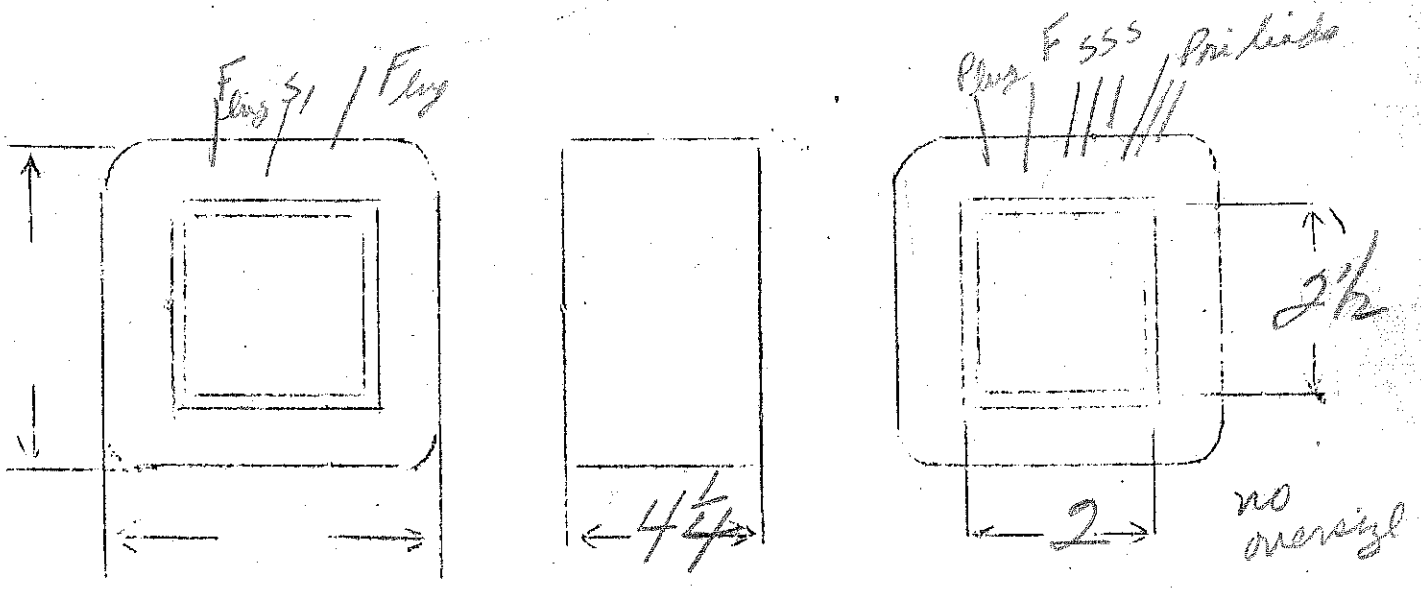
Ep - 110, 115, 120, 125

Es - 2500, 2360, 2200 rpm - 350 Mo

Ef - 11V - 7 amp CT

SPEC. NO. 1840

Winding	SEC	SHIELD	PRI	FIL			
Turns	2720	1	137	13			
Taps	2580		132	7			
Wind. Lgth.	2420		126				
Wire Size	3 7/8	shim stock	121				
T.P.L.	24		#10 Square	#14			
Kind Term.	161-17		5L!!!				
Term. Lgth.	#20 P. Braided	sil. Br.	#16 P. Braided	WIRE ONLY			
Layer Insul.	9 double 50#		9	3			
Wrapper	210056A 310071C 210056A	310056A	007KPAE 210056A	310056A			
TUBE	9L007				IMPREGNATION		VARNISH
CURE	2 x 2 1/2		no overage				

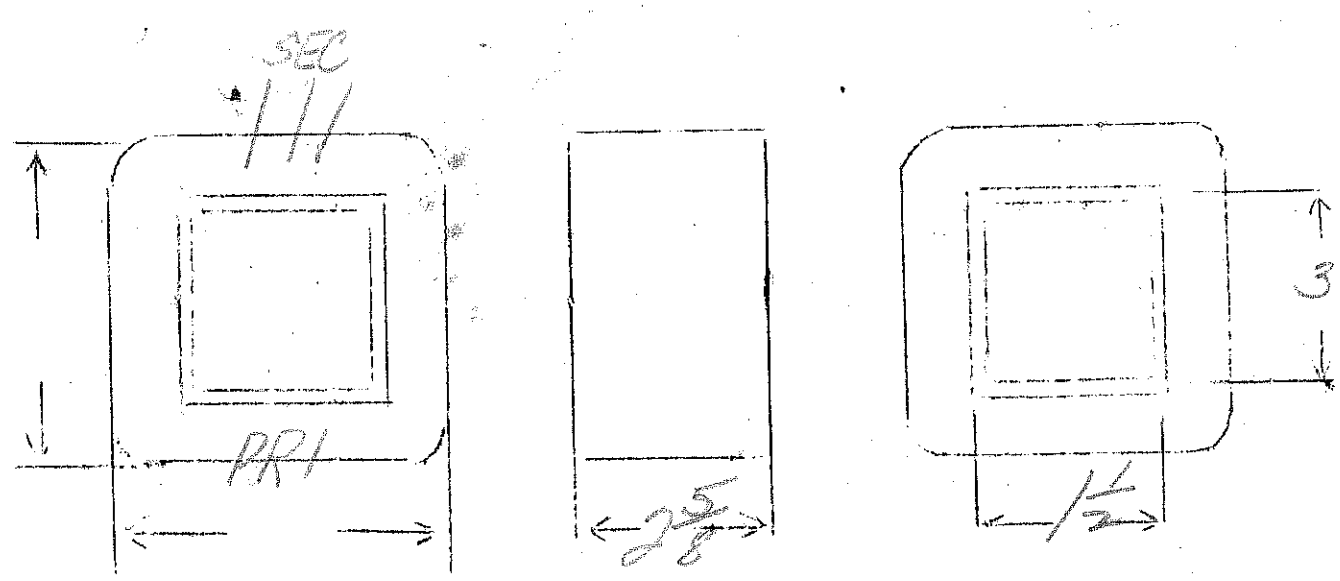


$E_p = 100, 110, 120, 130, 140$
 $E_s = 70V. C.T. - 420 VA - 12amp$

13

SPEC. NO. 184

Winding	PR1	SEC.				
Turns	182	100				
Taps	169 156-143	130	50			
Wind. Lgth.	2 ³ / ₈	2 ³ / ₈				
Wire Size	#15	#14				
T.P.L.	5L	6L				
Kind Term.	WIRE ONLY					
Term. Lgth.	6"	6"				
Layer Insul.	.007	.007				
Wrapper	30056A	30056A				
TUBE	9L007	IMPREGNATION		VARNISH		
CURE	1/2 x 3					



Ep - 105, 110, 115, 120

Es - 2 V.C.T. - 36 amps

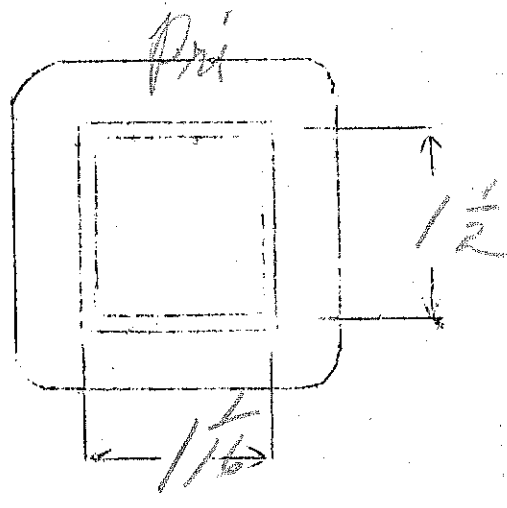
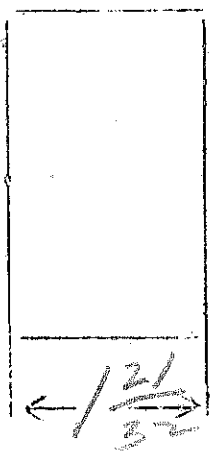
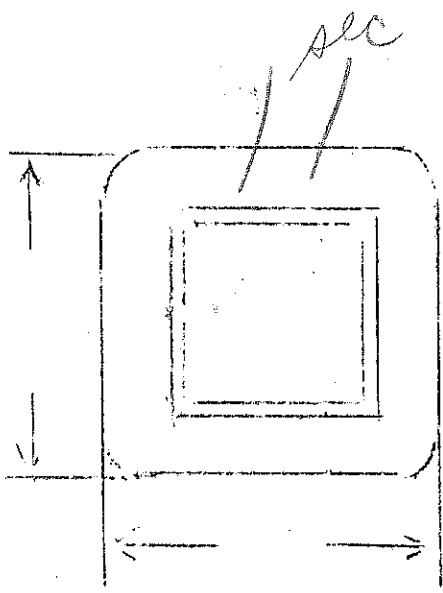
VA = 72

36

SPEC. NO.

1842

Winding	PRI	SEC				
Turns	433	8				
Taps	414 396-378	4				
Wind. Lgth.	$1\frac{15}{32}$	$1\frac{15}{32}$				
Wire Size	#23	double 10 1/2 ribbon cotton covered				
T.P.L.	55-10	4L				
Kind Term.	WIRE ONLY	WIRE ONLY				
Term. Lgth.	3"	12" long - cut 6" long 12A only				
Layer Insul.	50A	007				
Wrapper	3L0056A	3L0056A				
TUBE	7L007		IMPREGNATION		VARNISH	
CURE	1 1/2 x 1 1/2					



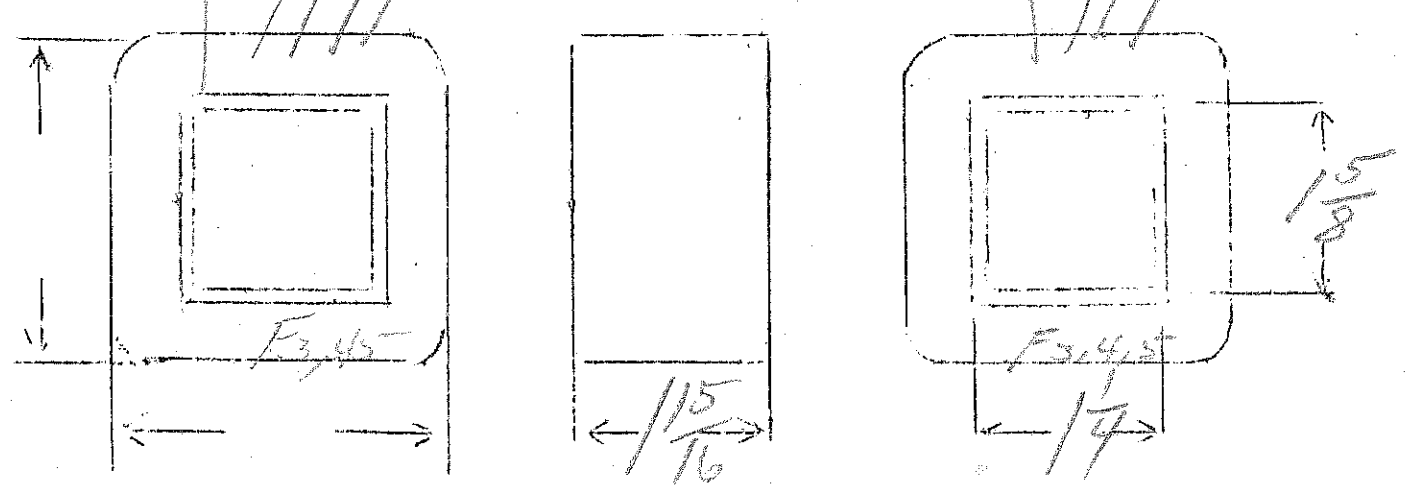
Ep - 11.5
 Es - 1400VCT - 80MA
 Ef1 - 2.5V - 175A
 Ef2 - 2.5V - 5.25A

Ef3 - 2.5V - 9amps
 Ef4 - 7.5V - 2.5amp CT
 Ef5 - 7.5V - 125 amp CT
 29

SPEC. NO. 1843

Winding	SEC	SHIELD	PRI	White F1	Red F2	Black F3	Green F4	Blue F5	
Turns	4400	201	334	8	8	8	24	24	
Taps	2200	—	—				12	12	
Wind. Lgth.	1.75	1.75	1.75	—	—	—	—	—	
Wire Size	#33	#33	#21	#20	#15	#14	#19	#22	
T.P.L.	201-22		56-6	layer 1 - F3 + F4 layer 2 - F1, F2, F5					
Kind Term.	#20 Perard	oil br	#20 Perard	WIPE ONLY					
Term. Lgth.	9	3	9	9	9	9	9	9	
Layer Insul.	double 16		50#						
Wrapper	2L007VC	1L007VC	2L007GA	2L0076A		2L0075A			
TUBE	7L007			IMPREGNATION			VARNISH		
CURE	1/4 x 1/8								

heavy sec. finishing - 2L007VC + 1L0056A throughout
 F2 555, F1
 F1 00, F2



Ep-115

ES - 100V, tap 75V - 20MA

EF₁ = EF₂ = EF₃ = 2.5V.C.T. - 6amps

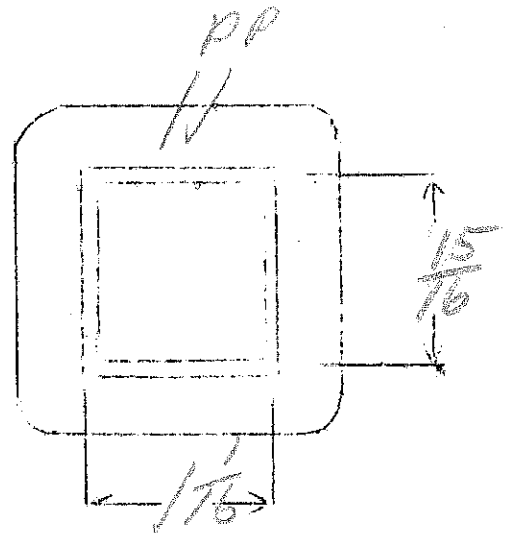
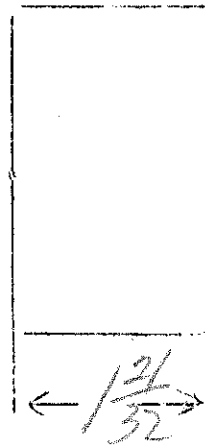
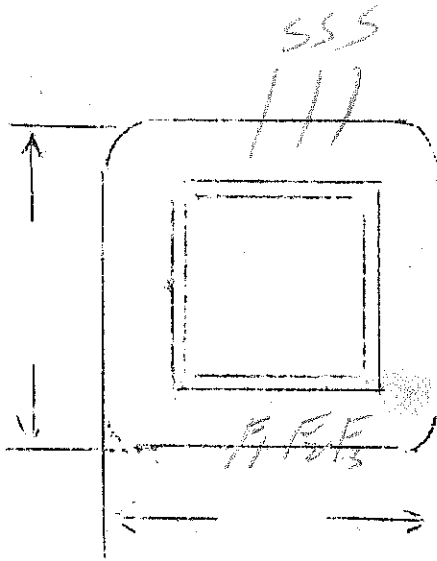
EF₄ = 5V - 2amps

5.8

SPEC. NO.

1844

Winding	PRI	SHIELD	SEC	F ₁ , F ₂ , F ₃	F ₄		
Turns	665	240	650	16	32		
Taps			480	8	—		
Wind. Lgth.	1 ¹⁵ / ₃₂	1 ¹⁵ / ₃₂	1 ¹⁵ / ₃₂	—	—		
Wire Size	#25	#36	#36	double #18	#20		
T.P.L.	67-10	240	240-3				
Kind Term.	#20 P Braid	oil Br	#20 P Braid	WIRE ONLY			
Term. Lgth.	9	3	9	9	9		
Layer Insul.	40#	—	30#	—	—		
Wrapper	1L007W	1L007W	2L0056A	2L0056A	2L0056A		
TUBE	4L007			IMPREGNATION		VARNISH	
CURE	1 ¹⁵ / ₁₆ x ¹⁵ / ₁₆						



0 - Green
75V - Blue
100V - Red

Ep-115

VA=130

Es - 920V-CT - 250MA

Ep - 5V - 3amps CT

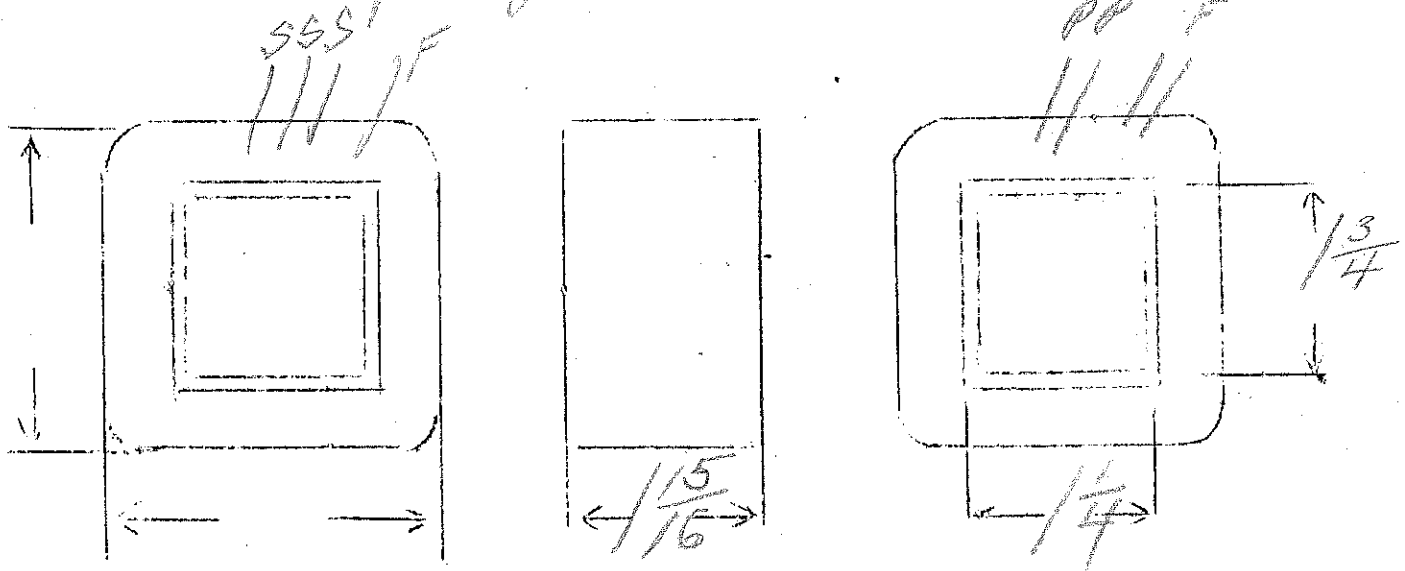
254

SPEC. NO.

1845

Winding	SEC	SHIELD	PRI	F ₀			
Turns	2540	117	294	14			
Taps	1270	—		7			
Wind. Lgth.	1.75	1.75	1.75	—			
Wire Size	#28	#28	#21	double #21			
T.P.L.	117-22	117	50-6				
Kind Term.	#20 PB wire	oil Pb	#20 PB wire	WIRE ONLY			
Term. Lgth.	9 double	3	9	9			
Layer Insul.	30#	—	50#				
Wrapper	2007WC	1007VC	2007SA	21007CA			
TUBE	7007+1007V			IMPREGNATION	VARNISH		
CURE	1/4 x 1/4						

heavy finishing



115
15
T.M. 11/10

3 leg winding - shell type core - 4 X 3 1/2 X 3 1/16 stack
 outer legs 250T top at 225 T #22 (350V)

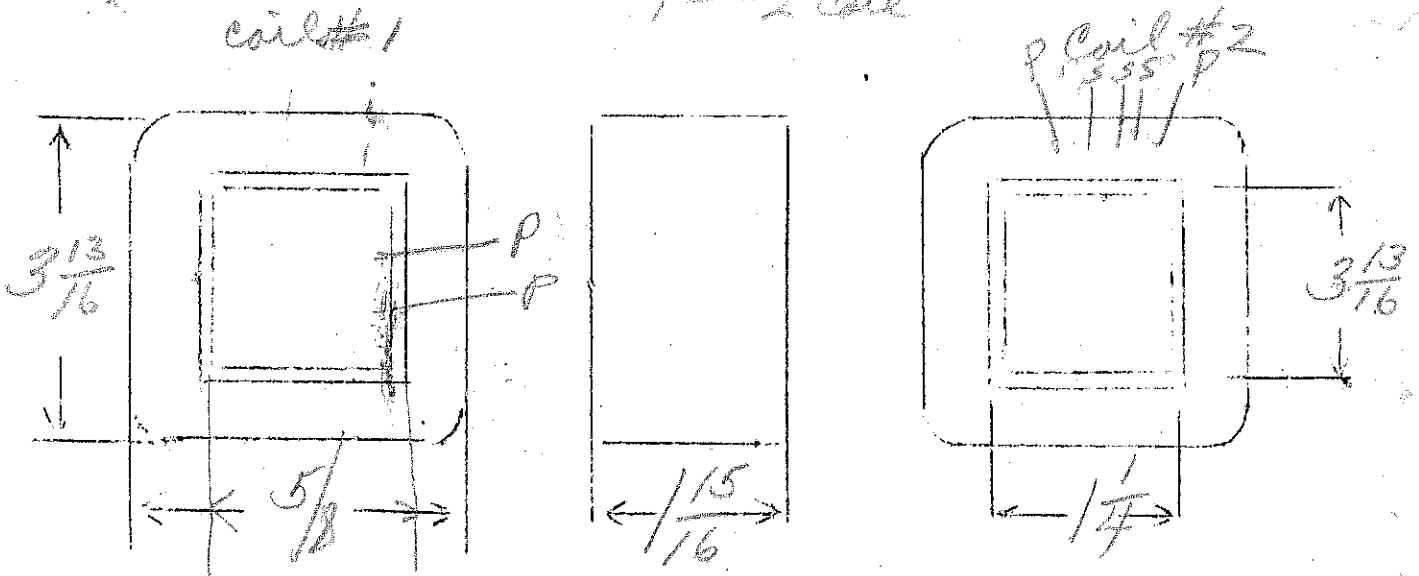
Center leg (inade) - 2000T #28
 300T #24 top 200T

SPEC. NO. _____

1846 (408 speeds)

	Coil #1	Coil #2				
Winding	PRI	PRI	SEC			
Turns	250	2000	300			
Taps	225		200			
Wind. Lgth.	1.75	1.75	1.75			
Wire Size	#22	#28	#24			
T.P.L.	5-7-5	119-17	76-4 (single wind)			
Kind Term.	WHT #20 GREEN-BLACK Braid	BLACK #20 Braid	#26 Blue-Yellow-Red Braid			
Term. Lgth.	9"	9"	9"			
Layer Insul.	50#	40#	50#			
Wrapper	2L0076A	2L0076A	2L0076A			
TUBE	7L007			IMPREGNATION		VARNISH
CURE	1/4 X 3 13/16					

each transformer is composed of 2 - #1 coils
 and 1 - #2 coil

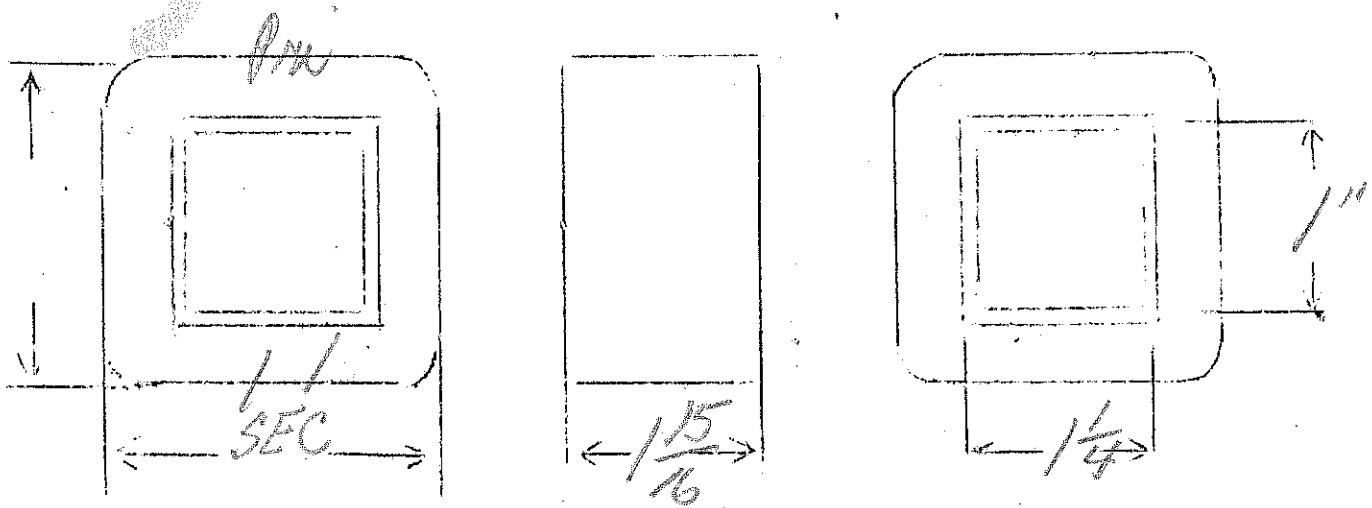


Ep- ,110, 115, 120
 Ef - 2.2V - 36 amper

443

SPEC. NO. 1847

Winding	PR1	FIL				
Turns	532	11				
Taps	570	—				
Wind. Lgth.	488	—				
Wire Size	1.75	1.75				
T.P.L.	#22	4 strands #13				
Kind Term.	61					
Term. Lgth.		WIREFORM				
Layer Insul.	5"	5"				
Wrapper	50#					
TUBE	7L007			IMPREGNATION		VARNISH
CURE	1 1/4 x 1"					



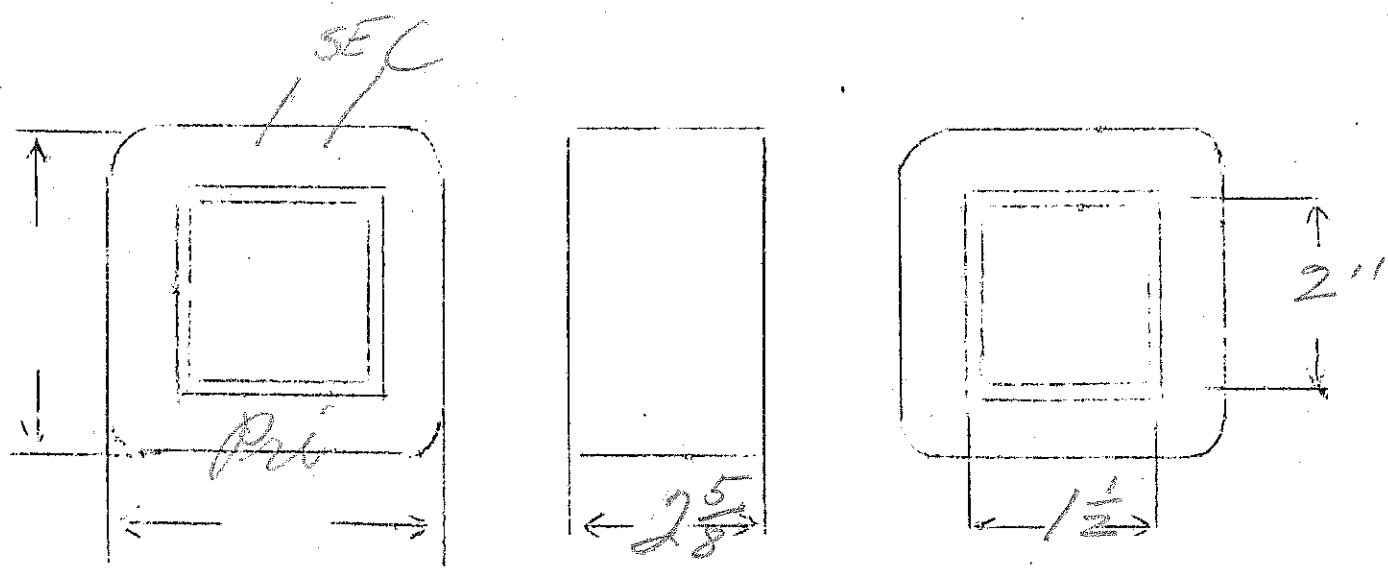
Ep - 100-105-110-115-120-125

ES = 17V. ea side - 16 amps

2

SPEC. NO. 1848

Winding	PRI	SEC					
Turns	250 240	74					
Taps	230 210 220 200	37					
Wind. Lgth.	2 3/8	-					
Wire Size	#17	double 14					
T.P.L.	6L	4L (very close)					
Kind Term.	WIRES ONLY						
Term. Lgth.	4"	4"					
Layer Insul.	007 Kap						
Wrapper	2L0056A	2L0056A					
TUBE	9L007		IMPREGNATION		VARNISH		
CURE	1 1/2 x 2						



$E_p - 220V.$

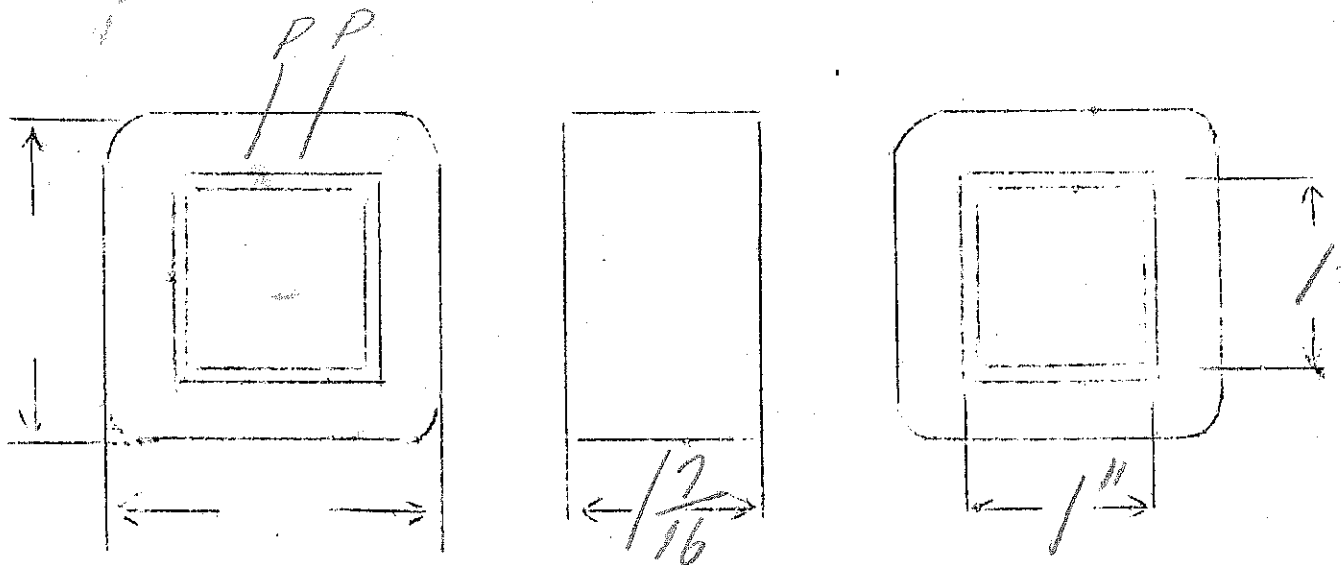
$E_{F_1} = E_{F_2} = E_{F_3} = 5VCT-3A$

$\frac{N}{E} = 5.7$

VA-45

SPEC. NO. 1849

Winding	PR1	F ₁	F ₂	F ₃			
Turns	1280	32	32	32			
Taps	—	16	16	16			
Wind. Lgth.	125	—	—	—			
Wire Size	#28	#18	#18	#18			
T.P.L.	8T-16						
Kind Term.	alBi	WIRE ONLY					
Term. Lgth.	3	3	3	3			
Layer Insul.	30#	—	—	—			
Wrapper	210056A	210056A	210056A	210056A			
TUBE	4007	IMPREGNATION			VARNISH		
CURE	1x1						

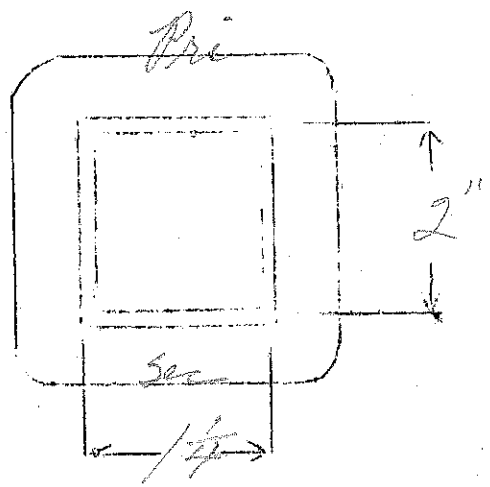
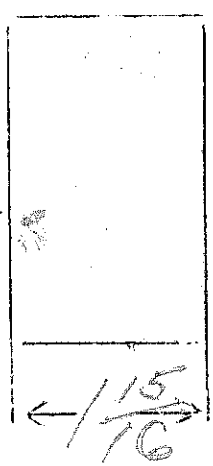
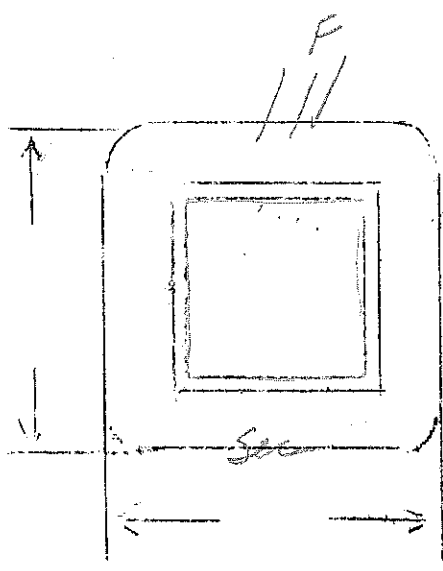


Green 135
 Yellow 115
 Black 195
 white 0

500 Red
 250 Red
 200 Red
 Blue $\gamma = .4$ amps
 200 Red
 250 Red
 300 Red
 25V CT - 10amps

VA = 145
 $\frac{N}{E} = 222$
 5000 volt insulation
 SPEC. NO. 1850

Winding	SEC	SHIELD	PR1	FL			
Turns	1460	106	277	6			
Taps	1354 1220 730	240 - 106	255 233	3			
Wind. Lgth.	175	175	1175				
Wire Size	#27	#27	#21	3 strands #17			
T.P.L.	106		50-6				
Kind Term.	#20 P Braid	W.O.	#20 P Braid	Wire only	- can be cleaned over wire after baking		
Term. Lgth.	9	3	9	9			
Layer Insul.	double 16#		50#				
Wrapper	7L007VC	7L007GA	2L007VC 2L007GA	2L007VC 2L007GA			
TUBE	7L007	IMPREGNATION		YARNISH			
CURE	1/4 x 2"						



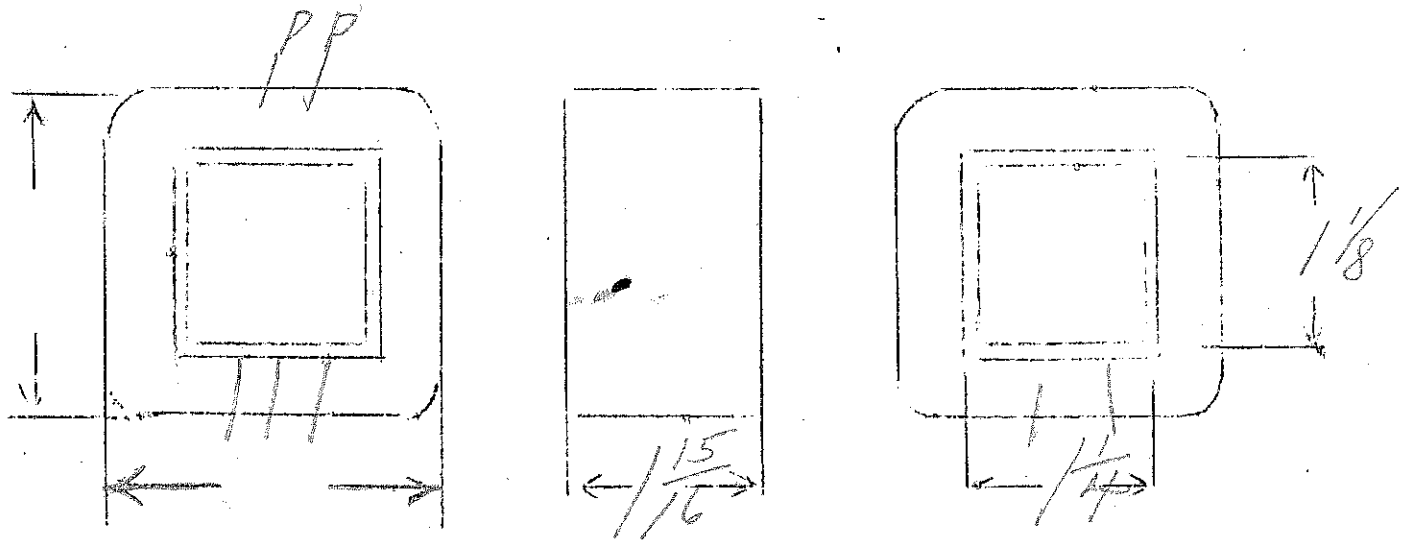
35
110

E_p - 115V
 E_{F1} - 5V - 15 amp CT.
 E_{F2} - 2.5V - 15 amp - 5000V. Insulation

4

SPEC. NO. 1851

Winding	PR1	F1	F2				
Turns	460	22	11				
Taps	-	11	-				
Wind. Lgth.	175	-	-				
Wire Size	#21	#11	#11				
T.P.L.	54-9	-	-				
Kind Term.	WIRE ONLY						
Term. Lgth.	4"	4"	4"				
Layer Insul.	50#	-	-				
Wrapper	2L0076A	2L0076C 3L0076A	2L0076C 3L0076A				
TUBE	7L007	IMPREGNATION		VARNISH			
CURE	1/4 X 1/8						



Ep-115V.

7500V Breakdown

ES = 3000, 1500, 500V. ra side CT. - 275 MA

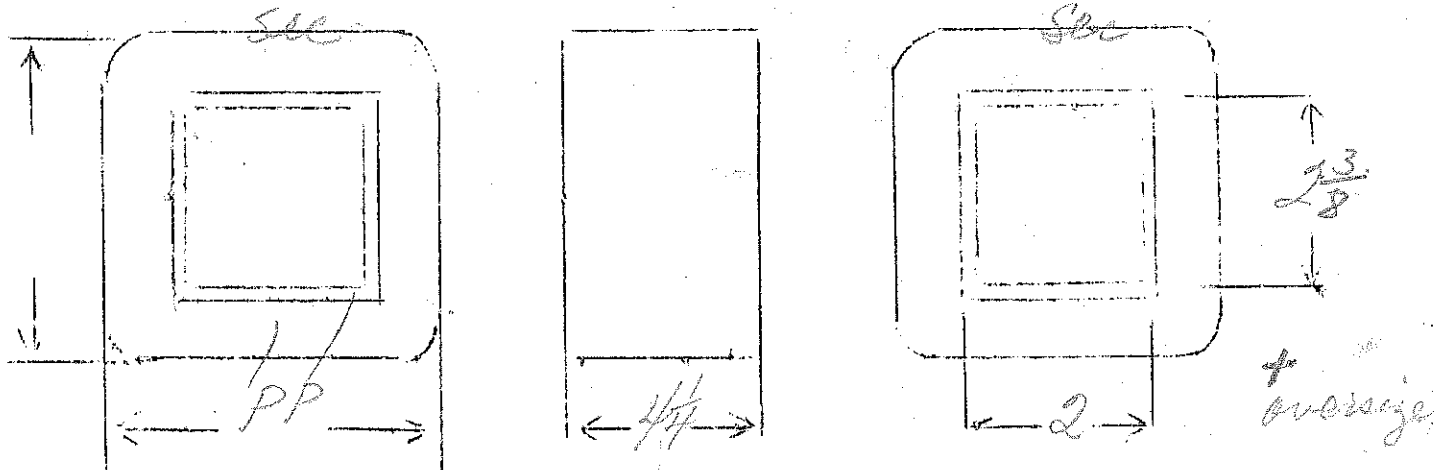
VA = 825

1.30

SPEC. NO. 1852

Winding	SEC	PRI					
Turns	8450 6350 4925	150					
Taps	4225	3525	2100				
Wind. Lgth.	33 37						
Wire Size	#28	#12					
T.P.L.	252	44					
Kind Term.	WIRE ONLY						
Term. Lgth.	6"	6"					
Layer Insul.	Double 40#	KRAFT					
Wrapper	3L007VC 2L005GA	2L005GA					
TUBE	10L007H 2L007VC		IMPREGNATION	VARNISH			
CURE	2 x 2 3/8						

Ground C.T. to core.



Over

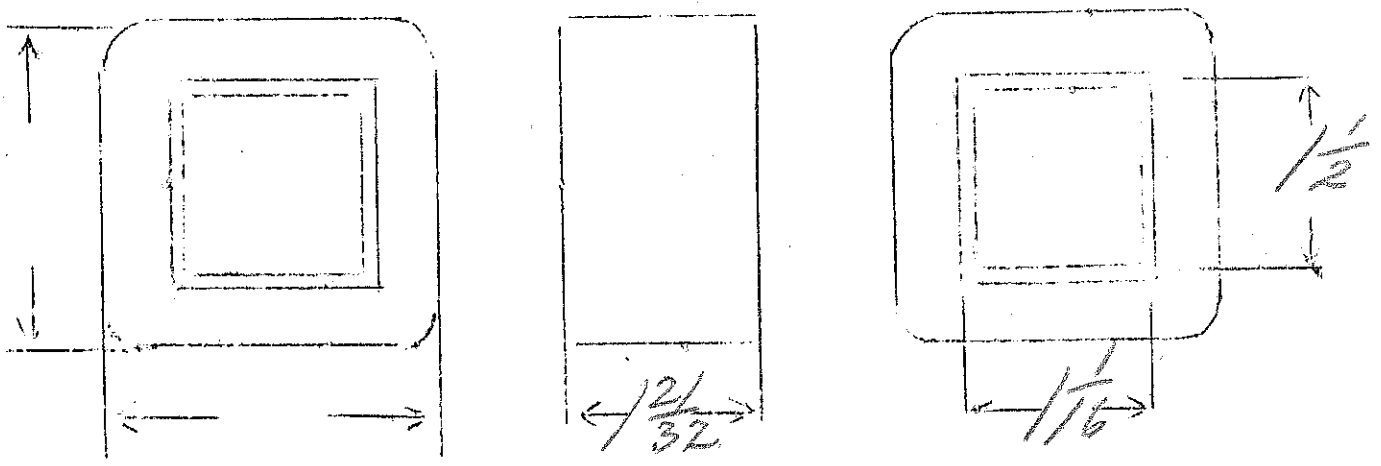
Ep - 115V.
 Es - 775V.C.T. - 100Ma
 Ef - 5V - 3amps
 Ef - 6.3V.C.T. - 2.5amps

1-6A6
 1-6L7
 2-42

3.6

SPEC. NO. 1853

Winding	SEC	SHIELD	PRI	F ₂	F ₁		
Turns	3080	172	416	35	20		
Taps	1540	-	-	12	-		
Wind. Lgth.	$\frac{115}{32}$	$\frac{115}{32}$	$\frac{115}{32}$				
Wire Size	#33	#33	#23	#18	#18		
T.P.L.	172-18	172	55-8				
Kind Term.	#20 P. Braided	sil braided	#20 P. Braided	WIRE ONLY			
Term. Lgth.	9	3	9	9	9		
Layer Insul.	double 16#	-	50#	-	-		
Wrapper	1L007VC	1L007VC	2L0056A	2L0056A	2L0056A		
TUBE	7L007			IMPREGNATION		VARNISH	
CURE	1 1/16 x 1 1/2						



Auto-transformer

110-120-130-140-150-160 volts

2 - 15 amper

$$\frac{N}{E} = 1.7$$

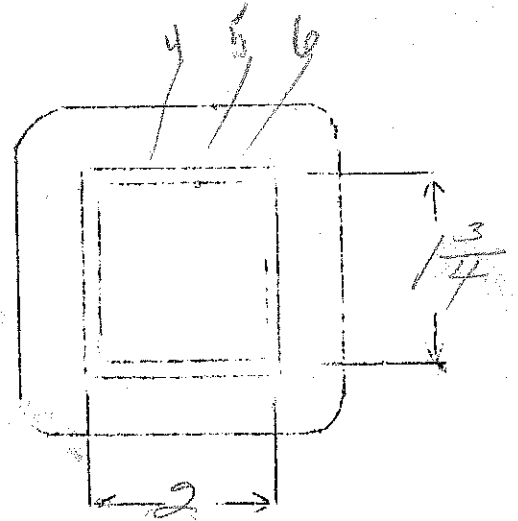
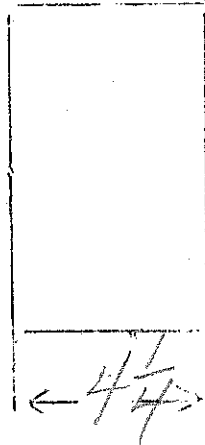
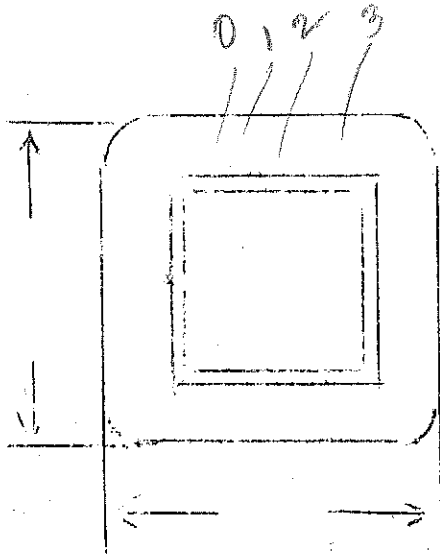
1285

SPEC. NO.

1855

Continuous

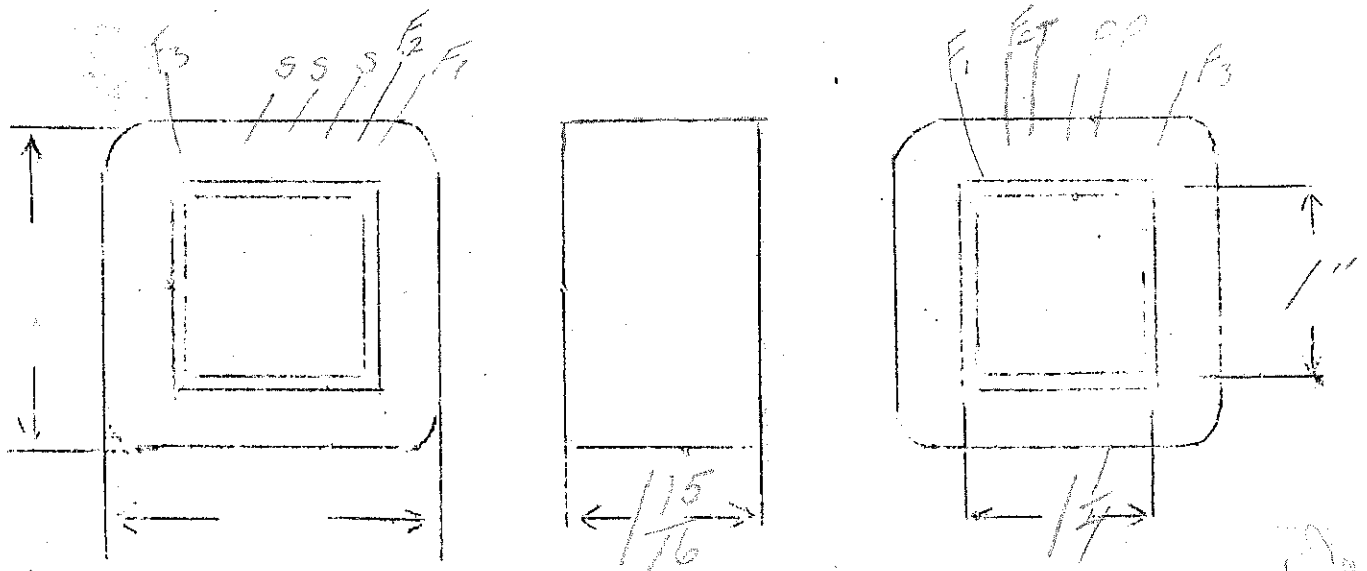
Winding							
Turns	187	101					
Taps		81-63-41	24-				
Wind. Lgth.	3 3/4	3 3/4					
Wire Size	#12	#13					
T.P.L.	40-5	5L					
Kind Term.	WIRE	ONLY					
Term. Lgth.	6"	6"					
Layer Insul.							
Wrapper		260056A					
TUBE	9L007			IMPREGNATION		VARNISH	
CURE	2 x 1 3/4						



Same as 653 - on 1/4" laminette

SPEC. NO. 1857

Winding	SEC	SHIELD	PRI	F ₁	F ₂	F ₃
Turns	3850	200	535	26	32	32
Taps	1925	—	—	—	16	—
Wind. Lgth.	1 3/4	1 3/4	1 3/4	—	—	—
Wire Size	33	33	22	18	20	18
T.P.L.	200-20	200	60-9			
Kind Term.	sil braid		WIRE ONLY	WIRE ONLY		
Term. Lgth.	3	3	3	3	3	3
Layer Insul.	double 16#	—	50#			
Wrapper	1L007VC 215L	1L007VC	2L007GA	2L007GA		2L007GA
TUBE	7L007			IMPREGNATION		VARNISH
CURE	1/4 x 1"					



Handwritten notes and calculations at the bottom right of the page, including "20 16/4" and "60 3/0".

Ep - 115 Volts

Eg - 1500 V. - 400 MA

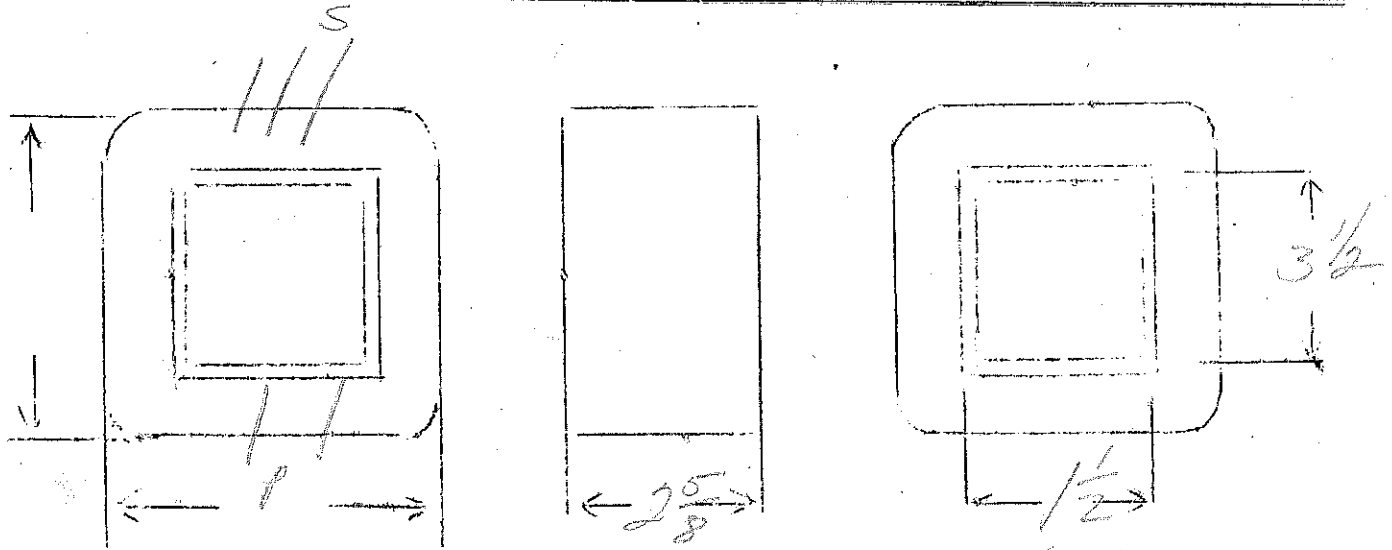
top 1350

$$\frac{N}{E} = 1.12$$

SPEC. NO.

1858

Winding	SEC	PRI					
Turns	1875	130					
Taps	1680	—					
Wind. Lgth.	2 $\frac{3}{8}$	2 $\frac{3}{8}$					
Wire Size	#25	#13					
T.P.L.	112-17	52					
Kind Term.	#18 Motor Lead	WIFE ONLY					
Term. Lgth.	24"	4"					
Layer Insul.	double 30 #	007					
Wrapper	21-007VC 01-00155A	21-0050A					
TUBE	92007			IMPREGNATION			KARNISH
CURE	1 $\frac{1}{2}$ x 3 $\frac{1}{2}$						

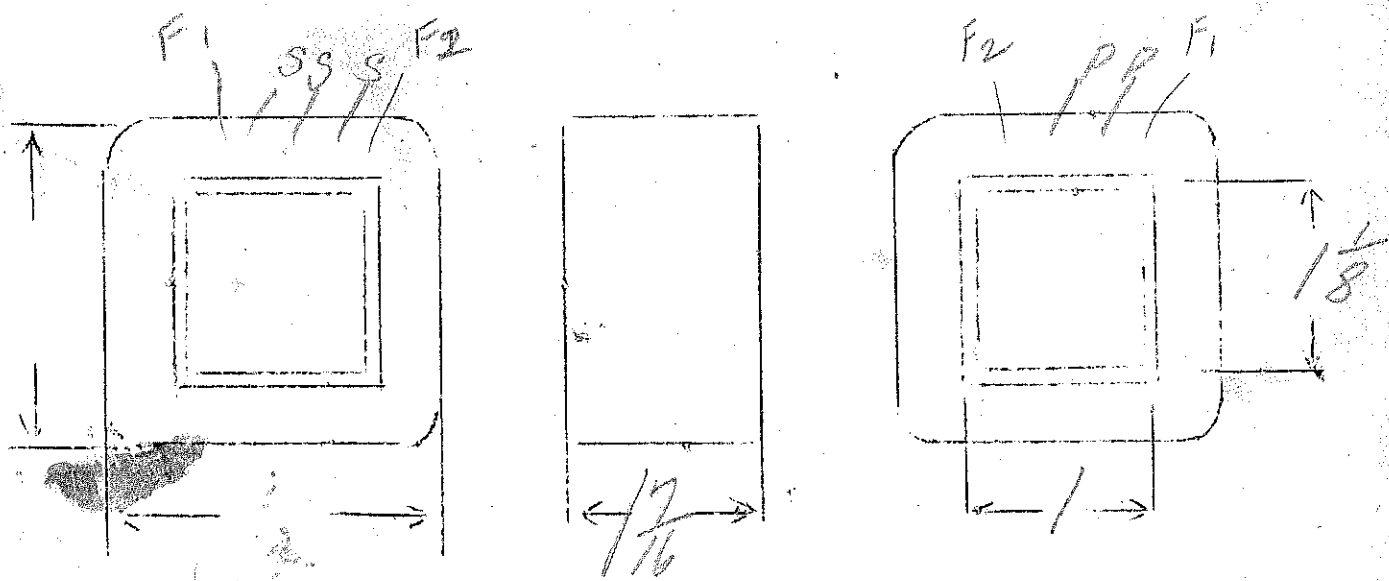


Casting on back only - channel wire leg on secondary side. Put pad on sec. with at single winding.

Ep - 120
 Es - 710V open circuit 45
 Ef1 - 6.3V - 1.6amp
 Ef2 - 5V - 2amps

SPEC. NO. 1859

Winding	SEC	SHIELD	PRI	F1	F2		
Turns	3200	201	540	31	25		
Taps	1600	—	—	—	—		
Wind. Lgth.	1.25	1.25	1.25	—	—		
Wire Size	#36	#36	#26	#21	#21		
T.P.L.	201-16	201	68-8	—	—		
Kind Term.	sil braid		WIRE ONLY		—		
Term. Lgth.	3	3	3	3	3		
Layer Insul.	double 16#		double 20#		—		
Wrapper	L007VC	L005VA	2005GA	2005GA	2005GA		
TUBE	5L007FIL005GA			IMPREGNATION		VARNISH	
CURE	1 x 1/8						



$E_p - 105, 115, 125$

$VA = 70$

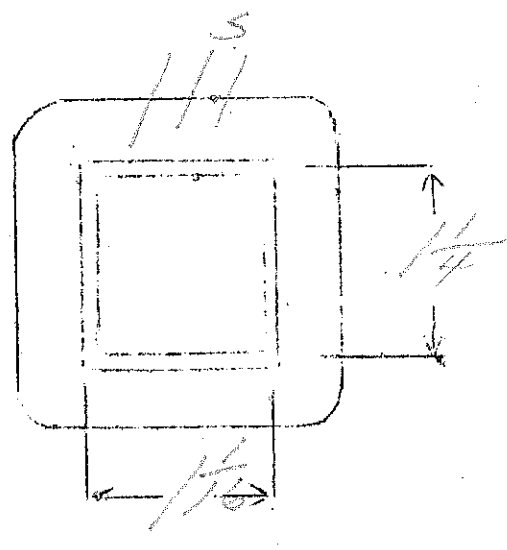
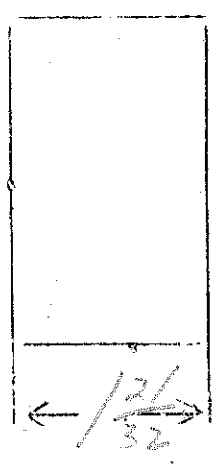
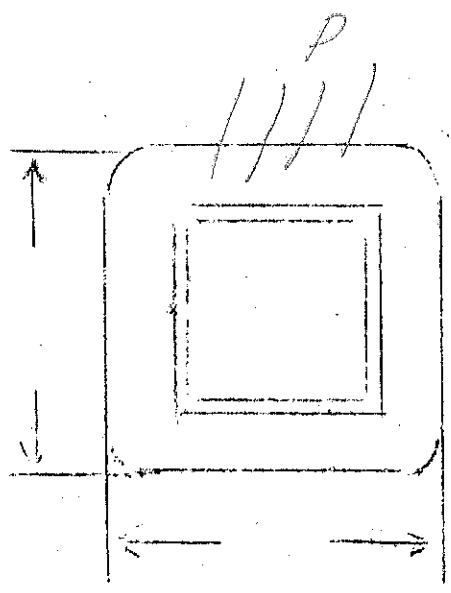
$E_s - 10VCT - 7amp$

$\frac{N}{E} = 4.3$

C.T. grounded to case

SPEC. NO. 1860

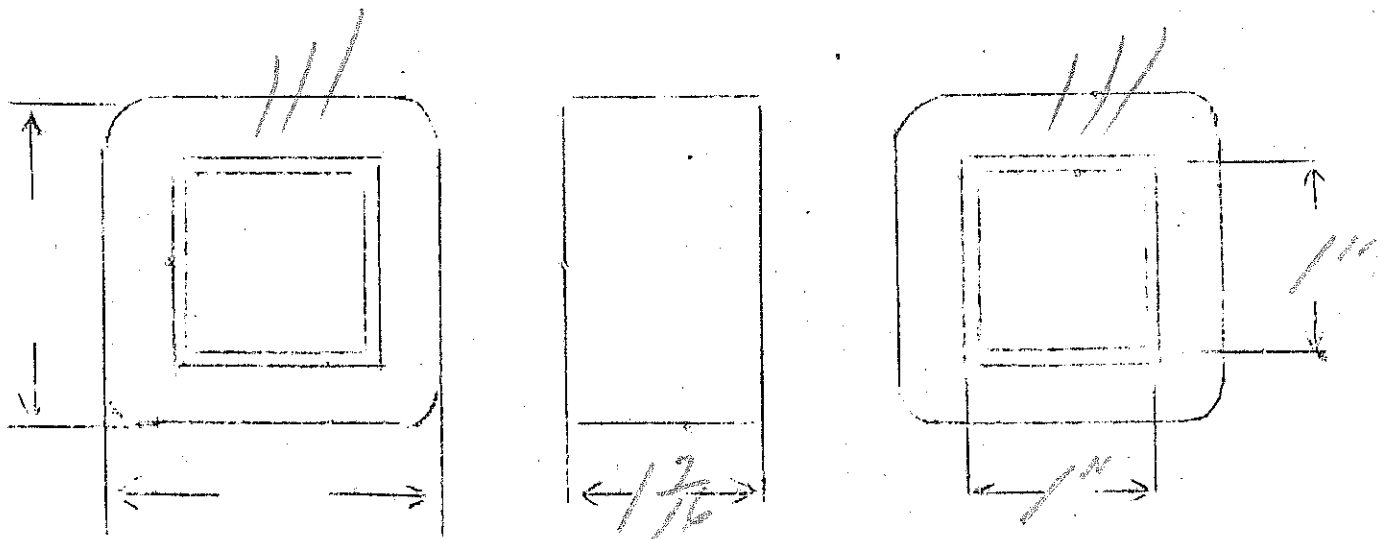
Winding	PRI	SEC				
Turns	537	48				
Taps	495	24				
Wind. Lgth.	$\frac{15}{32}$	$\frac{15}{32}$				
Wire Size	#23	#14				
T.P.L.	57-10	3L				
Kind Term.	WIRE ONLY					
Term. Lgth.	3"	3"				✓
Layer Insul.	40#					
Wrapper	2L007GA	2L007GA				
TUBE	7L007		IMPREGNATION		VARNISH	
CURE	$1/16 \times 1/4$					



E_g - 6V dc - vibrator circuit
 E_g - 280V. dc. output

SPEC. NO. 1861

Winding	SEC	SHIELD	PRI				
Turns	5600	1	80				
Taps	2800		40				
Wind. Lgth.	1.25	1.25	1.25				
Wire Size	#35	shin steel	#18				
T.P.L.	187-30		27-3				
Kind Term.	#30 aluminum	silbr	WIRE ONLIP				
Term. Lgth.	9"	3"	9"				
Layer Insul.	30#	-	.005 BR				
Wrapper	10071C 10076A	10056A	10056A				
TUBE				IMPREGNATION	VARNISH		
CURE	1X / NW						

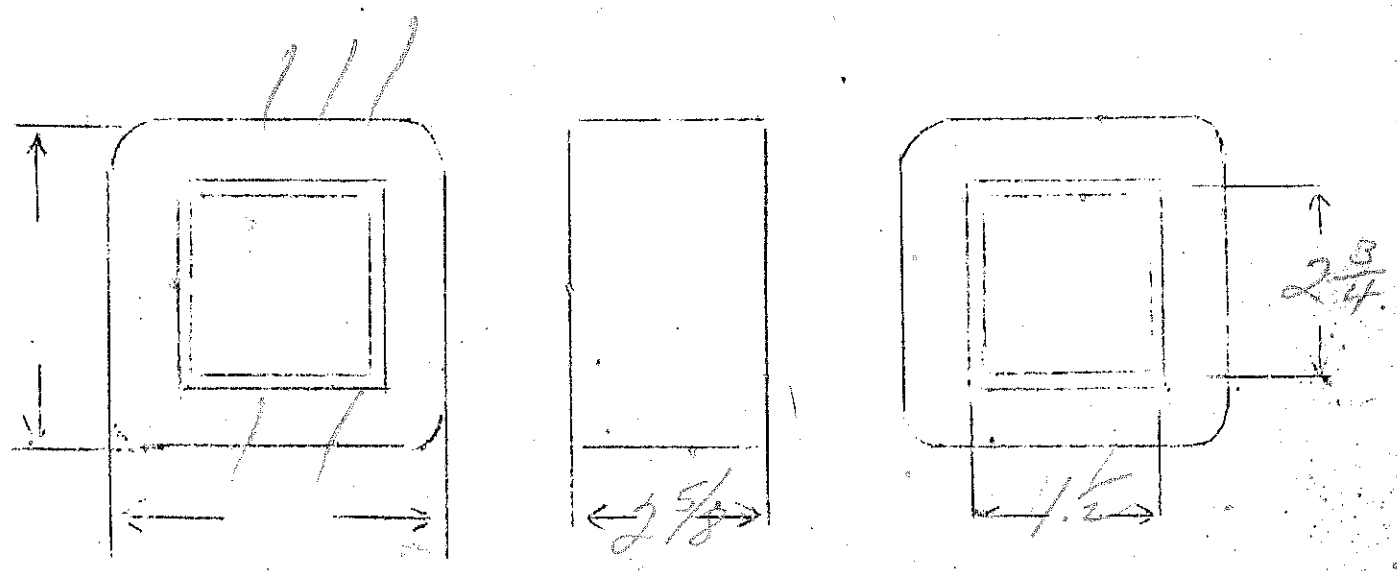


Ep-115V
 Es-2400V CT-300MA.

14

SPEC. NO. 1862

Winding	SEC	PRI				
Turns	3750	162				
Taps	1875	—				
Wind. Lgth.	23/8	23/8				
Wire Size	#27	#16				
T.P.L.	145-26	4L				
Kind Term.	WIRE	ONLY				
Term. Lgth.	4"	4"				
Layer Insul.	double 20*	.005				
Wrapper	2L007VE 2L005GR	2L005GA				
TUBE	9L007H1007VC		IMPREGNATION		VARNISH	
CURE	1 1/2 x 2 3/4					



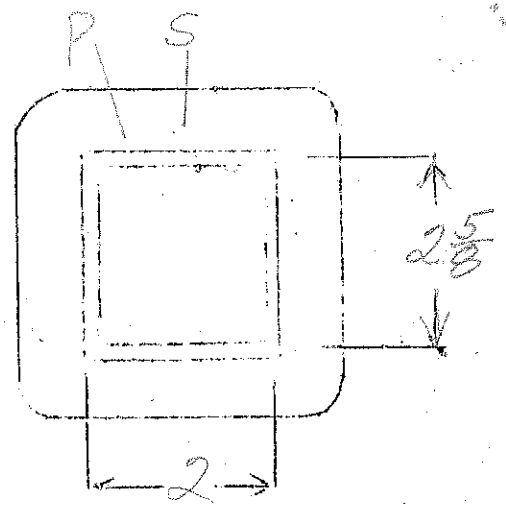
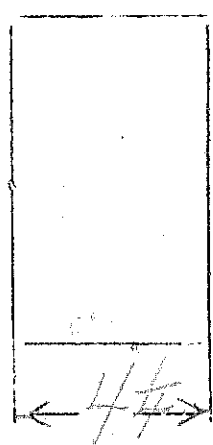
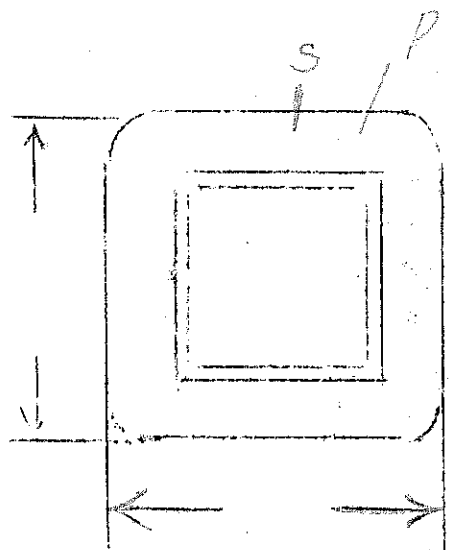
E_p - 123 volts
 E_s - 2300 Volts - 500 Ma

$E_{T_s} = 1150$ watts
 7500

$\frac{N}{E} = 1:1$

SPEC. NO. 1863

Winding	SEC	SHIELD	PRI			
Turns	2750	1	135			
Taps	-					
Wind. Lgth.	3 7/8	3 7/8				
Wire Size	#24	Copper shin lap.	#10 Square			
T.P.L.	164-17	oil	5L			
Kind Term.	#30 Braid	Braid	WIRE ONLY			
Term. Lgth.	18"	6"	12"			
Layer Insul.	double 40H		double .007 Kraft			
Wrapper	2L005GA 2L007VC 2L005GA	2L005GA	3L005GA			
TUBE	10L004	IMPREGNATION		VARNISH		
CURE	1 2 x 2 5/8					



$E_p - 115 \checkmark$

$E_{s1} = E_{s2} = E_{s3} = E_{s4} = 5V - 3amp.$

60 watts total

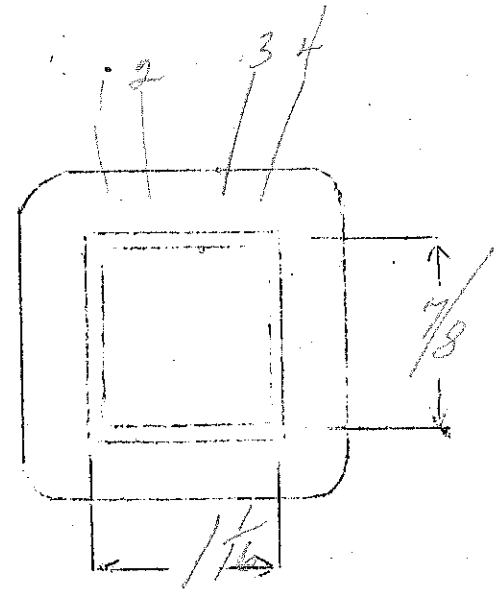
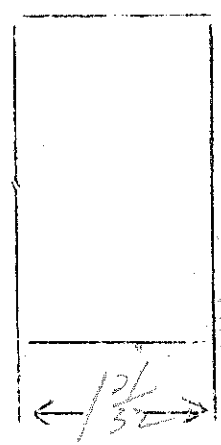
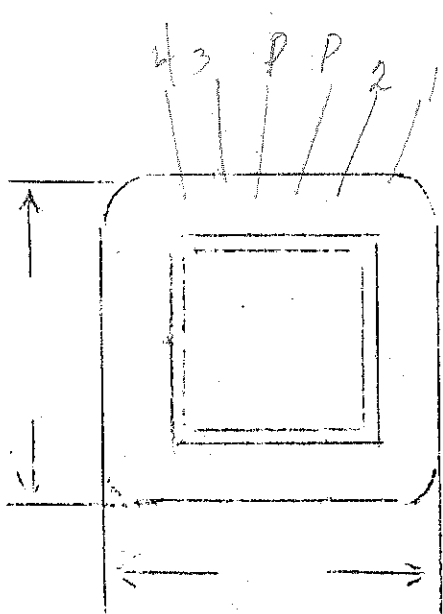
1275

5.73

SPEC. NO.

1864

Winding	PR1	F ₁	F ₂	F ₃	F ₄		
Turns	660	32	32	32	32		
Taps		—	—	—	—		
Wind. Lgth.	$1 \frac{15}{32}$						
Wire Size	#25	#18	#18	#18	#18		
T.P.L.		1L each					
Kind Term.	WIRES ONLY						
Term. Lgth.	3"	3"					
Layer Insul.	30 #						
Wrapper	3L005GA	3L005GA	3L005GA	3L005GA	3L005GA		
TUBE	72007	IMPREGNATION			VARNISH		
CURE	$1 \frac{1}{6} \times \frac{7}{8}$						

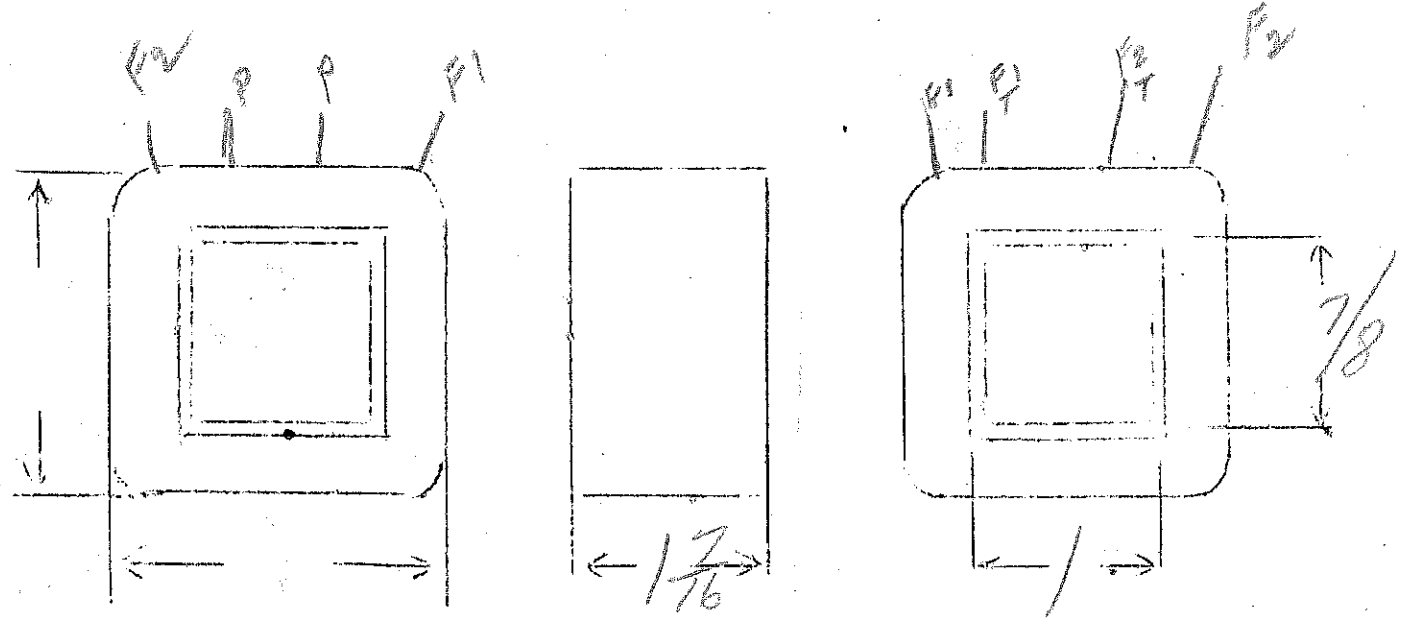


$E_p - 115V$
 $E_{s1} - 7.5V - 2amp CT.$
 $E_{s2} - 6.3V - 1amp CT.$

VA = 25

SPEC. NO. 1865

	#209	WL				
Winding	PR1	F1	F2			
Turns	710	52	44			
Taps	—	26	22			
Wind. Lgth.	1.25					
Wire Size	#27	#19	#21			
T.P.L.	72					
Kind Term.	WIRE ONLY	✓	✓			
Term. Lgth.	3"	3"	3"			
Layer Insul.	30#	—	—			
Wrapper	3L005 GA	3L005 GA	3L005 GA			
TUBE	4L007			IMPREGNATION		VARNISH
CURE	1 X 1 3/8					



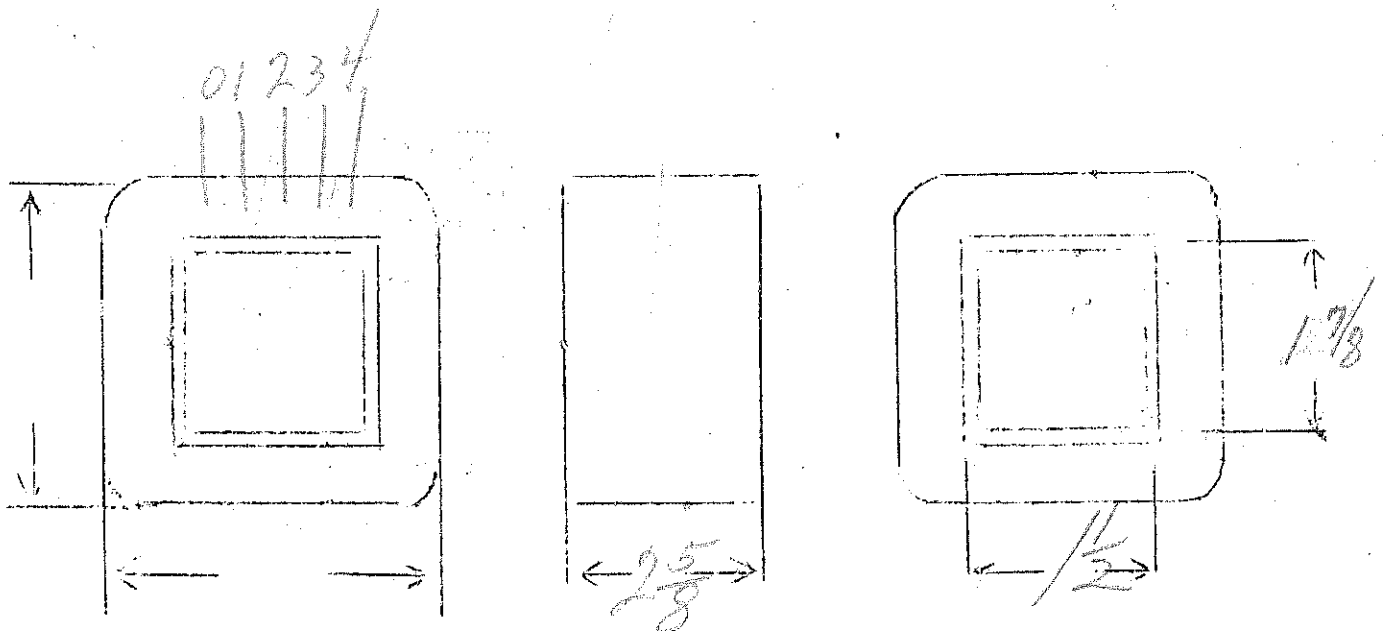
See other side

206

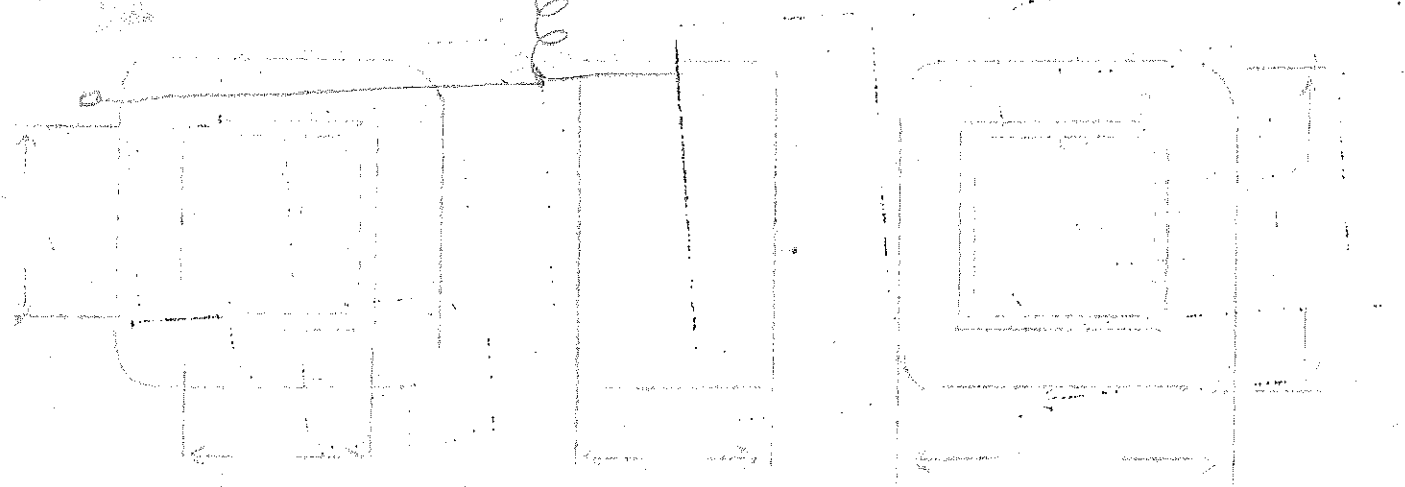
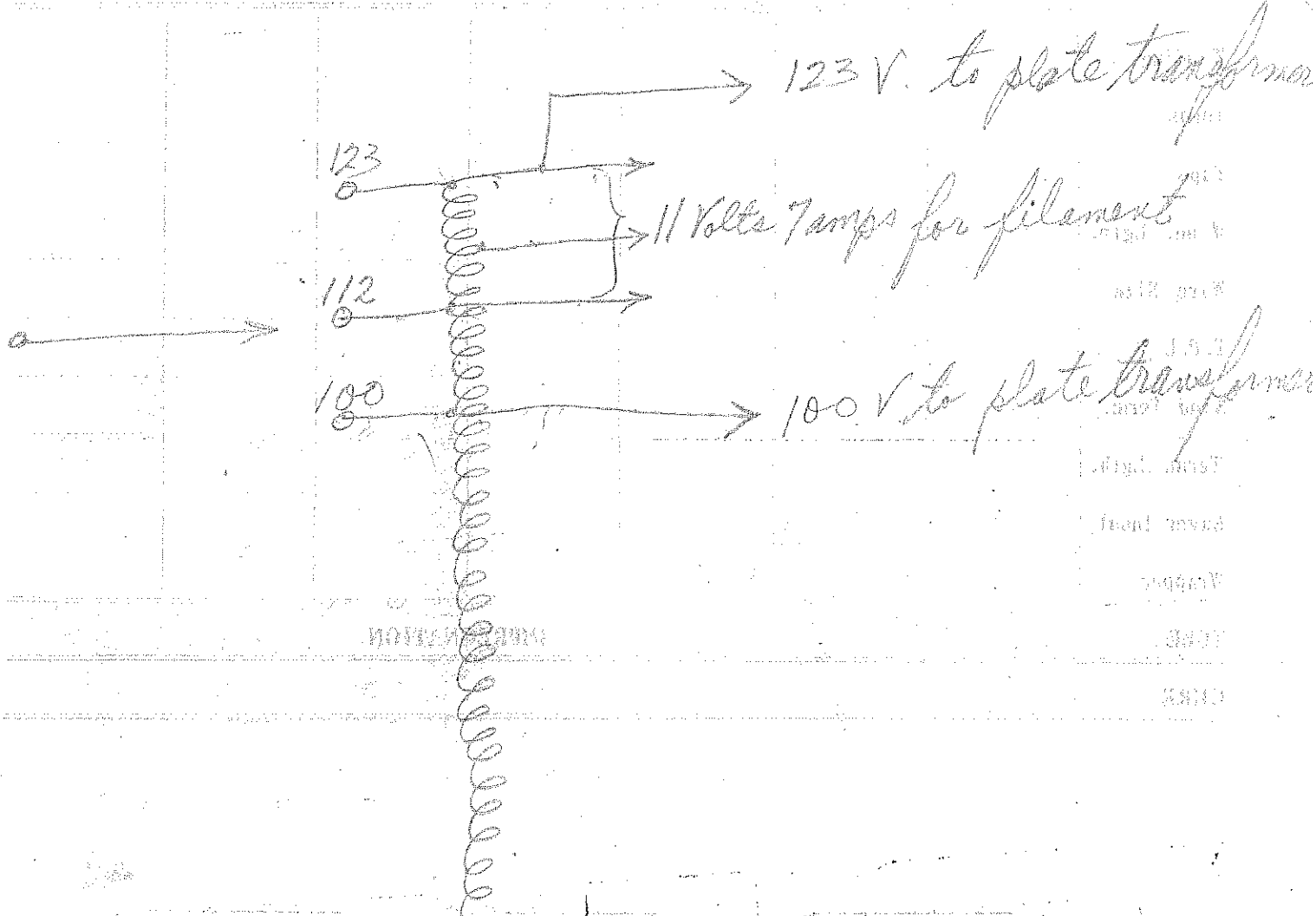
SPEC. NO. 1866

Continuous

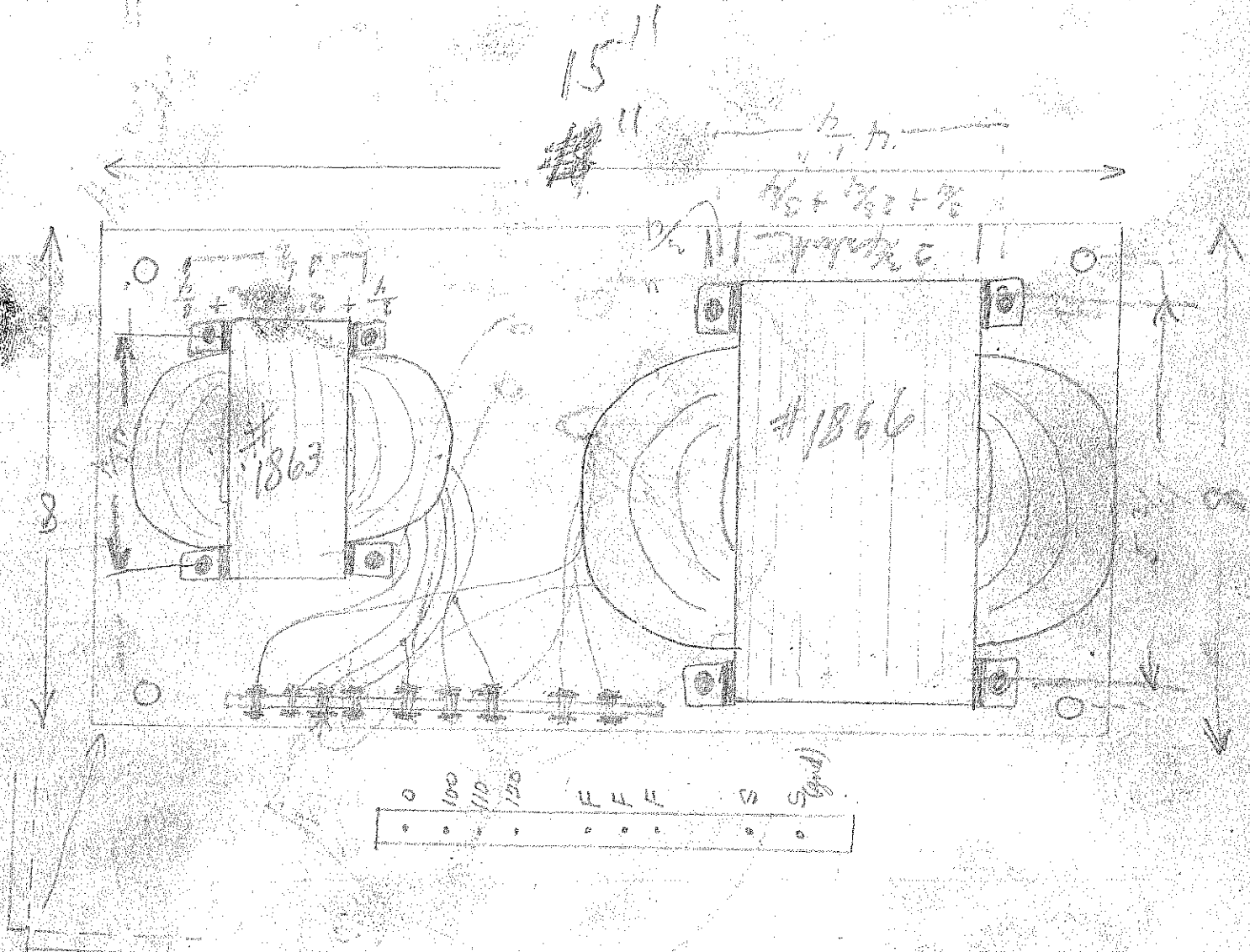
Winding							
Turns	206	26	25				
Taps	—	—	12				
Wind. Lgth.	2 3/8						
Wire Size	#15	double #13	double #12				
T.P.L.	6L	2L	3L				
Kind Term.	WIPE ONLY						
Term. Lgth.	12"	12"	12"				
Layer Insul.	.007 KRAFT	Double .007	KRAFT				
Wrapper			3L0056A				
TUBE	7L009			IMPREGNATION		VARNISH	
CURE	1 1/2 x 17/8						



over



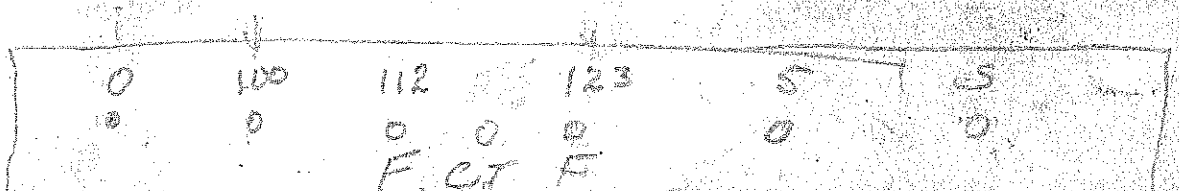
Spec. for mounting of 1863 and 1866



corners notched and bent flange apart $\frac{3}{8}$ "

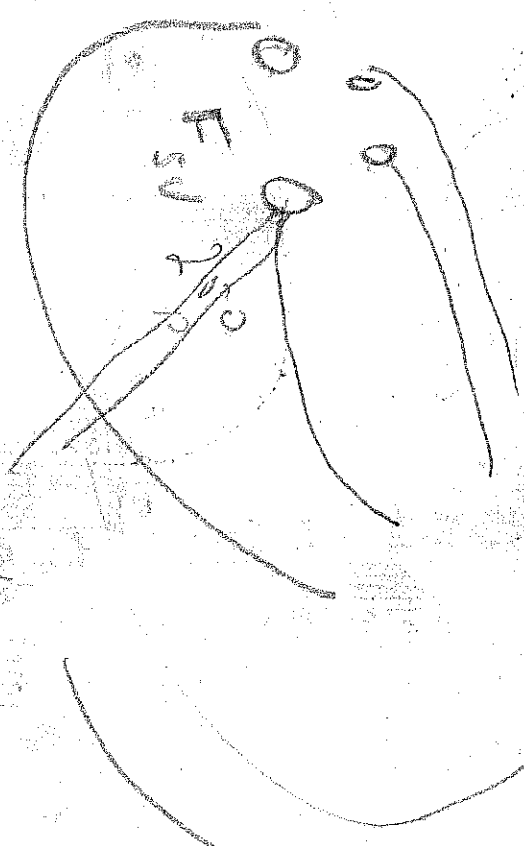
Fig 16 GA

1 - Special metal frame between units



$2\frac{1}{2}$
 $4\frac{1}{2}$
 $1\frac{1}{3}$
 $1\frac{1}{2}$
 2
 9
 2
 $1\frac{1}{3}$

$\frac{3}{16}$
 $\frac{1}{6}$



~~$1\frac{1}{2}$
 $2\frac{1}{2}$
 $4\frac{1}{2}$
 3
 $3\frac{1}{2}$
 $3\frac{1}{4}$~~

$6\frac{1}{2}$
 40
 29.40

$2\frac{1}{2}$
 $1\frac{1}{2}$

3-6-9-12-15-18-21-24 V-

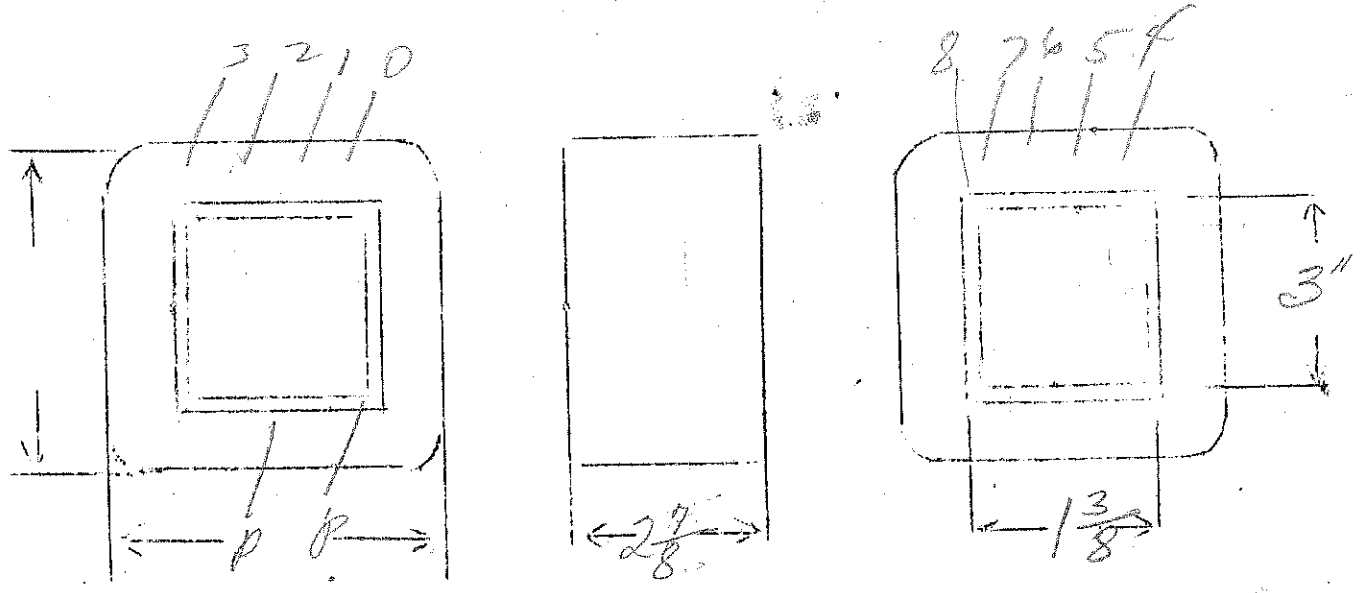
700 Watts

Ep-115V.

1047

SPEC. NO. 1867

Winding	PRI	SEC				
Turns	169	40				
Taps	—	5-10-15-20-25-30-35				
Wind. Lgth.	2 1/2	3 strands				
Wire Size	#13	#12				
T.P.L.	6L.	5L				
Kind Term.	Cotton covered ribbon #10					
Term. Lgth.	5"	5"				
Layer Insul.	007 KRAFT					
Wrapper	20056A 20056A					
TUBE	9L007			IMPREGNATION		KARNISH
CURE	1 3/8 x 3"					



Owner
10/11/70

Ep - 115V

E_{F1} - 5V - 3 amperes 1.66

E_{F2} - 25V - 12 amperes ← 5000 V. Ins

F" mly

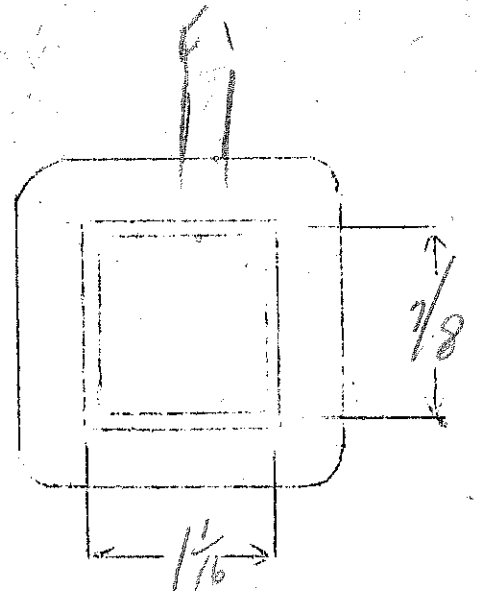
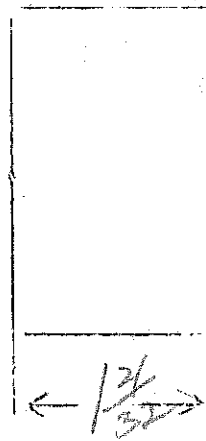
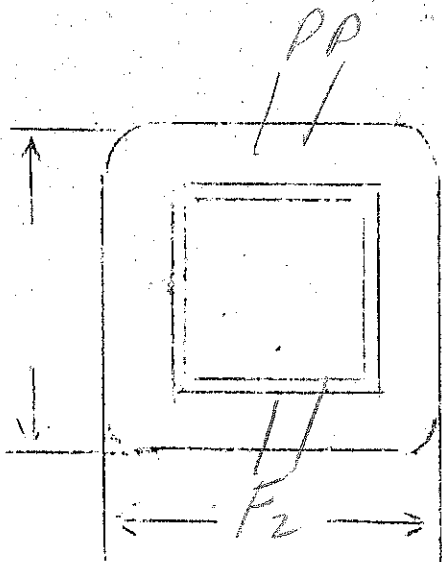
SPEC. NO.

1868

4.75

5.75

Winding	PRI	F ₁	F ₂				
Turns	660	32	16				
Taps	—	—	—				
Wind. Lgth.	1 15/32						
Wire Size	#25	#17	double #14				
T.P.L.		2 Layers	2 Layers				
Kind Term.	oil Braid	WIPE	ONLY				
Term. Lgth.	4"	4"	4"				
Layer Insul.	30 #						
Wrapper	2L007VC 2L005GA	2L007VC 2L005GA	2L007VC 2L005GA				
TUBE	7L007	IMPREGNATION		VARNISH			
CURE	1 1/16 x 7/8						

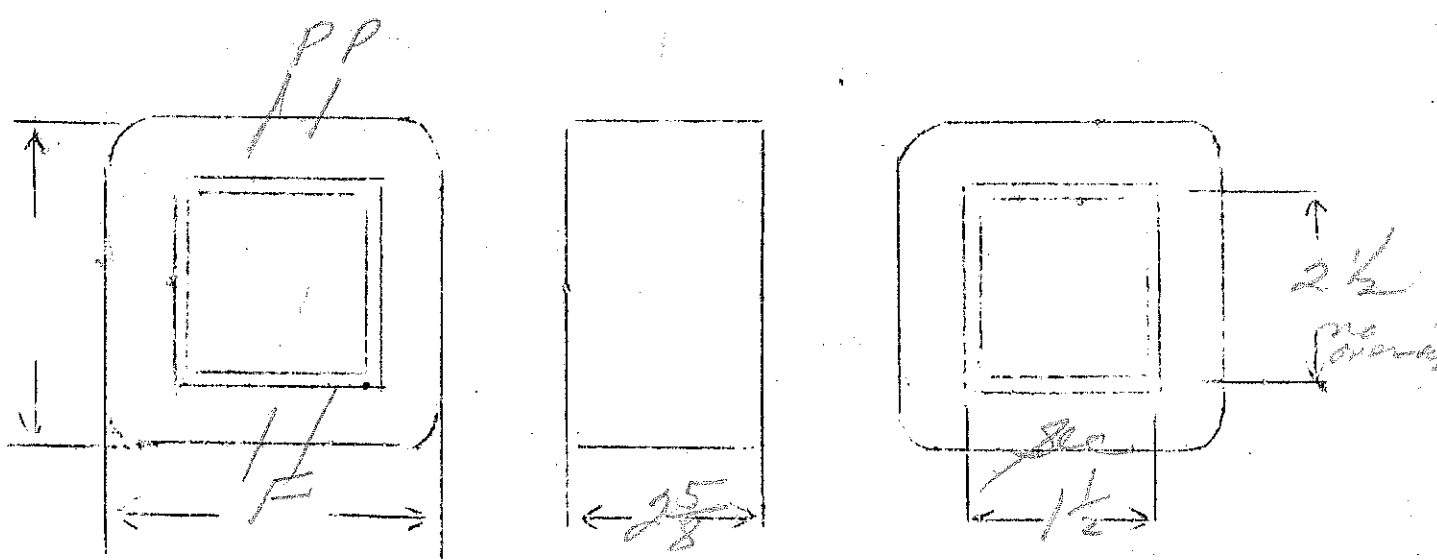


$E_p = 115V$
 $E_f = 2.2V - 18\text{amps}$
 $E_s = 20, 22.5, 25, 27.5, -15\text{amps}$
 $30, 32.5V\text{ open}$

$N/E = 1.6$

SPEC. NO. 1869

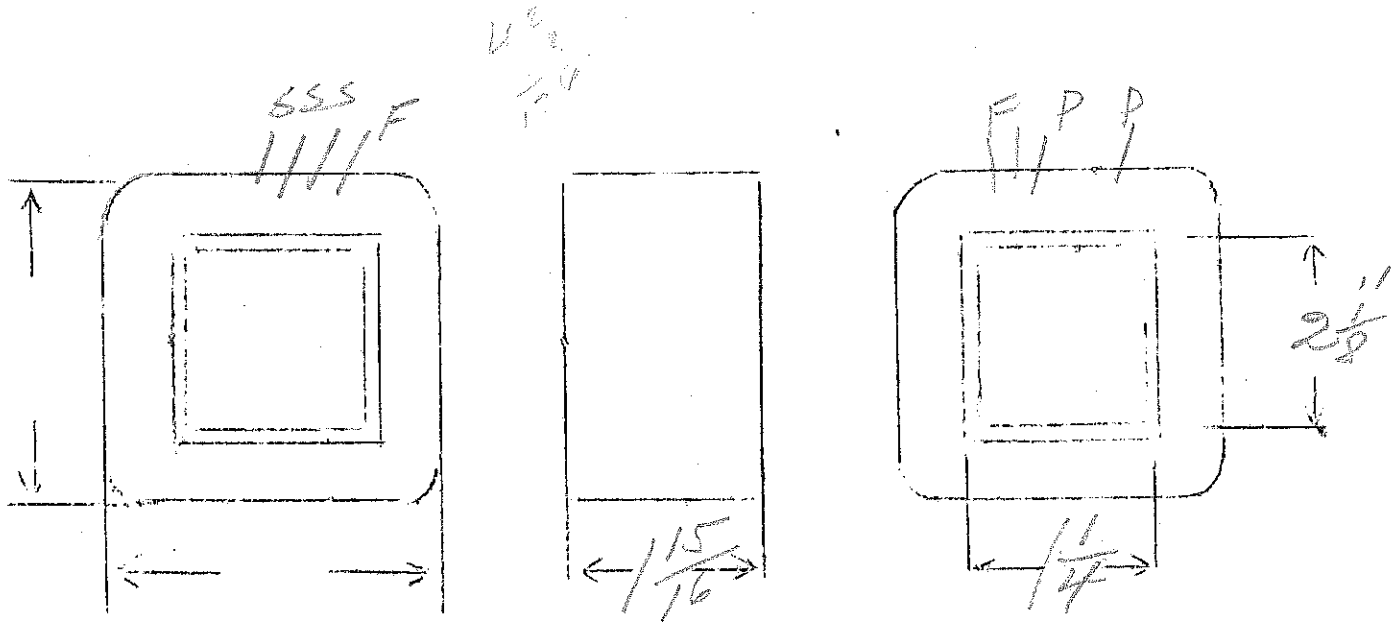
Winding	PR1	SEC	0-white	Ref			
Turns	184	52	Rest Blue	A/L			
Taps		48		4			
Wind. Lgth.		44-40	36-39				
Wire Size	#15	#11		double #13			
T.P.L.	6L						
Kind Term.	WIRE	ONLY					
Term. Lgth.	8" -	fleeing					
Layer Insul.	007 KRAFT	007 KRAFT					
Wrapper	2L0056A	2L0056A	2L0056A	2L0056A			
TUBE	9L007			IMPREGNATION			KARNISH
CURE	1 1/2 x 2 1/2						



$E_p = 115V$
 $E_s = 1000V - 200Ma$
 $E_f = 10V. - CT. - 3.5amps \quad 2.18$

SPEC. NO. 1870

Winding	SFC	PRI	FIL				
Turns	2400	252	24				
Taps	—	—	12				
Wind. Lgth.	1.75	1.75	1.75				
Wire Size	#29	#19	#17				
T.P.L.	134-18	6L	1L				
Kind Term.	#20 Round	#20 P. Round	WIRE ONLY				
Term. Lgth.	9"	9"	9"				
Layer Insul.	double 20# R.	50#	—				
Wrapper	2L007VC	2L007BA	2L007GA				
TUBE	7L007+1L007VC			IMPREGNATION		KADNISKU	
CURE	1 1/4" x 2 1/8"						



SARGE 173

Ep- 118

Es - 700V.C.T. - 65MA.

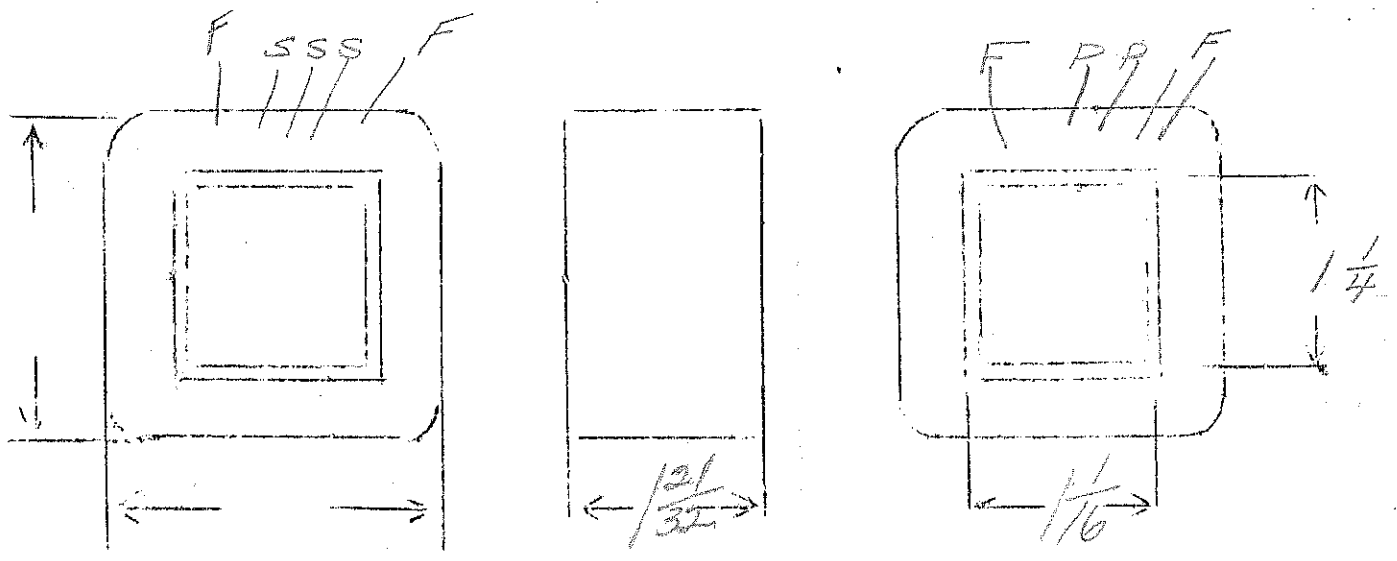
4.3

Ef1 - 5V - 2amps

Ef2 - 2.5 V.C.T. - 8amps

SPEC. NO. 1871 (Replace 225)

Winding	SEC	SHIELD	PRI	F ₁	F ₂		
Turns	3400	190	495	24	12		
Taps	1700	—	—	—	6		
Wind. Lgth.	$1\frac{15}{32}$	$1\frac{15}{32}$	$1\frac{15}{32}$	—	—		
Wire Size	#34	#34	#24	#20	double #16		
T.P.L.	190-18	194	63-8				
Kind Term.	sil braid		WIRE ONLY	→			
Term. Lgth.	3	3	3	3	3		
Layer Insul.	double 16#	—	50#	—	—		
Wrapper	1L007VC	1L007VC	2L005BA	2L005BA	2L005BA		
TUBE	4L007			IMPREGNATION		VARNISH	
CURE	$1\frac{1}{16} \times 1\frac{1}{4}$						



Ep - 115

Es - 930V.C.T. - 250Ma

Ep - 5V - 3amp

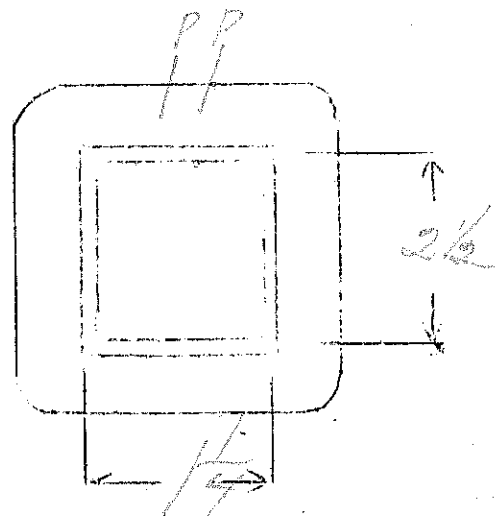
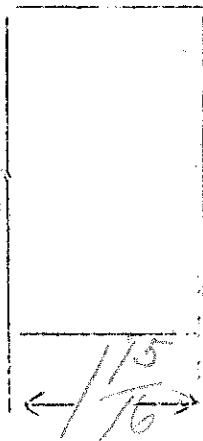
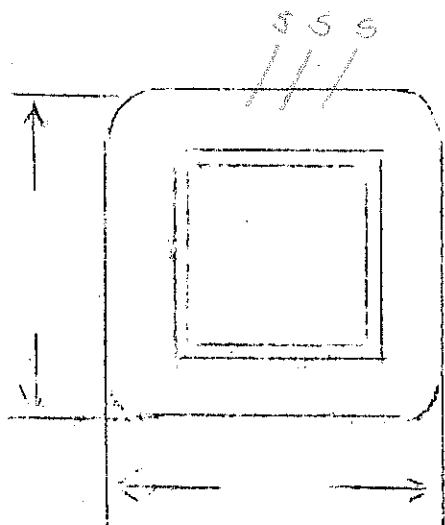
Ep - 2.5V - 6amp CT

Ep - 2.5V - 8amp CT

SPEC. NO.

1872

Winding	SEC	SHIELD	PRI	F1	F2	F3
Turns	1860	117	210	10	5	5
Taps	930	-	-		3	3
Wind. Lgth.	1.75	1.75	1.75	-	-	-
Wire Size	#28	#28	#19	#18	#15	double #17
T.P.L.	117-16	117	43-5			
Kind Term.	#20 P Braid	pl Braid	#20 P Braid	WIRE	ONLY	
Term. Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	double 20#		50#			
Wrapper	2007VC	1007VC	20076A			20076A
TUBE	7L007 + 11007VC			IMPREGNATION		VARNISH
CURE	1/4 x 2 1/2					



EP-115V.

Es - 750VCT-10ma

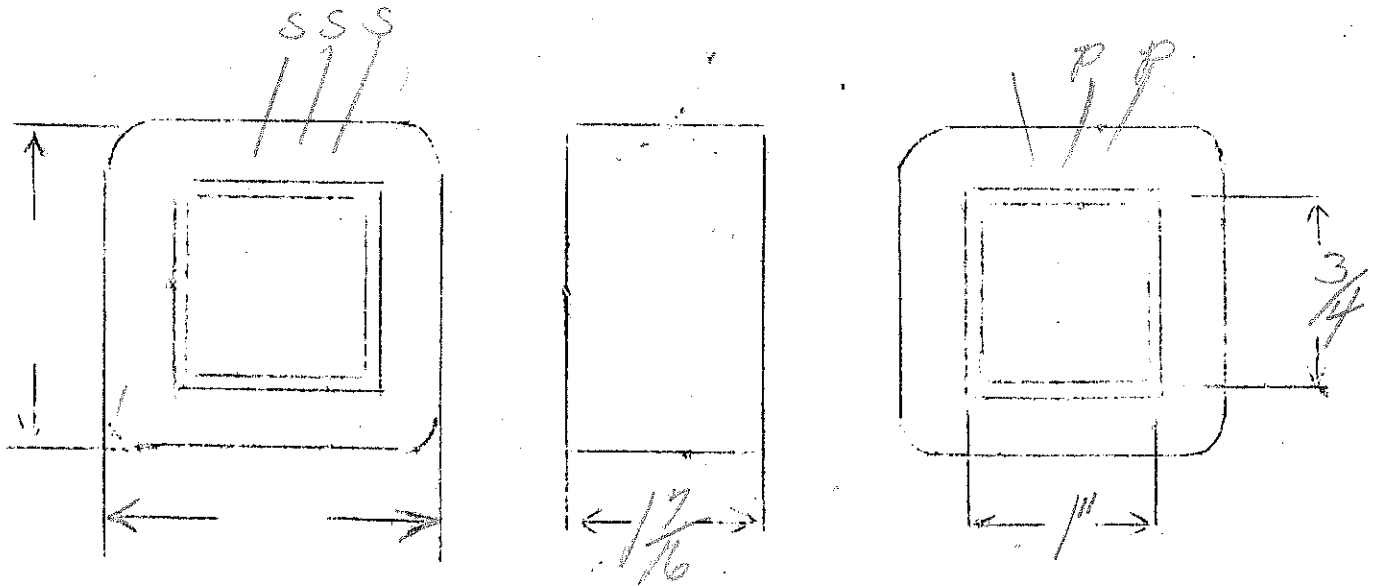
7.2

EF1 - 5V-2amps

EF2 - 6.3V-1amp

SPEC. NO. 1873

Winding	SEC	SHIELD	DR1	FIL	FIL		
Turns	5800	83	830	41	50		
Taps	2900				25		
Wind. Lgth.	1.25	1.25	1.25				
Wire Size	#39	#28	#28	#20	#23		
T.P.L.	290-20	83-1	83-10				
Kind Term.	#39 Braid	sil B1	#28 Braid	WIRE ONLY			
Term. Lgth.	9	3	9	9	9		
Layer Insul.	duplex 16#	—	40#	—	—		
Wrapper	2007C	20056A	30056A	30056A			
TUBE	72007	IMPREGNATION			VARNISH		
CURE	1 x 3/4 N.W.						

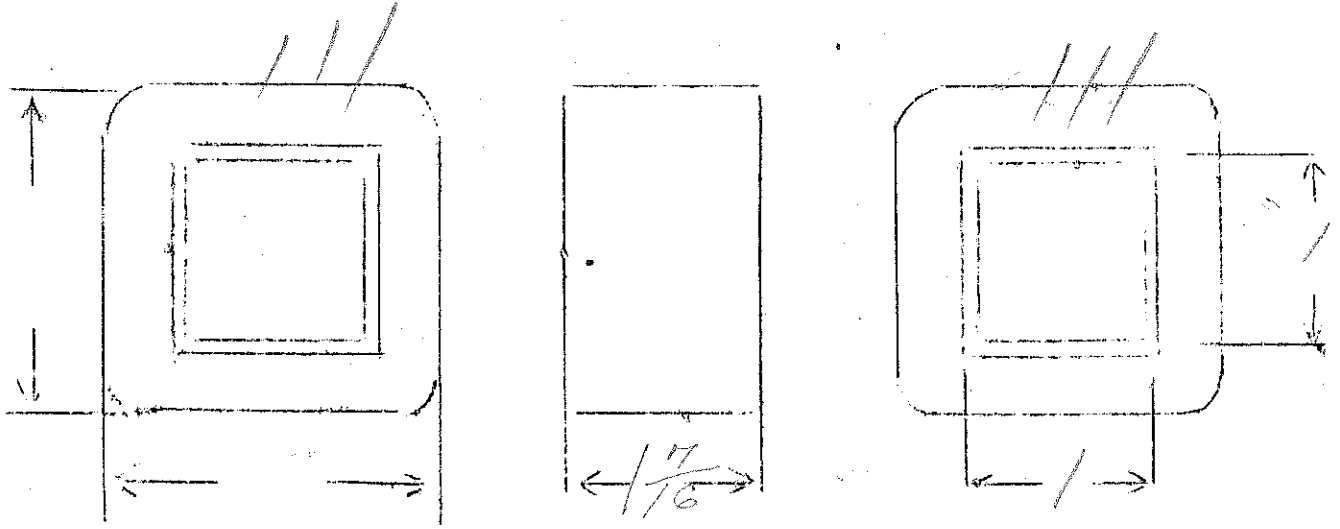


440 to 110V - 50 watt "A" MTG.

5.8

SPEC. NO. 1874

Winding	PRI	SEC				
Turns	2550	725				
Taps	—	—				
Wind. Lgth.	1.25	1.25				
Wire Size	31	25				
T. P. L.	117-22	61-12				
Kind Term.	# 20					
Term. Lgth.	9"	9"				
Layer Insul.	40#	40#				
Wrapper	1L007K	2L005GA				
TUBE	7/004		IMPREGNATION			VARNISH
CURE	1 x 1 NW					

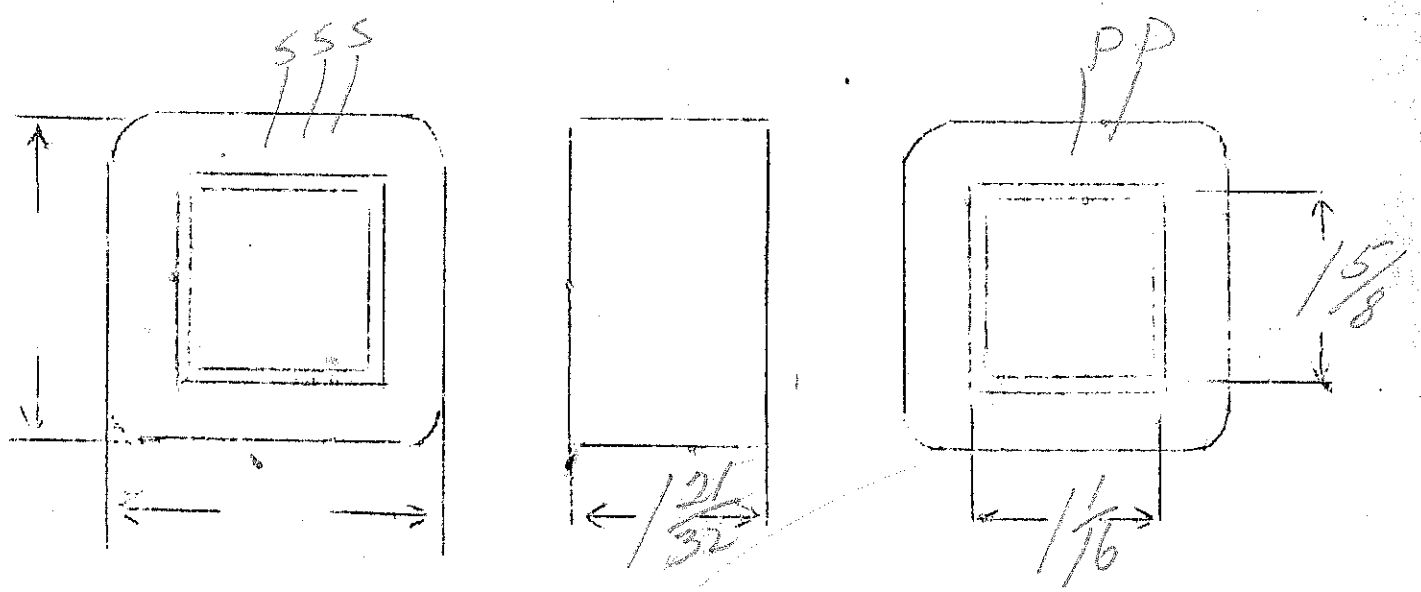


Ep-115
 Es - 700V.C.T. - 135Ma
 Ef1 - 5V - 2amp
 Ef2 - 6.3V.C.T. - 3amps

V.A. - 73

SPEC. NO. 1875

Winding	SEC	SHIELD	PRI	F ₁	F ₂		
Turns	2500	139	380	18	23		
Taps	1250		—		12		
Wind. Lgth.	$\frac{1.15}{.32}$	$\frac{1.15}{.32}$	$\frac{1.15}{.32}$	—	—		
Wire Size	#31	#31	#23	#20	#18		
T.P.L.	139-18	139	55-7				
Kind Term.	#20 Braid	sil Br	#20 Braid	WIRE ONLY			
Term. Lgth.	9 double	3	9	9	9		
Layer Insul.	16#	—	40#	—	—		
Wrapper	1L007VC	1L007VC	2L005GA	2L005GA	2L005GA		
TUBE	7LM7			IMPREGNATION		VARNISH	
CURE	1 1/16 x 15/8						



Yellow Black Green Red
 EP-110-115-120-125

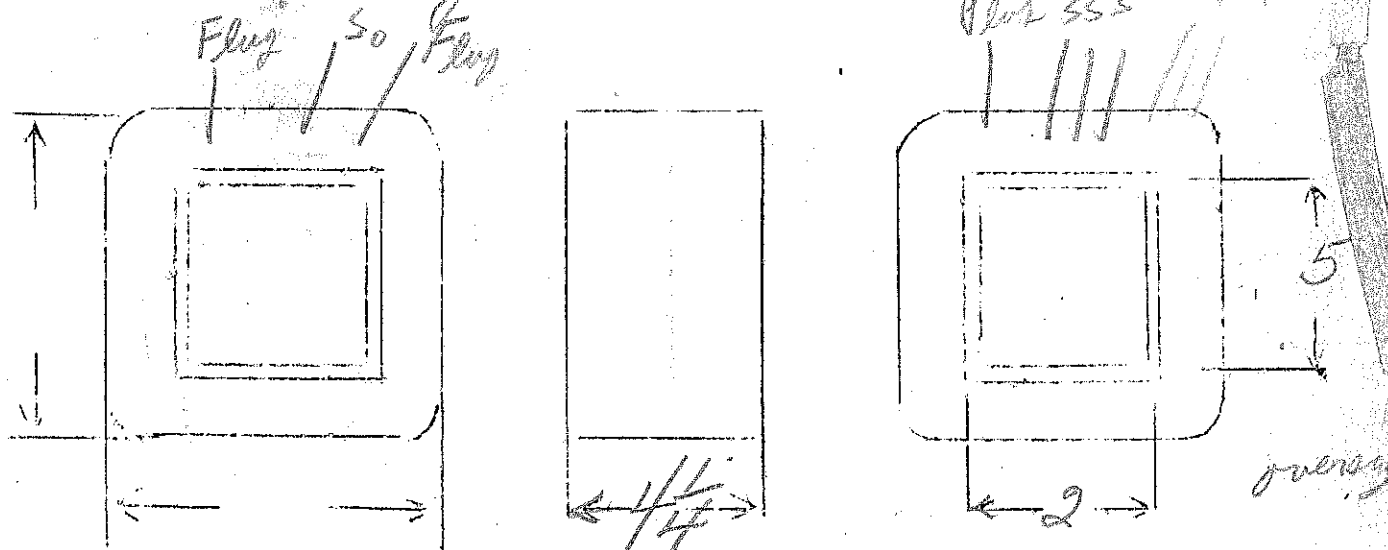
red green black blue
 Es - 3060-2580-2300 start

EP-11VOT-7amps

SPEC. NO. 1876-25 ~

Winding	SEC		PR1	FIL		
Sec taps	3120		128	12		
Turns	2640		123			
even layers	2300		117	6		
Taps			112			
Wind. Lgth.	3 7/8					
Wire Size	#24		#10 square	#13		
T.P.L.	166-19					
Kind Term.	#20 P. Braid		#16 Braid			
Term. Lgth.	9"		9"	3"		
Layer Insul.	double 50#		.007			
Wrapper	22507VC 34007VC 370056A		220056A	220056A 12010ER		
TUBE	104007+14007VC		IMPREGNATION	VARNISH		
CURE	2x5					

Fil on last pri layer



keep legs and leads near center of coil

over

Pri- 110-115-120-125
 Sec- 3060-2580-2300 @ 260ma
 Fila - 11V @ 7amp.

Lindquist

E. J. Koss
 Dec # 1478
 BRISTOL

SPEC. NO. 1876

2277

Winding	Sec		Pri		Fila.	
Turns	3120		128		12	
Taps	2320-2640		112-117-123	USE	6	
Wind. Lgth.	3 7/8"		3 7/8"	4"	3 7/8"	
Wire Size	#24		#10 □ DCC #9E		#14	
T. P. L.	166-196		32-46	32-46	12-16	
Finish						
Type Lead	9"	DC Stack	9"	9"	3'	
Lead Lgth.	1 3/4" DULAC	OVER	#10 ST. P. CP.	ST-W.G. TOPS 4mmolur	W.D. V.P. Sleeve	
Layer Insul.	2L 404 G		2L 007'4K	1L015CP		
Test Volt.	7500			1500	6000	
Wrapper	1L015VC		2L 007'4K	1L015VC	1L015VC	
	2L 1L015 CP		2L 005'4A	1L015CP	2L 005'4A	

TUBE 9L-007'4K + 2L 007'VC 1L015VC IMPREGNATION Varnish

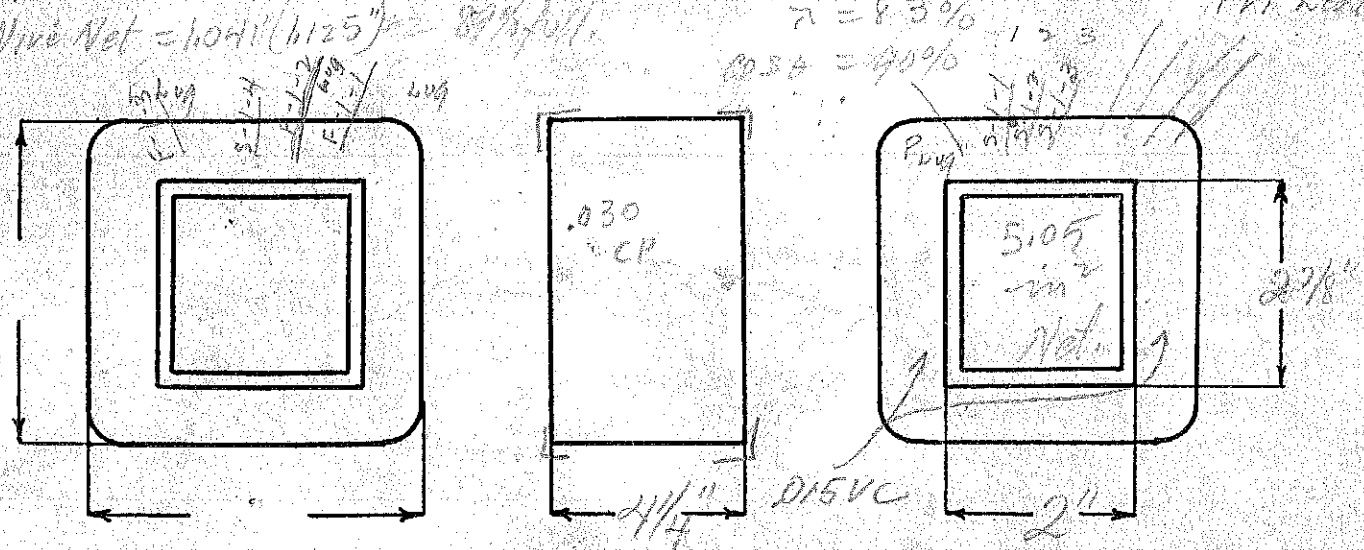
CORE 2 1/2" x 2 7/8" EVI GA. 24 GRADE D STACK 2x2

MOUNTING Open & Mount - See Reverse side.

Cu = 808-638-586
 Fe = 72.5 @ 60W
 TPV = 1023

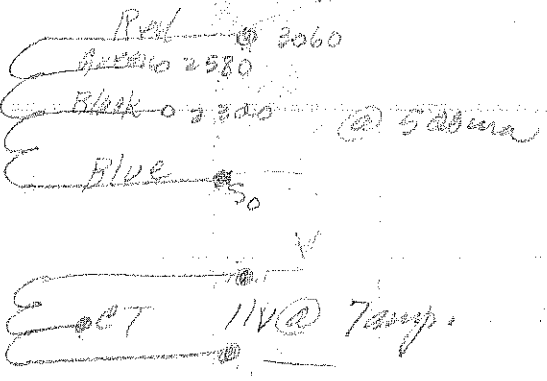
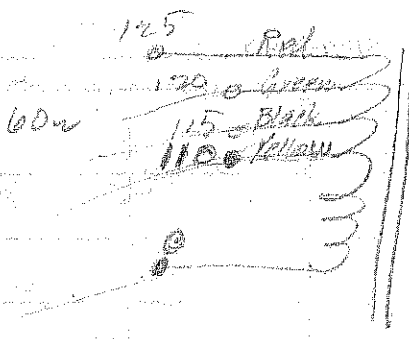
Σ Sec VA = 1607
 Pri VA = 2150
 Pri I = 19.6
 $\eta = 83\%$
 $\cos \phi = 90\%$

Pri Leads



REDESIGNED BY HWS

DATE 7-18-41



Notes: Taps on HV See come out on every layer.
Keep logs & leads near center of coil.

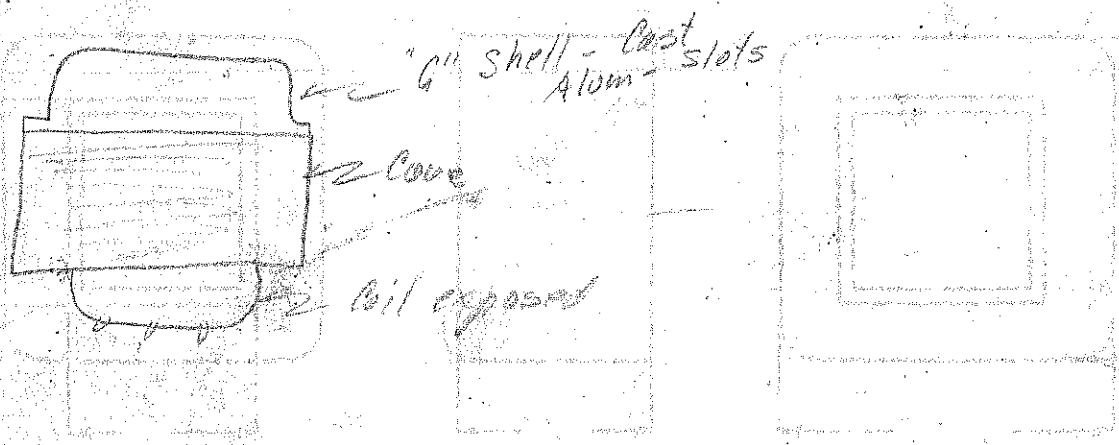
Open: Alum. bracket & drum shell cover with
louvers.

Closed: Alum. bracket top & bottom
assemble with 4 1/2" long - 1/4" aluminum
plated bolts.

Paint core black - no paint on casing

Install cotton sleeving over #10 St. Dill. primary
leads, color as shown.

Special "C" - open existing cabinet



Ep-130

see #1241

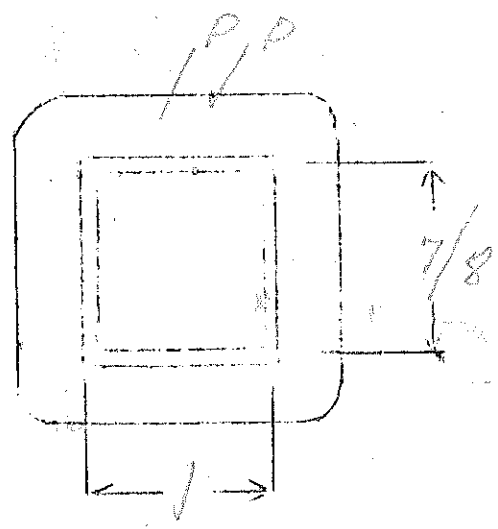
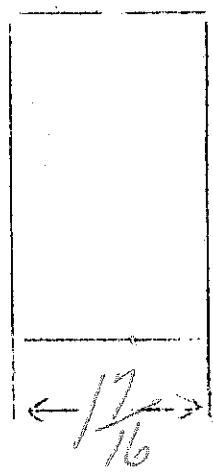
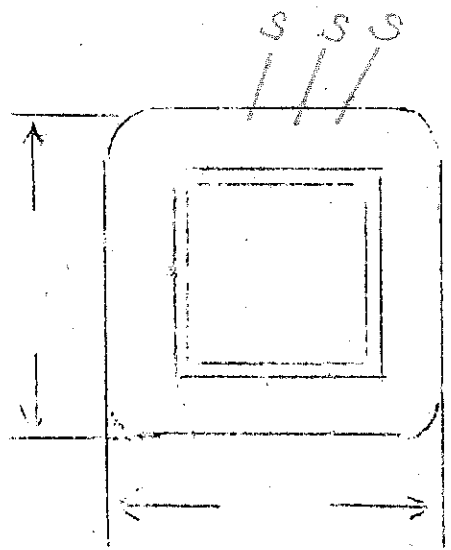
Es-685 V.C.T open circuit

Ef1-5V-2amps

Ef2-6.3V-1.6amps

SPEC. NO. 1877

Winding	SEC	SHIELD	DRI	F1	F2		
Turns	4000	97	904	33	41		
Taps	2000	—	—	—	—		
Wind. Lgth.	1.25	1.25	1.25	—	—		
Wire Size	#37	#27	#27	#21	#22		
T.P.L.	225-18		72-10				
Kind Term.	#22 PP Brand	nil Brand	#22 PP Brand	WIRE ONLY			
Term. Lgth.	3	3	3	3	3		
Layer Insul.	double 16#		40#				
Wrapper	1007VC	1005VP	2005GA	2005GA	2005GA		
TUBE	4L007			IMPREGNATION		VARNISH	
CURE	1 x 7/8 NW						



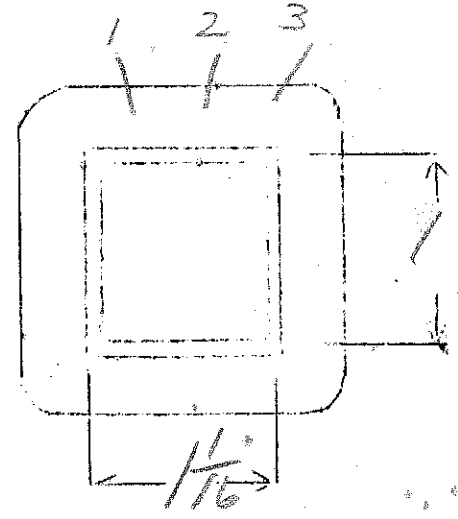
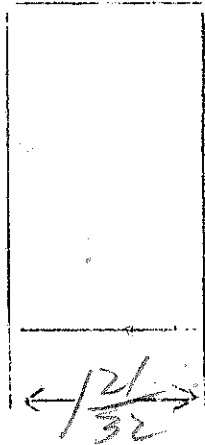
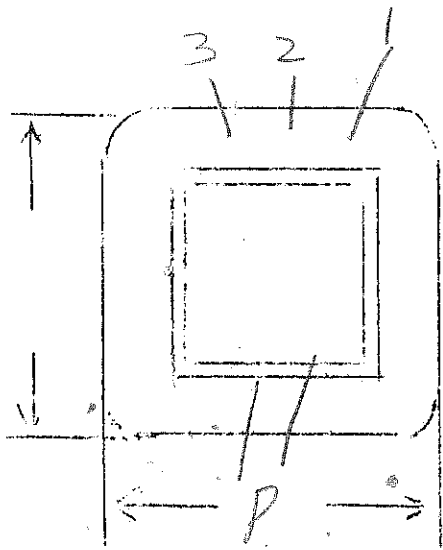
$E_{F1} = E_{F2} = E_{F3} = 5V-3amp - 5000V$ insulation

VA = 60

55

SPEC. NO. 1878

Winding	PRI	FIL	FIL	FIL			
Turns	632	30	30	30			
Taps							
Wind. Lgth.	115/32						
Wire Size	#23	#18	#18	#18			
T.P.L.	54-12	—	—	—			
Kind Term.	WIBE	ONLY					
Term. Lgth.	3	3	3	3			
Layer Insul.	50#	—	—	—			
Wrapper	21007V 110056A	21007V 110056A	21007V 110056A	21007V 110056A			
TUBE	71007	IMPREGNATION			VARNISH		
CURE	1 1/16 x 1						



Ep-115

Es-880V.C.T. - 200 Ma. - Brass tap

See T7438

EF₁ - 5V-3amps

EF₁ - 2.5V-3amps C.T.

VA=145

EF₂ - 5V-3amps C.T.

M/E = 184

EF₃ - 2.5V-3amps C.T.

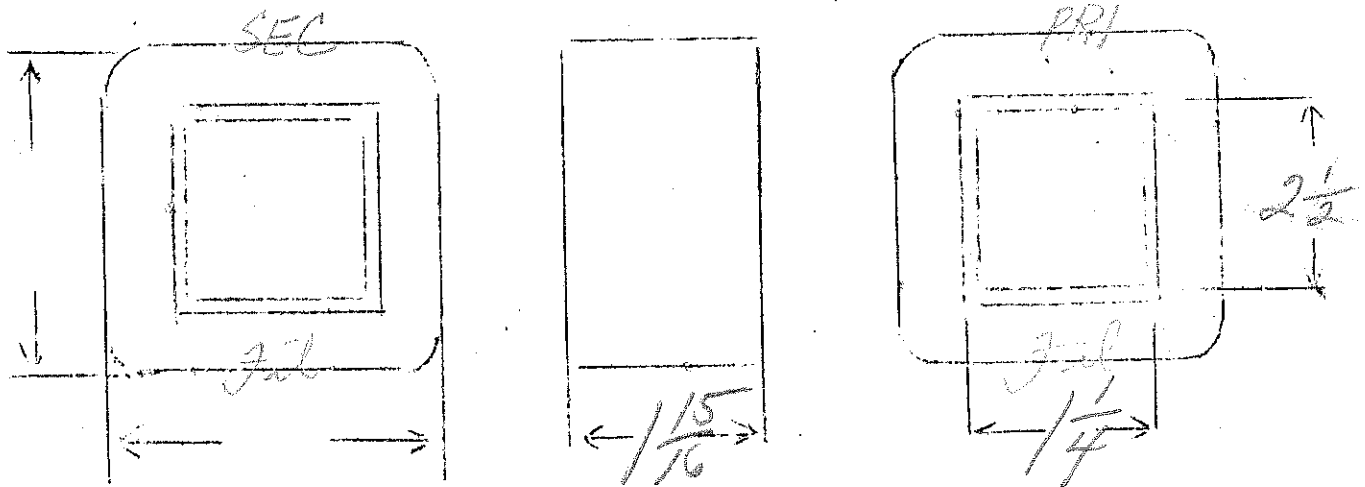
EF₃ - 2.5V-5amps C.T.

SPEC. NO.

1879

Winding	SEC	SHIELD	Black PRI	Green F ₁	White F ₂	Red F ₃	Blue F ₄	Black F ₅
Turns	1750 1135	130	212	10	10	5	5	5
Taps	1005 875	—	—	—	5	2	2	2
Wind. Lgth.	1.75	1.75	1.75	—	—	—	—	—
Wire Size	#29	#29	#20	#18	#18	#18	#18	#15
T.P.L.	130	130	44.5	—	—	—	—	—
Kind Term.	#20 P Braid	SEL Braid	#20 P Braid	WIRE	ONLY	—	—	—
Term. Lgth.	9	3	9	9	9	9	9	9
Layer Insul.	double 20.7	—	—	—	—	—	—	—
Wrapper	2007VC 32P, 32V	1007VC	2007BA	—	—	—	—	—
TUBE	71007	IMPREGNATION			VARNISH			
CURE	1/4 X 2 1/2							

heavy insulation - 2000V



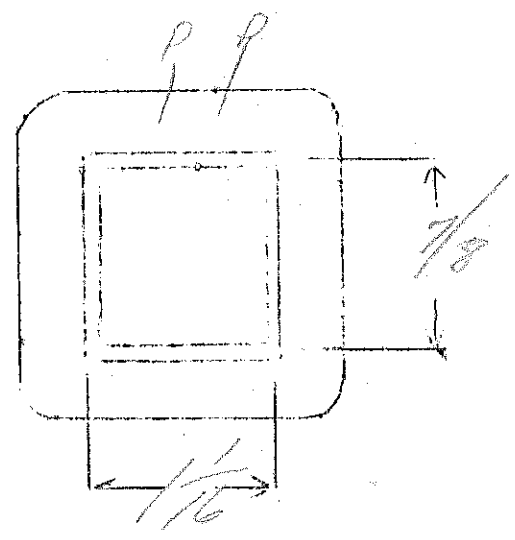
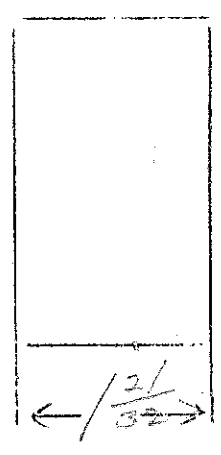
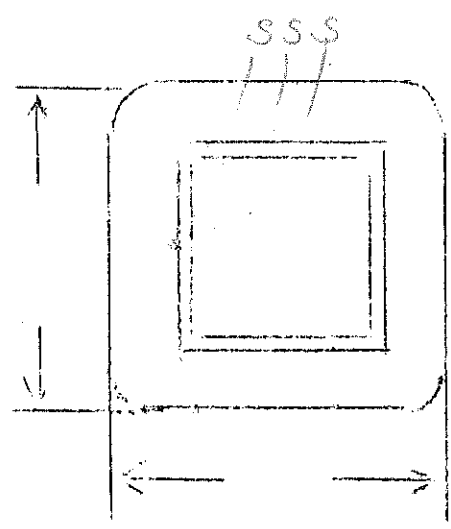
$E_p - 120V$
 $E_s - 250V \text{ CT} - 50 \text{ Ma}$
 $E_f - 5V - 2 \text{ amp}$
 $E_f - 6.3V - 2 \text{ amp}$

575

SPEC. NO.

1880 see #1892

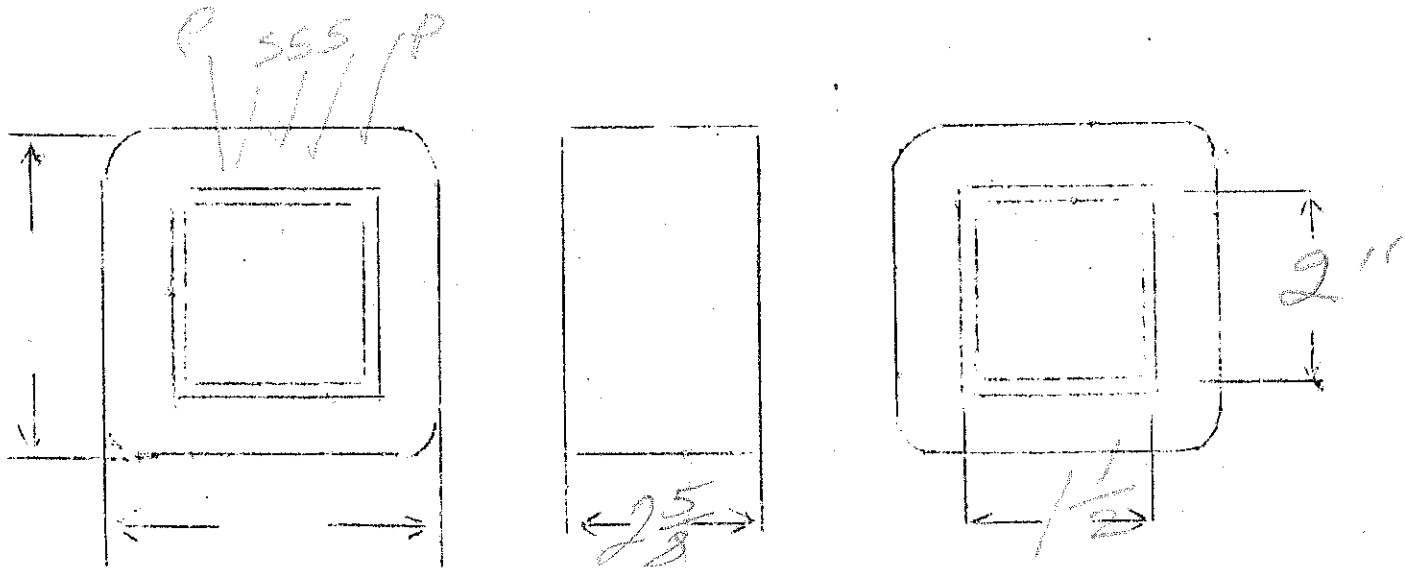
Winding	SEC	SHIELD	PRI	F ₁	F ₂		
Turns	4600	69	685	32	40		
Taps	2300	—	—	—	—		
Wind. Lgth.	$\frac{15}{32}$	$\frac{15}{32}$	$\frac{15}{32}$	—	—		
Wire Size	#35	#25	#25	#20	#20		
T.P.L.	2/2-22	69-1	69-10				
Kind Term.	#22 Round	WIRE ONLY	#22 Round	WIRE ONLY	WIRE ONLY		
Term. Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 16#	—	40#				
Wrapper	1L007VC 25 Wires	1L007VC	2L005GA	2L005GA	2L005GA		
TUBE	7L007			IMPREGNATION		VARNISH	
CURE	$\frac{1}{16} \times \frac{7}{8}$						



Ep - 115V
 ES - 1450V - 250Ma Continuous Operation
 CT
 $N/E = 2$

SPEC. NO. 1881

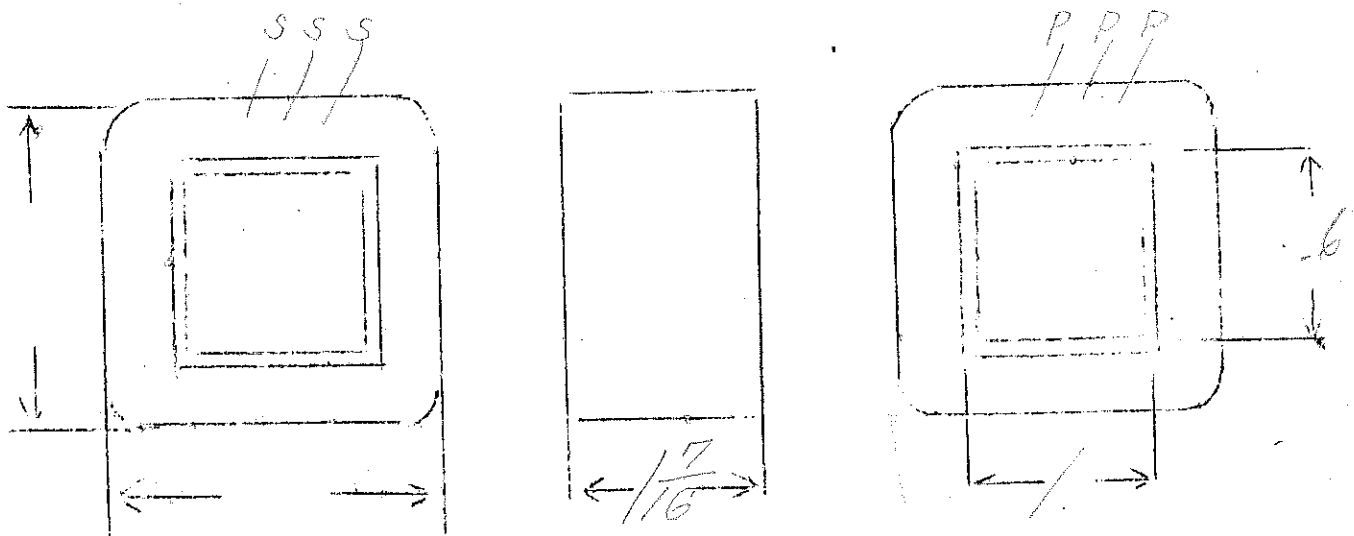
Winding	SEC	PRI					
Turns	3200	230					
Taps	1600						
Wind. Lgth.	2 3/8	2 3/8					
Wire Size	#27	#16					
T.P.L.	135-24	39-6					
Kind Term.	WIRE ONLY						
Term. Lgth.	4"	4"					
Layer Insul.	20% density	.00710 gpl					
Wrapper	21007VE	2100500					
TUBE	9L007		IMPREGNATION		VARNISH		
CURE	1 1/2 x 2						



AUTO B

SPEC. NO. 1882

Winding	SEC	SHIELD	PRI	SHIELD			
Turns	5000	1	92	1			
Taps	2500	—	46				
Wind. Lgth.	1.25	1.25	1.25	1.25			
Wire Size	#35	SILIM STOCK	#18	SILIM STOCK			
T.P.L.	182-28		23-4"				
Kind Term.	#20 Braid	Titan Braid	#20 Braid	Silver Braid			
Term. Lgth.	9"	3"	9"				
Layer Insul.	double 16#	—	50#				
Wrapper	12005C	12005VP	21005GA	21005G			
TUBE	7L007			IMPREGNATION	VARNISH		
CURE	1 x 6" NW						



Universal Driver

New Stock

P.P. plates L. P.P. grids
 15 watts and 10
 P/1/2s = 2, 2.4, 2.9, 3.5, 4.2, 4.6, 5, 6.5 : 1
 Max Pri DC = 100 ma. per side

SPEC. NO. 1883
 SEE 5541

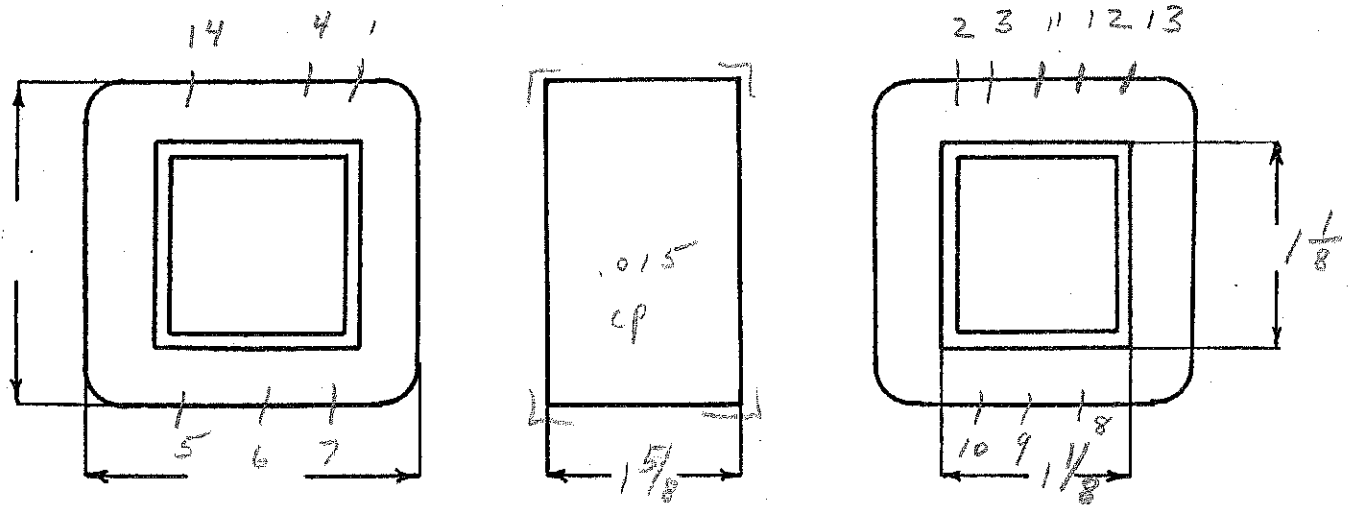
Winding	1-2-3-4 Sec	5-6-7 Pri	8-9-10 Pri	11-12-13-14 Sec		
Turns	833	1000	1000	833		
Taps	258-434	833	167	399-575		
Wind. Lgth.	13/8	13/8	13/8	13/8		
Wire Size	#29	#32	#32	#29		
T. P. L.	100-9L	139-8L	139-8L	100-9L		
Finish	89%	90%	90%	89%		
Type Lead	#20 DUAL C					
Lead Lgth.	cut 14"					
Layer Insul.	30#	30#	30#	30#		
Test Volt.	2500	2500	2500	2500		
Wrapper	2L005VC	2L005VC	2L005VC	2L0076A		

TUBE 5L0106K + 1L005VC IMPREGNATION

CORE 1 1/8 x 1 1/8 GA. 24 GRADE AA STACK Butt No Gap

MOUNTING AA

W.P. = 89%



DESIGNED BY S. Babcock

DATE 4-26-49

DESIGN AND TEST DATA

Rating: _____

Winding	Sec	Pri	Pri	Sec			
Mean Turn	5.36	5.81	6.49	7.31			
Resistance 25° c	31.	81.	90.5	42.4			
Pounds Copper	.145	.0945	.1055	.1985			
Copper Density	—	—	—	—			
Ratio Volts	—	—	—	—			
Test to Ground	2500	2500	2500	2500			

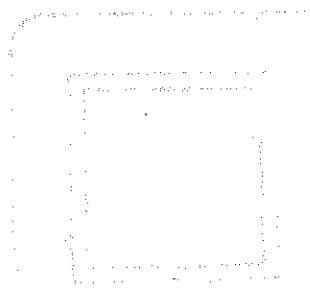
Iron Induction _____ @ _____ Cycles

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

Induced Test: Apply _____ Volts at _____ Cycles _____ on _____ with _____ grounded

Remarks:

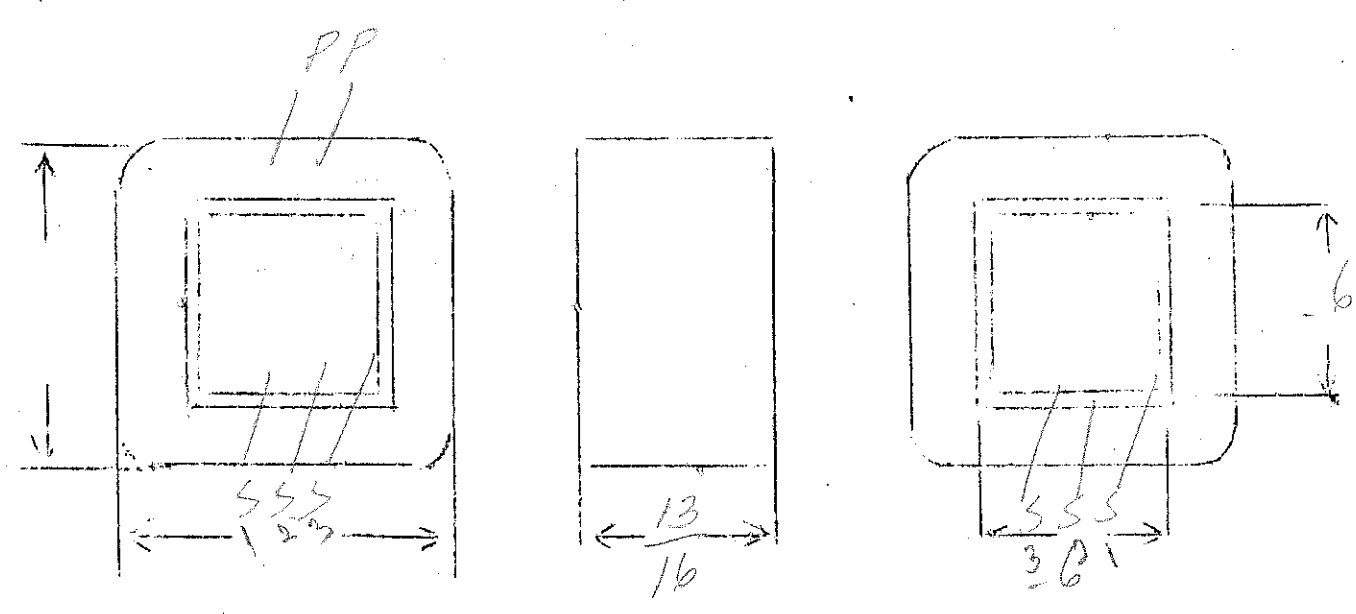
- 5 - 10 Red
- 6 - 9 Blue
- 7 - 8 Brown
- 1 - 14 Blue - White
- 2 - 13 Yellow
- 3 - 12 Green
- 4 - 11 Black



Ep-115
 $E_{F1} = E_{F2} = E_{F3} = 3.1V - \frac{1}{2} \text{ amp}$

SPEC. NO. 1884

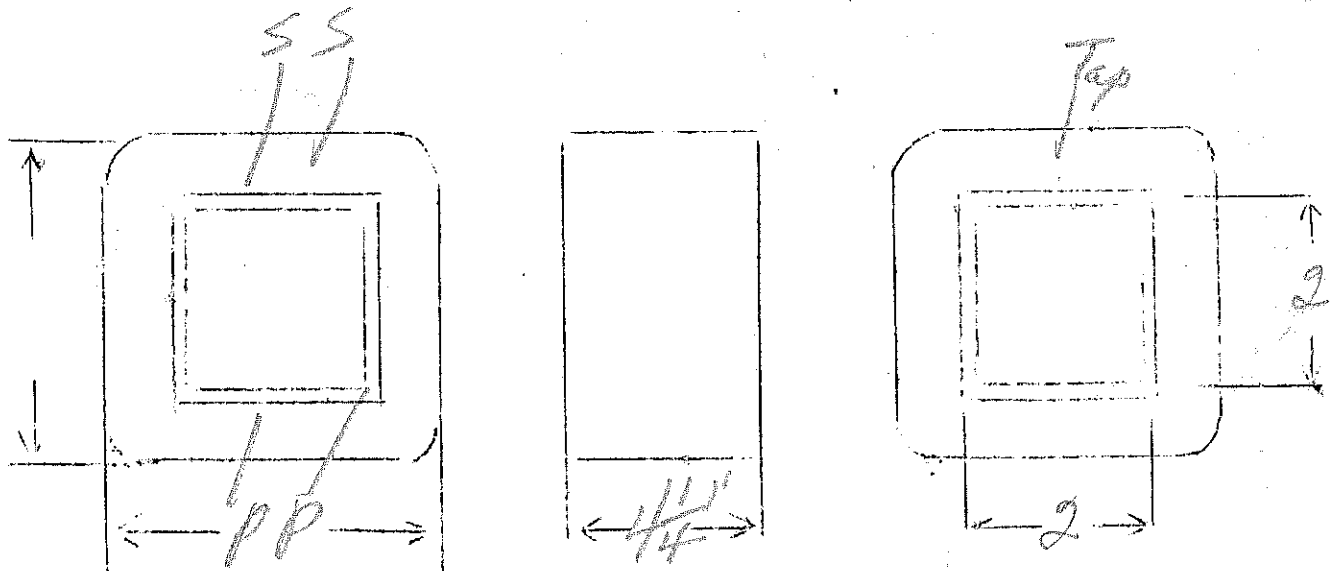
Winding	P	S	S	S		
Turns	1840	58	58	58		
Taps	—	—	—	—		
Wind. Lgth.	1 1/16	—	—	—		
Wire Size	#35	#28	#28	#28	4L	
T.P.L.	110-17		7 Layers			
Kind Term.	sil. bond		sil. bond			
Term. Lgth.	3	3	3	3		
Layer Insul.	30 ^u	40 ^u				
Wrapper	2L005GA	1L005GA		2L005GA		
TUBE	4L007			IMPREGNATION	VARNISH	
CURE	6x6	2x2	29 Ga			



EP-115
 ES-7500 V.C.T. - 500 watts

SPEC. NO. 1885

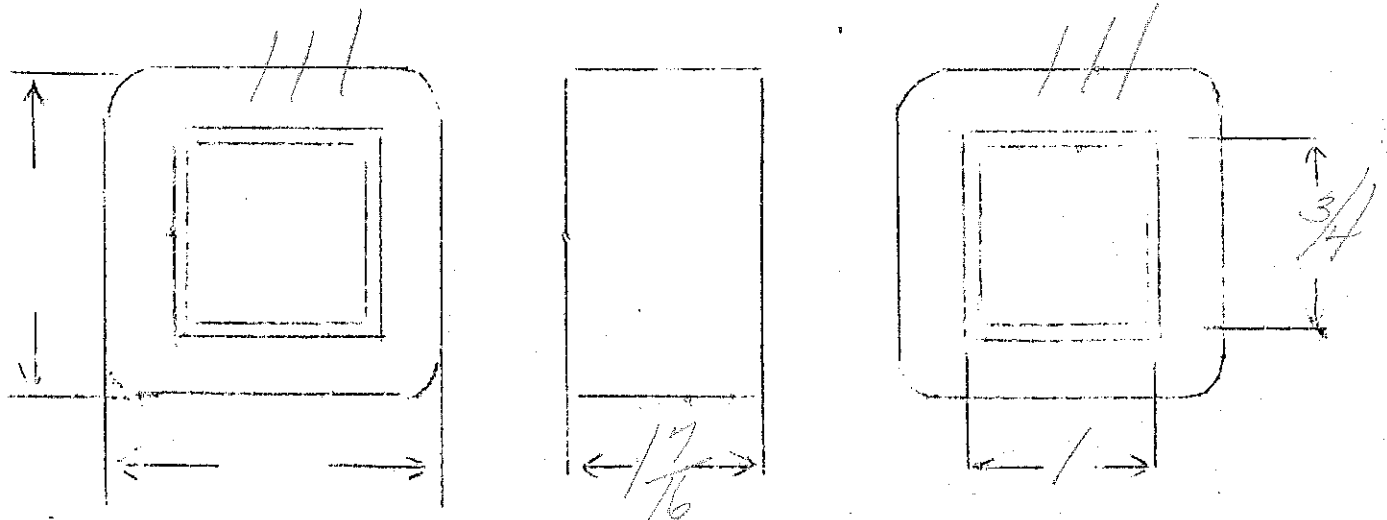
	Black	15					
Winding	PRI	SEC					
Turns	172	12,400					
Taps	-	6,200					
Wind. Lgth.	3 7/8	3 1/4"					
Wire Size	#14	#30					
T.P.L.	4L	273-46					
Kind Term.	SLEEVING	#20 PBraid	finish in winding				
Term. Lgth.	10"	10"					
Layer Insul.	.007	double					
Wrapper	4L007VC 3L005SA	4L007VC 4L005SA					
TUBE	9L007		IMPREGNATION	VARNISH			
CURE	2 x 2						



Ep-6V dr.
 Fg - 500V. CT - 60 mA

SPEC. NO. 1886

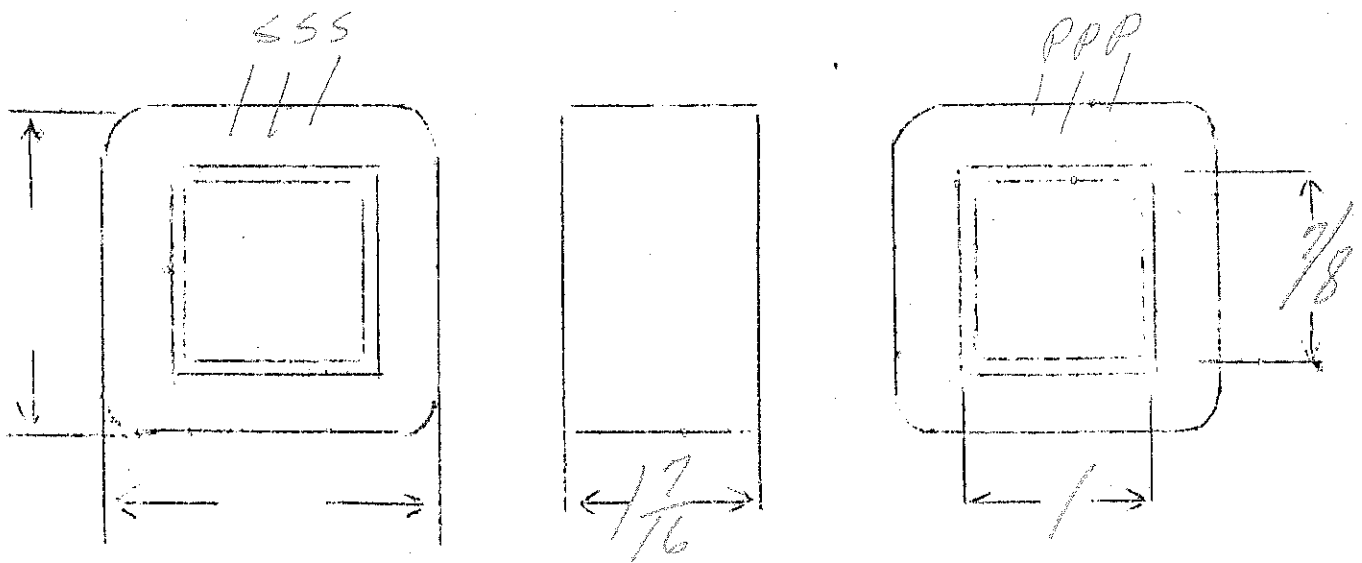
Winding	SEC	SHIELD	PR1				
Turns	4400	1	80				
Taps	2200		40				
Wind. Lgth.	1.25	1.25	1.25				
Wire Size	#34	Shiny Steel	#18				
T.P.L.	158-28		273				
Kind Term.	#22 Round	SellBr					
Term. Lgth.	9	3	9				
Layer Insul.	double 16F		005				
Wrapper	1007VC	2005GA	2005GP				
TUBE	72007	IMPREGNATION		VARNISH			
CURE	1x 3/4 NW 2x2						



Ep - 6Vdc
 Es - 550V.CT - 60ma

SPEC. NO. 1887

Winding	SAC	SHIELD	PRI				
Turns	4200		72				
Taps	2100		36				
Wind. Lgth.	1.25						
Wire Size	#34		#17				
T.P.L.	16226		24-3L				
Kind Term.	#22 PBRIND	SILBR	WIRE ONLY				
Term. Lgth.	9"	3"	9"				
Layer Insul.	double 16T		005				
Wrapper	1L007VC	2W05GA	3L005GA				
TUBE	7L007			IMPREGNATION	VARNISH		
CURE	1X7/8		2X2				



Bill of Materials (8117) UNION VIL CO

See #8117

EE - 10-8V - 10 amps

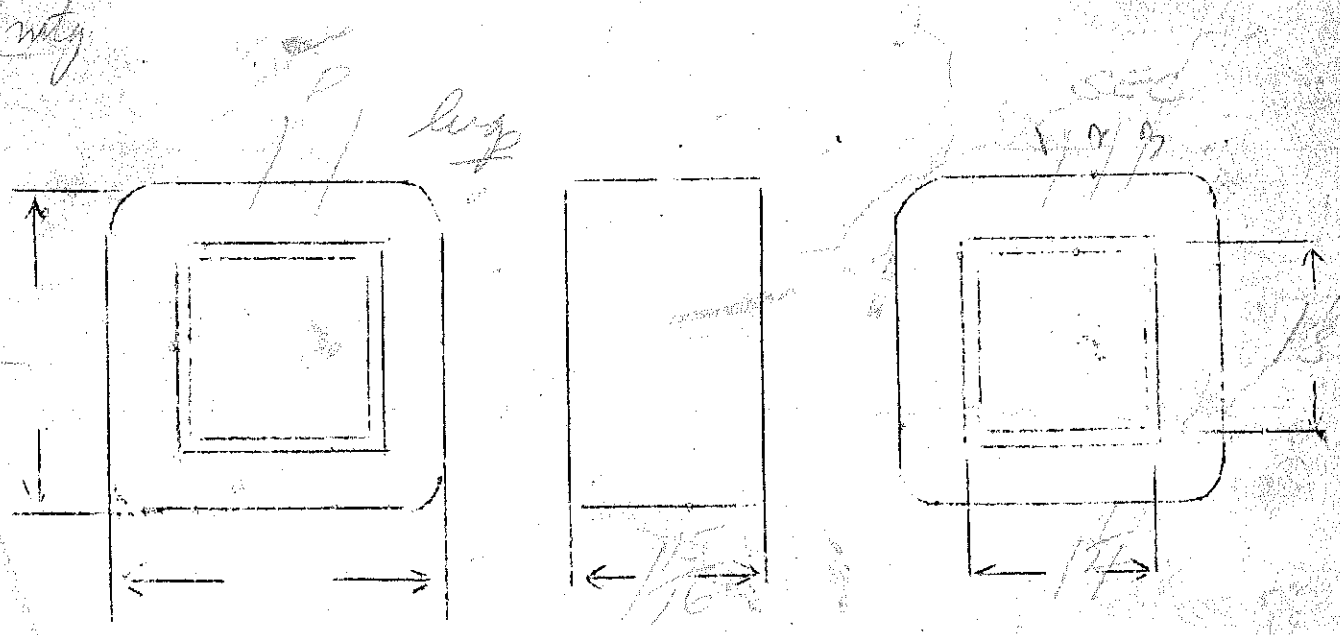
$\frac{N}{E} = 44$

SPEC. NO. 1888

(Intermittent + Duty)

Winding	PR1	SEC				
Turns	510	49				
Taps	—	39				
Wind. Lgth.	1.75	—				
Wire Size	#29	#12				
T.P.L.	57.9					
Kind Term.	WIPE	WIPE				
Term. Lgth.	2"	3"				
Layer Insul.	50	005				
Wrapper	2100 15A	2100 15A				
TUBE	92007			IMPREGNATION		
CURE	1 1/4 x 1 1/2					

BB wty



AUTO TRANSFORMER - 115 to 100 Volt - 2 amp and 90 volt.

$$\frac{N}{E} = 6$$

SPEC. NO. 1289

	<i>Continuous</i>						
Winding	PRI						
Turns	540	158					
Taps	-	63					
Wind. Lgth.	1.25	1.25					
Wire Size	#26	#20					
T.P.L.	68-8						
Kind Term.	WIRE ONLY						
Term. Lgth.	3	3					
Layer Insul.	40	005					
Wrapper	2L0056A						
TUBE	7L007		IMPREGNATION	KARNISH #			
CURE	1X1 NW		26 G. 475				

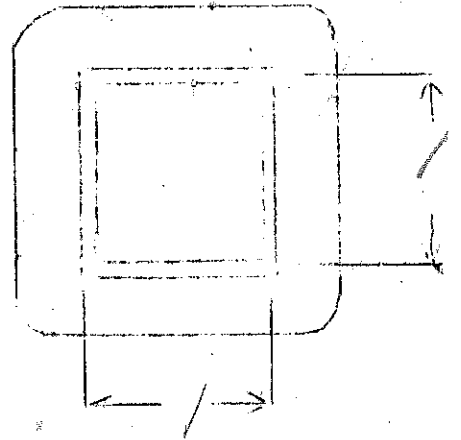
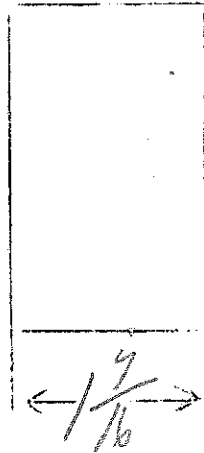
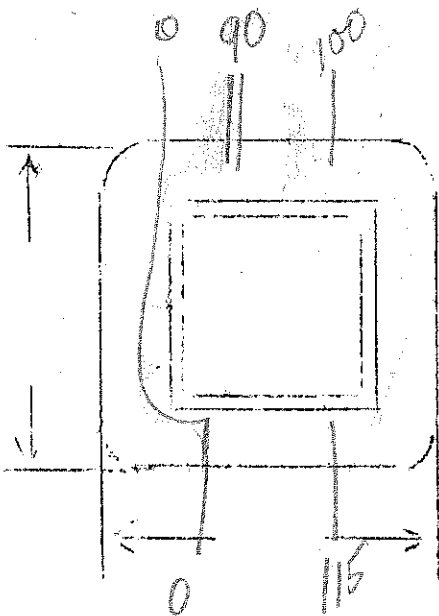
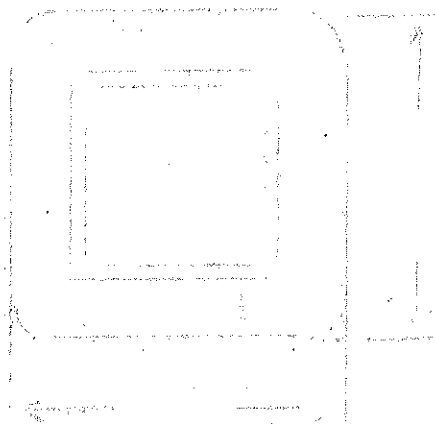
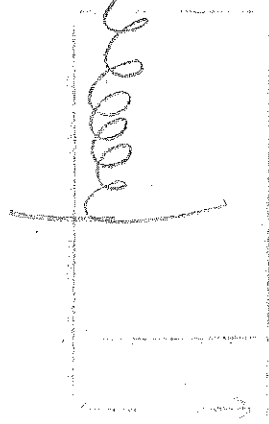
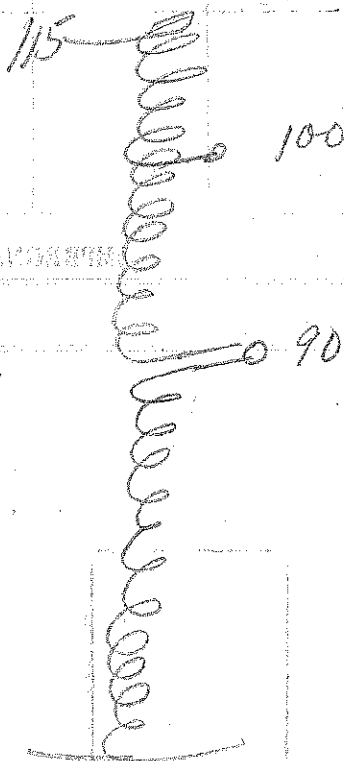


FIG. NO.

SECTION
TYPE
NO.
DATE
BY
CHECKED
APPROVED

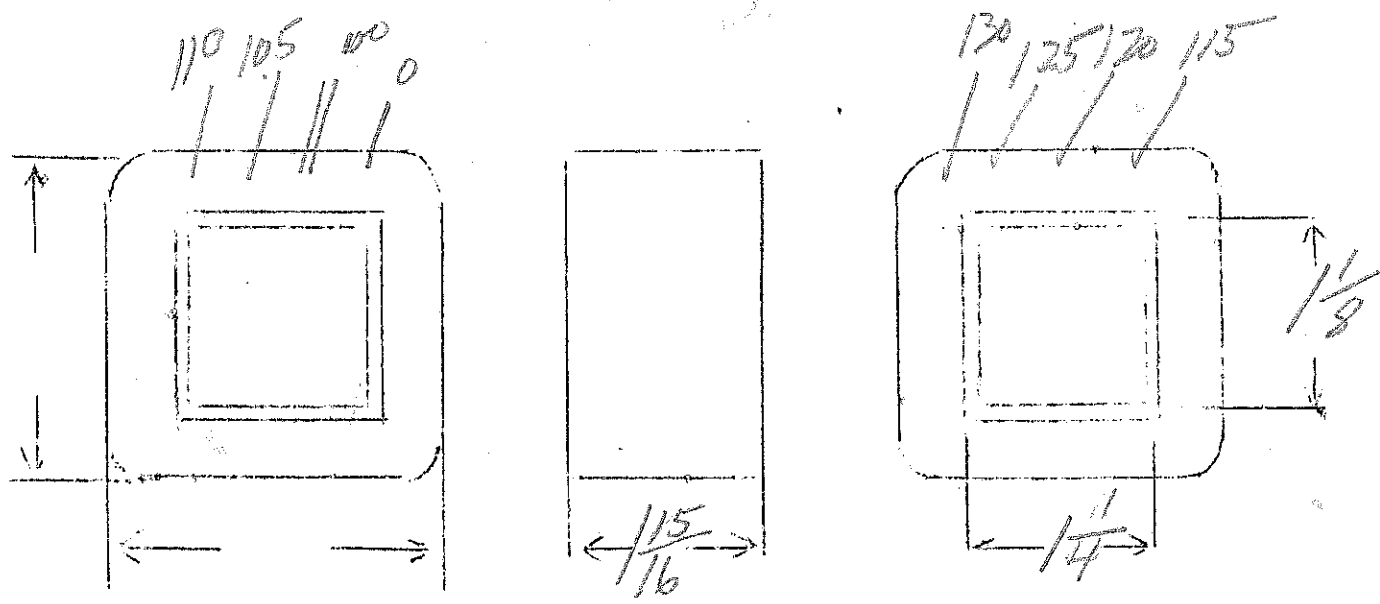


Booster transformer 100-105-110-115-120-125-130
 $i = 4 \text{ amp.}$

$\frac{N}{E} = 43$

SPEC. NO. 1890

Winding	Continuous					
Turns	430	110				
Taps		88	66	44	22	
Wind. Lgth.	1.75	1.75				
Wire Size	#22	#15				
T.P.L.	57-8	5L				
Kind Term.	WIPE ONLY					
Term. Lgth.	3"	3"				
Layer Insul.	50#	007				
Wrapper	20076A	20076A				
TUBE	72007		IMPREGNATION	VARNISH		
CURE	1/4 x 1/8	22				

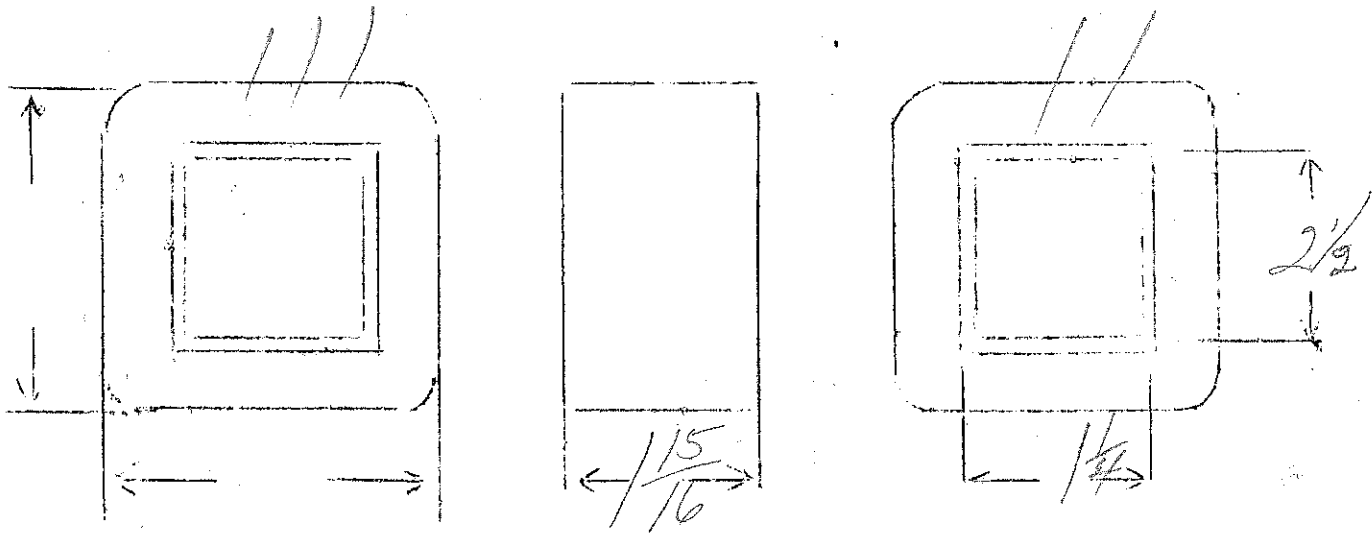


Ep - 115
 Es - 1000 V.C.T. - 250MA
 Ef - 5V - 3amp
 Ep - 6.3V.C.T. - 2amp

SPEC. NO. 1891

Winding	SEC	SHIELD	PRI	F1	F2		
Turns	2000	112	210	10	13		
Taps	1000		—		6		
Wind. Lgth.	1.75	1.75	1.75	—	—		
Wire Size	#28	#28	#19	#18	#20		
T.P.L.	112-18	20	43-5				
Kind Term.	#20 PBraid	wire only	#20 PBraid	WIRE	ONLY		
Term. Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 30#	—	50#	—	—		
Wrapper	2007VC	20076A	20076A	20076A	20076A		
TUBE	2007 #1007 VC			IMPREGNATION		VARNISH	
CURE	1 1/4 x 2 1/2						

183



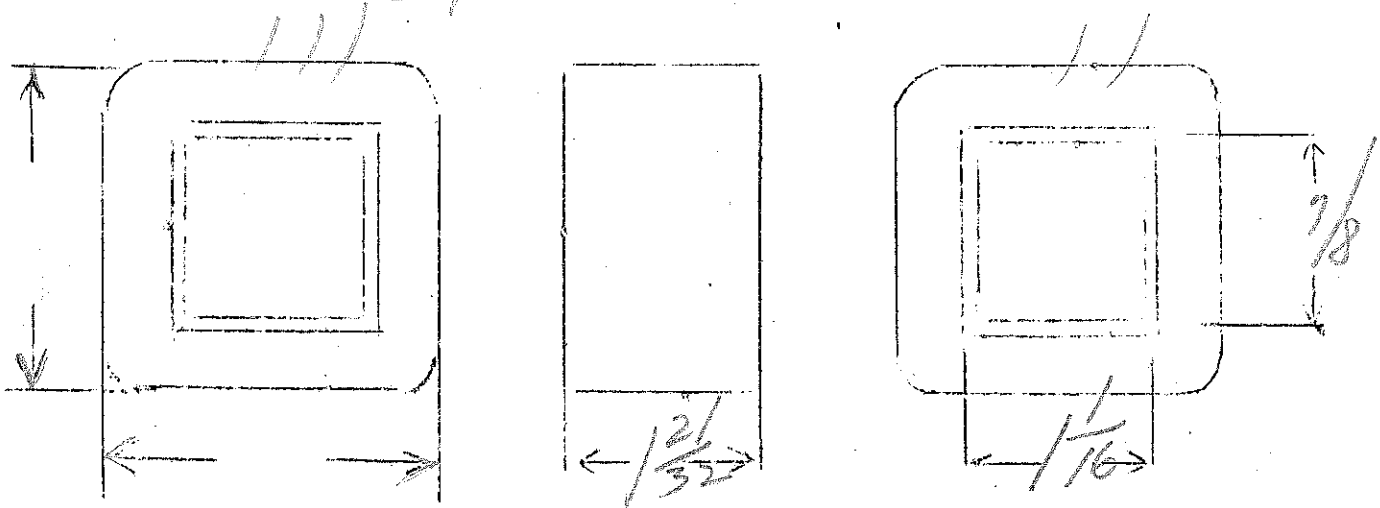
$E_p - 115V$
 $E_s - 750V - 55 ma$
 $E_f - 5V - 2amp$
 $E_f - 6.3V - 2amp$

spec #1880
 1892

SPEC. NO.

Winding	SEC	SHIELD	PRI	F ₁	F ₂		
Turns	4800	68	675	32	40		
Taps	2400	—	—	—	—		
Wind. Lgth.	$\frac{115}{32}$	$\frac{115}{32}$	$\frac{115}{32}$	—	—		
Wire Size	#35	#25	#25	#20	#20		
T.P.L.	219-22	68	68-10	—	—		
Kind Term.	#20 WIRE ONLY	WIRE ONLY	#20 WIRE ONLY	WIRE ONLY	WIRE ONLY		
Term. Lgth.	9" $\frac{1}{16}$	3"	9" $\frac{1}{16}$	9"	9"		
Layer Insul.	double 16#	—	40#	—	—		
Wrapper	2607VC	2607VC	26056A	26056A	26056A		
TUBE	7L007			IMPREGNATION		VARNISH	
CURE	$\frac{1}{16} \times \frac{7}{8}$			2x2 246A			

Finishing for 300 volts



410
 545
 6.8

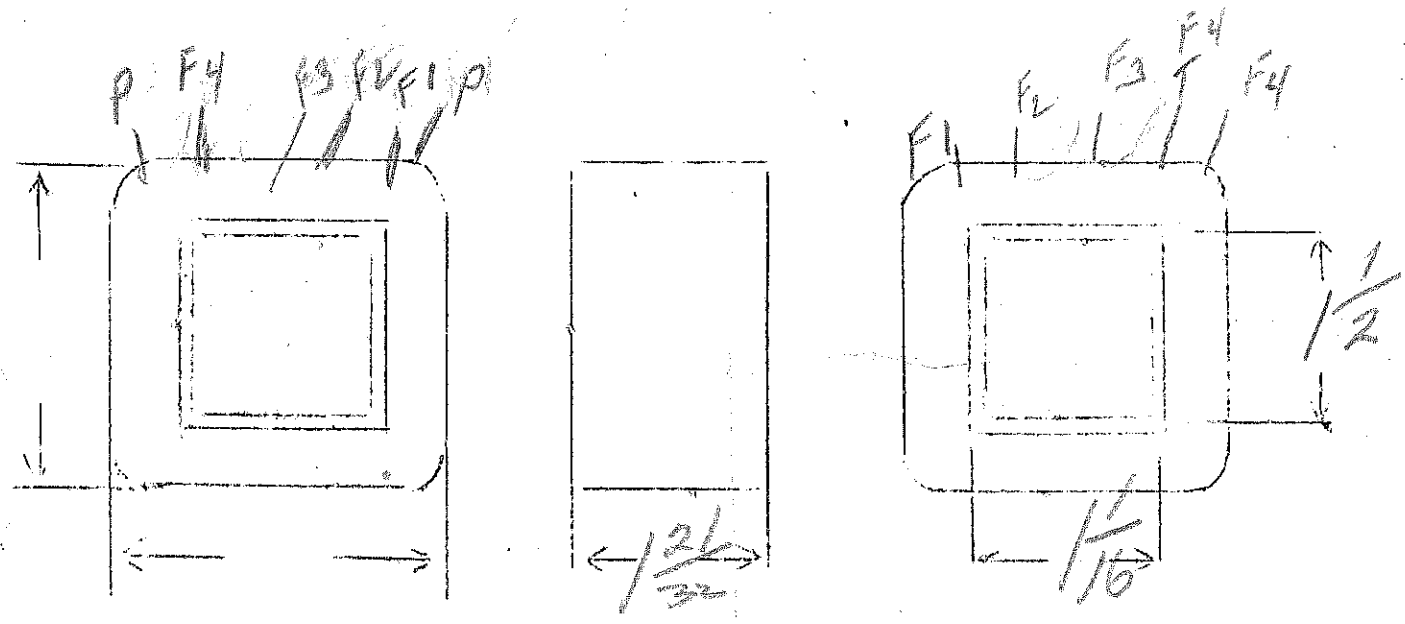
Halstead
 Ep - 115V
 EF1 - 5V-3amps
 EF2 - 5V-3amps

EF3 - 25V-12amps VA = 70
 EF4 - 2.5V-4amps CT
 all 3000 V. Ins

SPEC. NO. 1903

362

Winding	PRI	F1	F2	F3	F4		
Turns	415	22	22	11	11		
Taps	—	—	—	—	5		
Wind. Lgth.	$\frac{15}{32}$	$\frac{15}{32}$	$\frac{15}{32}$	—	—		
Wire Size	#23	#18	#18	#12	#16		
T.P.L.	53-8	—	—	—	—		
Kind Term.	WIRE ONLY						
Term. Lgth.	4"	4"	4"	4"	4"		
Layer Insul.	40#	—	—	—	—		
Wrapper	3L0056A	→			3L0056A		
TUBE	7L007	IMPREGNATION			VARNISH		
CURE	$\frac{1}{16} \times \frac{1}{2}$						

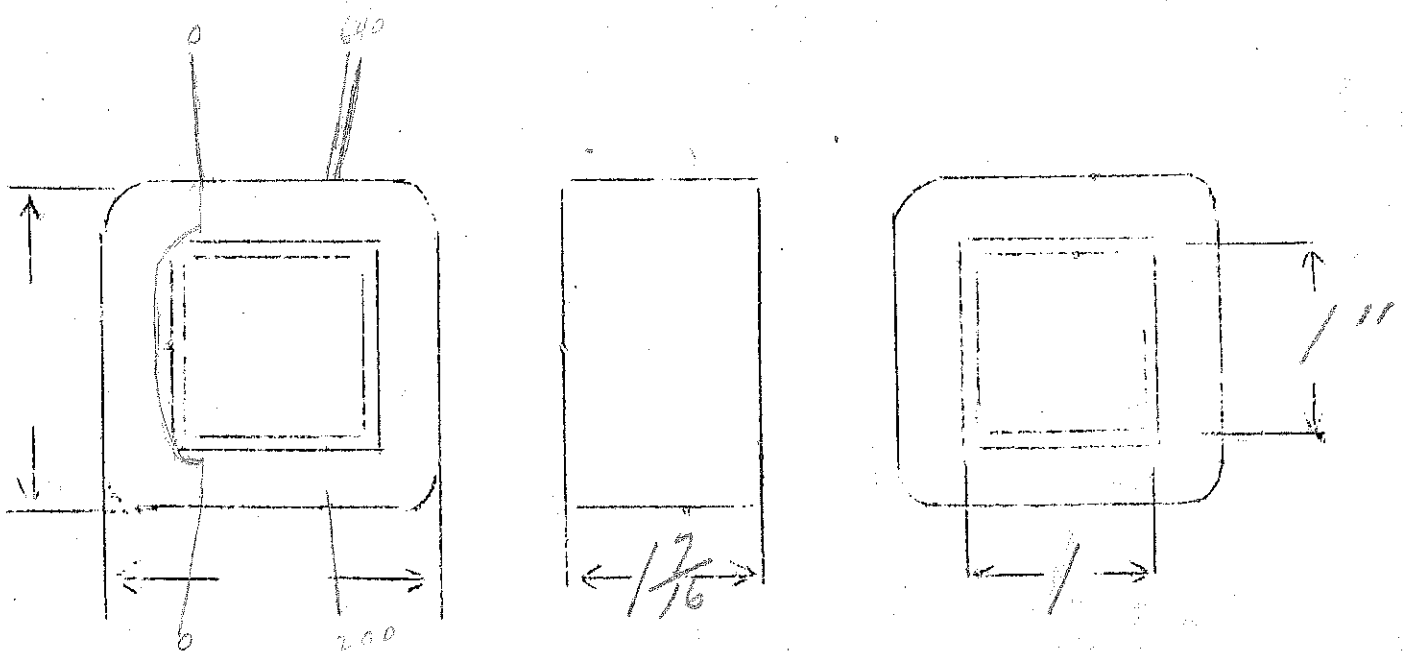


110-140 volt auto transformer - 150 watt

SPEC. NO. 1894

Continued

Winding	PAP1					
Turns	640	200				
Taps	—					
Wind. Lgth.	1.25					
Wire Size	#26	#21				
T.P.L.	65-10	33-6				
Kind Term.	WIRE ONLY					
Term. Lgth.	6	6"				
Layer Insul.	40					
Wrapper	21005GA					
TUBE	72007		IMPREGNATION	VARNISH		
CURE	1 X 1		2 X 2			



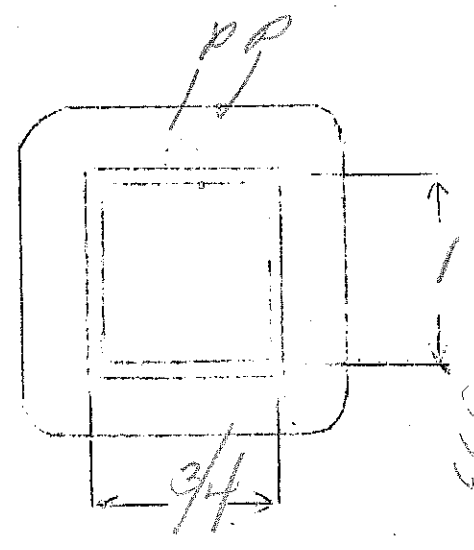
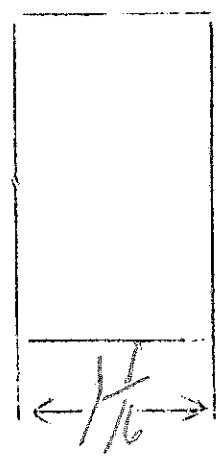
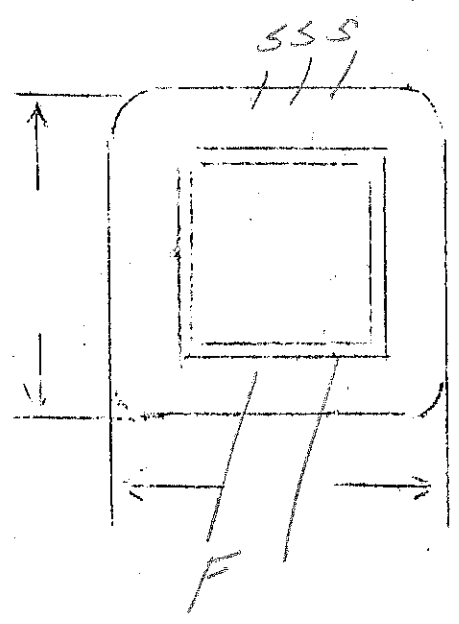
Ep-115V
 Es-300VCT-25MA
 Ef-6.3V.CT=1.1amp

VA=15

73

SPEC. NO. 1895

Winding	SEC	SHIELD	PR1	FIL			
Turns	2540	183	840	54			
Taps	1270	—	—	27			
Wind. Lgth.	7/8	7/8	7/8	—			
Wire Size	#38	#38	#31	#23			
T.P.L.	183-14		80-11				
Kind Term.	sil Brand			WIPE ONLY			
Term. Lgth.	3	3	3	9"			
Layer Insul.	20#		30#				
Wrapper	1L007VC	1L007VC	2W056A	2W056A			
TUBE	7L007			IMPREGNATION	VARNISH		
CURE	3/4X1	296A	2X2				



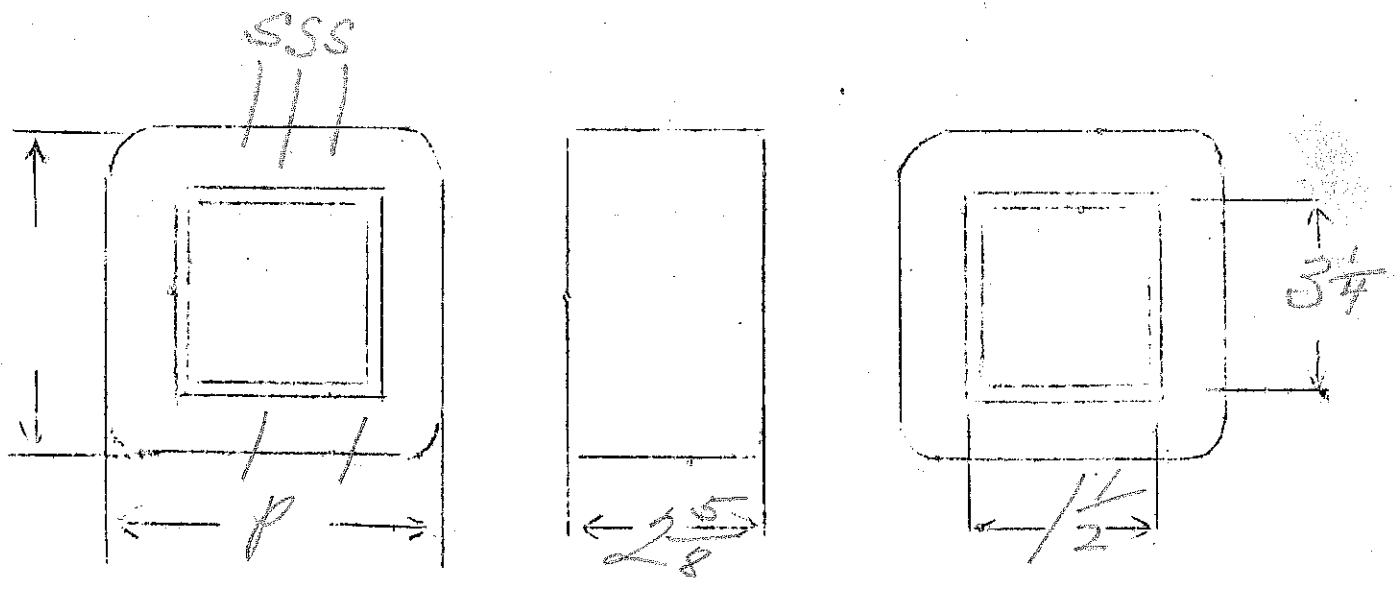
555
1895

Ep-115
 Es-3800VCT. - 300MA

125

SPEC. NO. 1896

Winding	Blank DRI	SEC				
Turns	143	3820				
Taps	-	1910				
Wind. Lgth.	23/8	2 1/4				
Wire Size	#15	#27				
T.P.L.	42	137-28				
Kind Term.	WIREF ONLY					
Term. Lgth.	6"	6"				
Layer Insul.	.005	double 20*				
Wrapper	3100TVE 1100SSA	3100TVE 3100SSA				
TUBE	92007		IMPREGNATION	VARMISH		
CURE	1 1/2 x 3 1/4					



440 to 110 V - 150 watts

308

SPEC. NO. 1897

Winding	PR1	SEC				
Turns	1350	375				
Taps	—	—				
Wind. Lgth.	1.75	1.75				
Wire Size	#26	#20				
T.P.L.	91-15	47-8				
Kind Term.	WIPE	ONLY	"5" only with 9" #14 material used			
Term. Lgth.	4"	4"				
Layer Insul.	40#	50#				
Wrapper	21007K	21007GA				
TUBE	72007		IMPREGNATION		VARNISH	
CURE	1/4 x 1/2					

