

Ep- 118

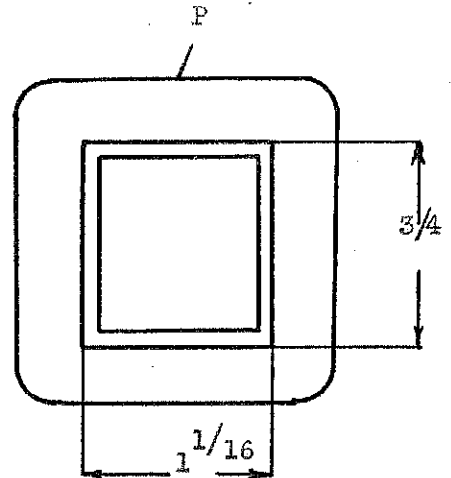
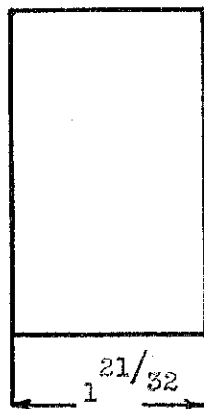
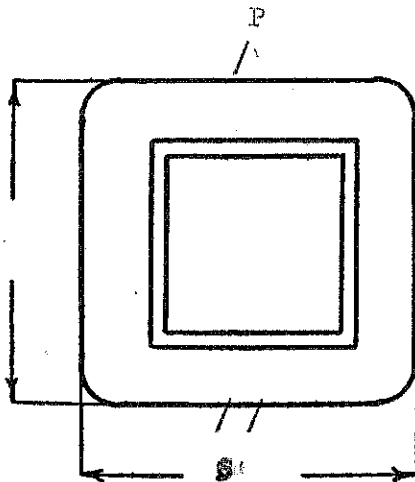
TEST TRANSFORMER

Es- 1500v- 15 ma. 15,000V issulation

n/e-7

SPEC. NO. 4101

Winding	P	S				
Turns	825	10500				
Taps						
Wind. Lgth.	1 15/32	1.25				
Wire Size	28	38				
T. P. L.	98-9	250-42				
Finish						
Type Lead	W.O.	Sil. Br.	heavy finish.			
Lead Lgth.	4"					
Layer Insul.	40#	double 20#				
Test Volt.						
Wrapper	3L007VC	2L007VC 2L005GA				
TUBE	7L007		IMPREGNATION	Double Varnish(Lam)		
CORE		GA.	GRADE	STACK		
MOUNTING	Special					



DESIGNED BY G. W.

DATE 6-21-38

Ep-- 118v  
Es--2500v- 15ma.

TEST TRANSFORMER  
15,00V insulation.

4.6

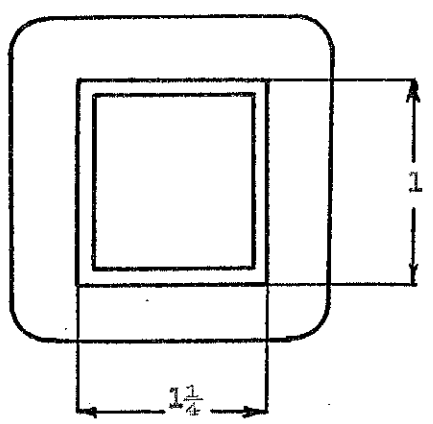
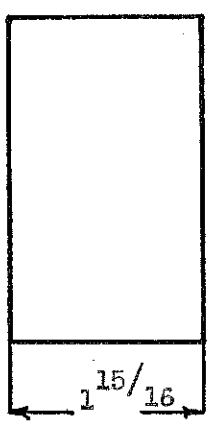
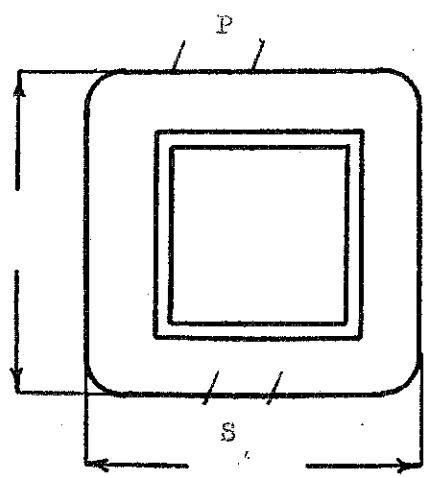
SPEC. NO. 4102

Winding	Pri	Sec				
Turns	545	11,500				
Taps						
Wind. Lgth.	1 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>				
Wire Size	#27	#38				
T. P. L.	95-6	250-50				
Finish						
Type Lead	W.O.	#20 Dulac	Start lead in coil			
Lead Lgth.	4"	6"				
Layer Insul.	40#	double 20#				
Test Volt.						
Wrapper	5L007	4L007VC 7L005GA				

TUBE	7L007	IMPREGNATION	Double Varnish(lam)
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CORE	GA.	GRADE	STACK
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MOUNTING Special



DESIGNED BY G.W.

DATE 6-21- '38

Ep- 118v

TEST TRANSFORMER

Es-3500v 15ma. 15,00V Insulation

3.4

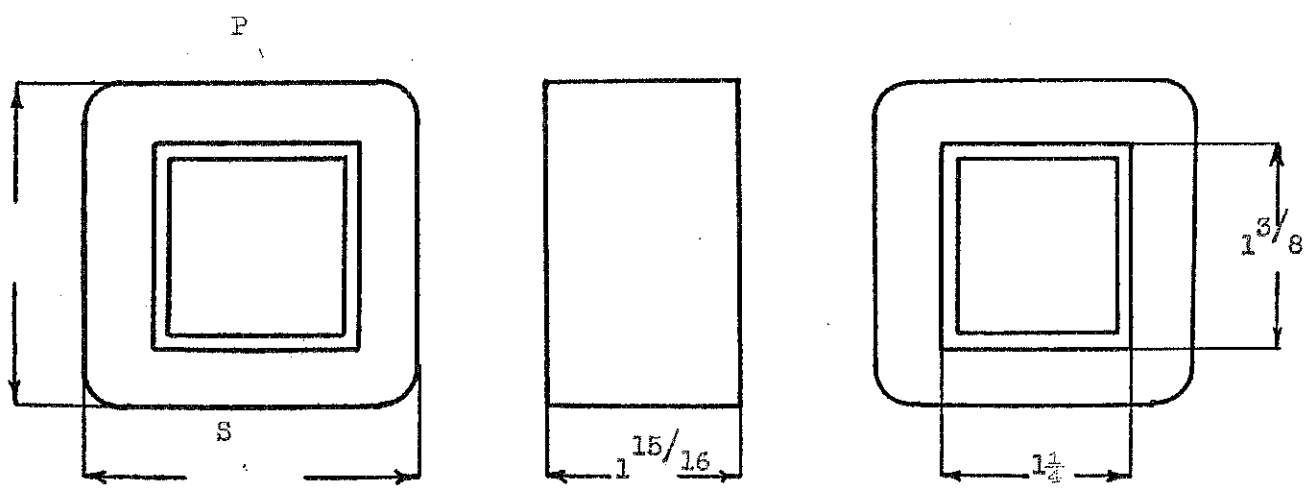
SPEC. NO. 4103

Winding	Pri	Sec.				
Turns	400	12,000				
Taps						
Wind. Lgth.	1 5/8	7/8				
Wire Size	#26	#38				
T. P. L.	85-5	180-67				
Finish						
Type Lead	W.O.	#20 Dulac	Start lead in coil.			
Lead Lgth.	4"	6"				
Layer Insul.	50#	double 16#				
Test Volt.						
Wrapper	71007VG	51007VG 21005GA				

TUBE		IMPREGNATION	Double Varnish(lam)
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CORE	GA.	GRADE	STACK
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MOUNTING Special



DESIGNED BY G.W.

DATE 6-21 '38

Ep- 118  
 Es- 5000v 15ma.

TEST TRANSFORMER  
 15,000V Insulation

3.0

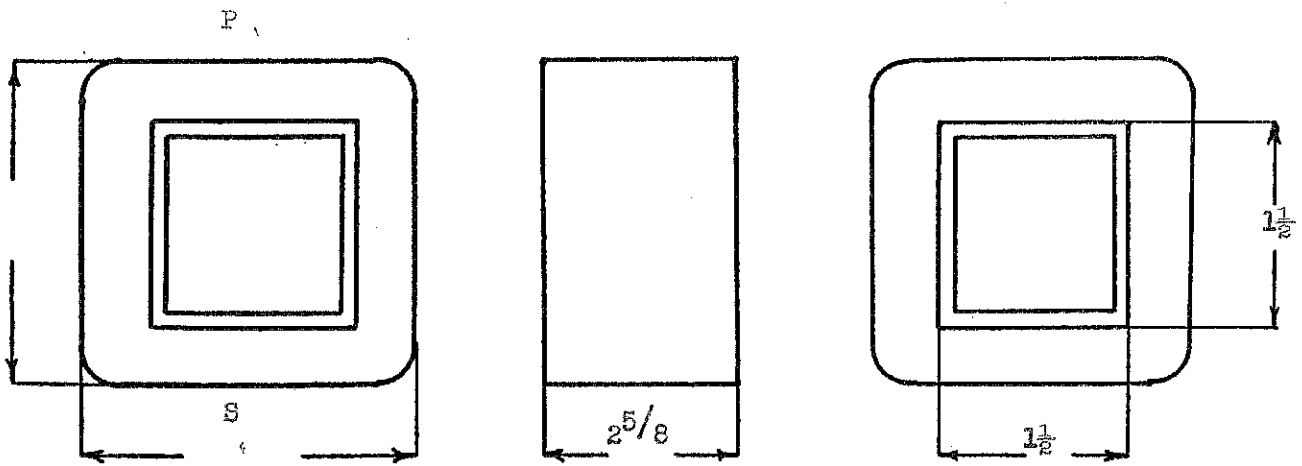
SPEC. NO. 4104

Winding	Pri.	Sec.				
Turns	354	15,000				
Taps						
Wind. Lgth.	2 <sup>5</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>				
Wire Size	#23	#37				
T. P. L.	89-4	206-73				
Finish						
Type Lead	W.O.	#20 Dulac	Start lead in coil			
Lead Lgth.	4"	6"				
Layer Insul.	50#	double #20#				
Test Volt.						
Wrapper	10L007VC	10L007VC 2L005CA				

TUBE		IMPREGNATION	Double Varnish (lam)
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CORE	GA.	GRADE	STACK
------	-----	-------	-------

MOUNTING Special



DESIGNED BY G.W.

DATE 6-21- '38

Dept. Water + Power Bid 24-12717

3.6

auto transf

120  
1/5 over steps 125

250 watt

SPEC. NO.

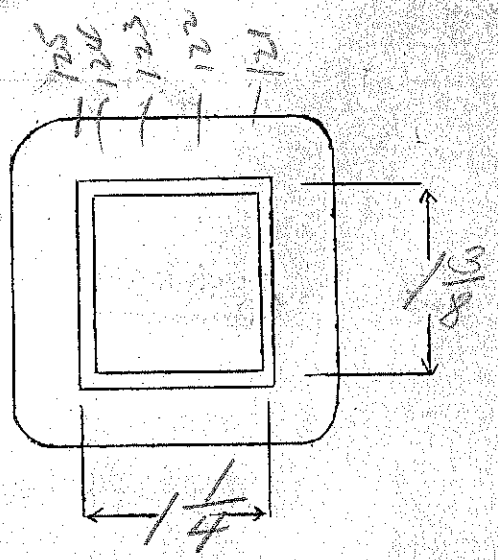
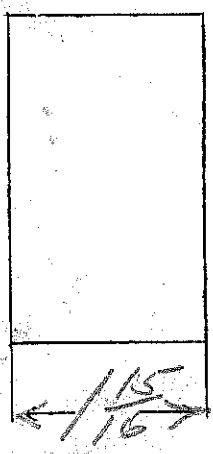
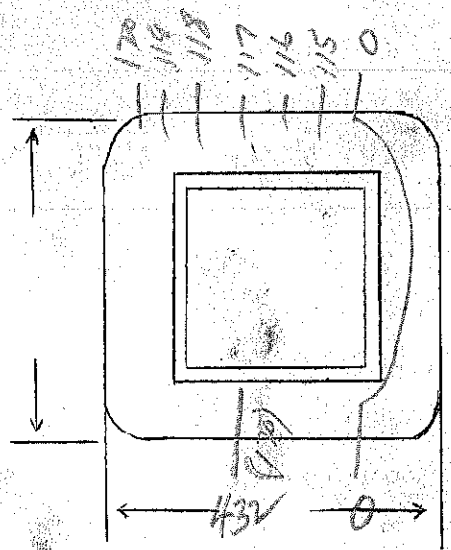
4105

Winding							
Turns	452						
Taps	448-444-440-436-432-428-424-420-416-412						
Wind. Lgth.	1.75						
Wire Size	#19						
T.P.L.	11L						
Kind Term.	W.O.						
Term. Lgth.	3"						
Layer Insul.	.007K						
Test Volt.							
Wrapper	260076A						

#14 motor cable leads - 6" out of case

TUBE	76007	IMPREGNATION	Varnish
CORE		PRIMARY V.A.	
MOUNTING	5-6' leads out of case thru grommets		

out to lug - solder motor cable leads to lug



DESIGNED BY

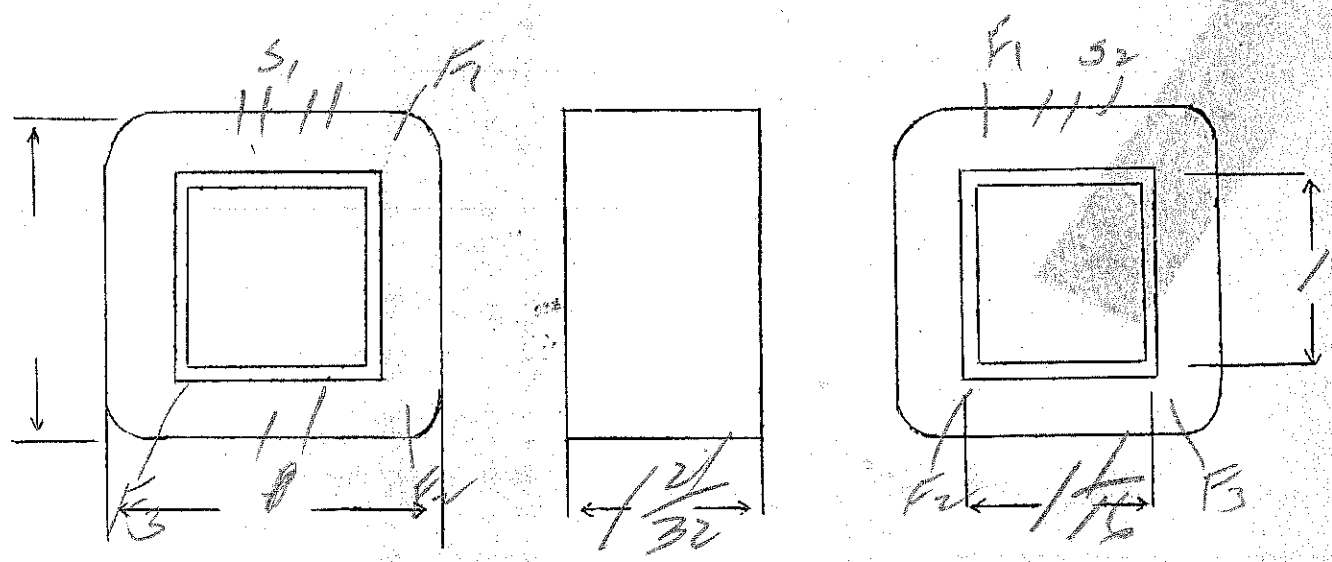
Yur

DATE

7/12/38

ED-115 TOWER  
 ES - 600VCT-50ma - Splitsec F<sub>2</sub> 2.5V-2amp  
 ES2 - 500VCT-35ma F<sub>3</sub> - 5V-1/2amp  
 H - 2V-2amp  
 ELECTRO ULTRAVIOLET CORP.  
 SPEC. NO. 4106  
 52

Winding	S <sub>1</sub>	S <sub>1</sub>	S <sub>2</sub>	D	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
Turns	1680	1680	2700	590	29	14	28
Taps	—	—	1350				
Wind. Lgth.	1 1/2 22						
Wire Size	#36	#36	#37	#25	#20	#20	#23
T.P.L.	240-7	240-7	270-10	70-9			
Kind Term.	Scl	Br.		WIPE ONLY			
Term. Lgth.	3"	✓	✓		✓	✓	✓
Layer Insul.	double 1/8"						
Test Volt.							
Wrapper	10005VC	10005VC	10005VC	26005GA	✓	✓	✓
TUBE	62007			IMPREGNATION		Varnish	
CORE					PRIMARY V.A.		
MOUNTING	BB						



DESIGNED BY *gwr* DATE *6/23/38*

same as 4080  
 E<sub>0</sub> - 24V CT for 12V battery  
 400V DC, 150ma

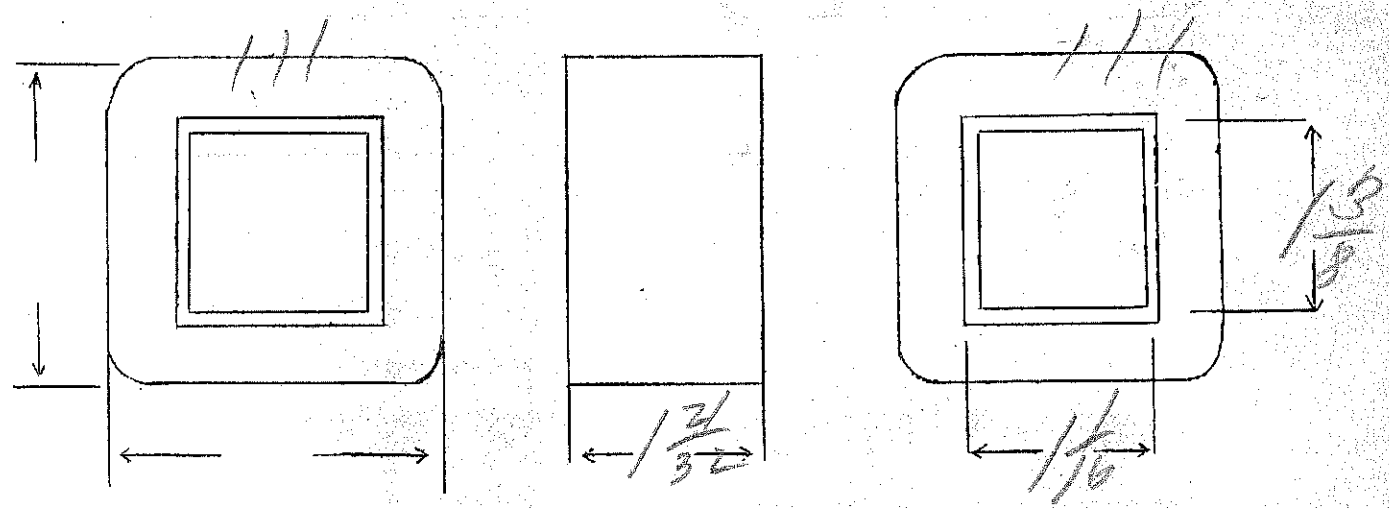
SPEC. NO. 4107

Winding	S	SH	D				
Turns	3940	1	88				
Taps	1970		44				
Wind. Lgth.	1932						
Wire Size	#32	SH19	#17				
T.P.L.	159.26	8 1/4"					
Kind Term.	#20 100	sil br	w.o.				
Term. Lgth.	9"	3"	9"				
Layer Insul.	d-30#		007K				
Test Volt.							
Wrapper	2407VC	240056A	240055A				

TUBE 76007 | IMPREGNATION Varnish  
 CORE 24 Ga - 2x2 | PRIMARY V.A.  
 MOUNTING A - Copper shield over laminations

TPV = 3.66

215V



DESIGNED BY gwr

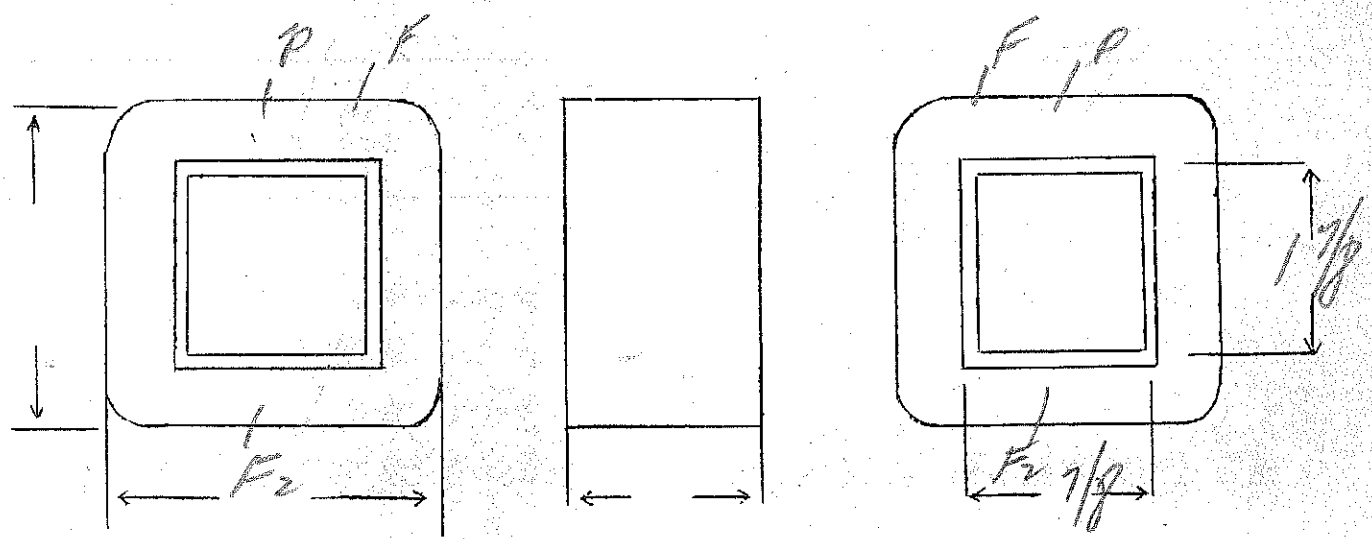
DATE 6/23/38

Ed - 115V  
 Ef - 6.3V - 6amp  
 Ef - 5V - 5amp

3.1

SPEC. NO. 4108

Winding	P	F <sub>1</sub>	F <sub>2</sub>				
Turns	357	21	17				
Taps	—	—	—				
Wind. Lgth.	1 1/16						
Wire Size	#25	double #19	double #19				
T.P.L.	57-7	1.6L					
Kind Term.	WIRE ONLY			space for 5000V Ins			
Term. Lgth.							
Layer Insul.	40#						
Test Volt.			5000V				
Wrapper	21005BA	21005BA	21005BA				
TUBE	61007		IMPREGNATION		Varnish		
CORE	29 BA - B 2x2			PRIMARY V.A.			
MOUNTING	F						



DESIGNED BY *Jwt*

DATE 6/29/38



EP 118V

ES - 1500V - 325mA

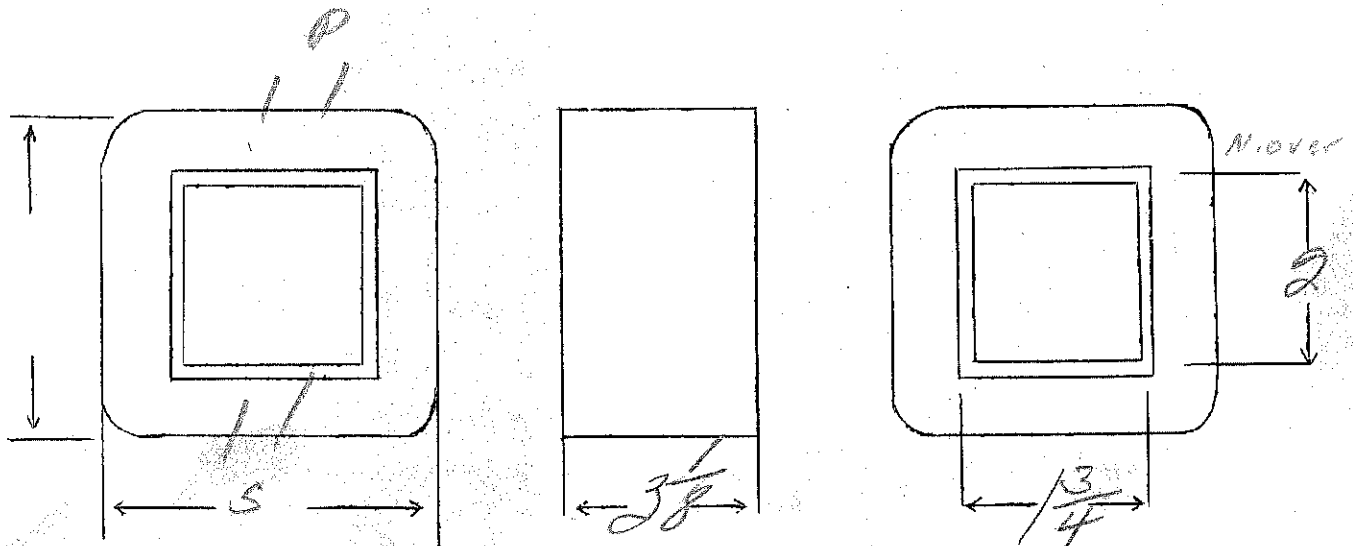
1.80

SPEC. NO.

4109

Winding	SEC	PRI				
Turns	2900	214				
Taps	—	—				
Wind. Lgth.	2 1/2					
Wire Size	#26	#13				
T.P.L.	133-22	7L				
Kind Term.	#70 Dulac	W.O.		Large		
Term. Lgth.	4"	4"				
Layer Insul.	double 30#	007K				
Test Volt.	6500					
Wrapper	21007VC 21005GA	31005GA				
TUBE	91007 + 11007VC		IMPREGNATION	Varnish		
CORE			PRIMARY V.A.	750		
MOUNTING	Un-cased - cad. brackets, black lamination - nameplates					

start feed in coil  
finish see leads to bakelite panel strip



DESIGNED BY

GW

DATE

6/28/38

Ep-115 POWER

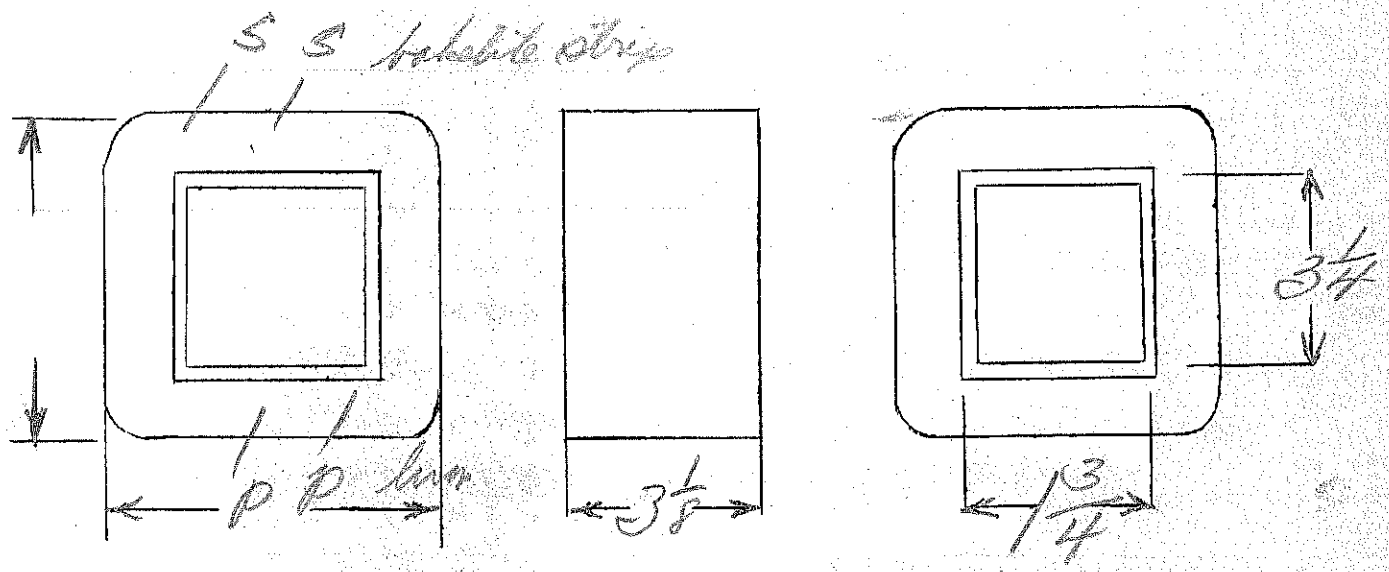
BRISTOW

ES - 3000V. 250 ma

1.15

SPEC. NO. 410

Winding	SEC	PRI					
Turns	3/60	132					
Taps	—	—					
Wind. Lgth.	2 1/2						
Wire Size	#27	#12					
T.P.L.	147.25						
Kind Term.	W.O.	W.O.					
Term. Lgth.	6"	6"	Start sec lead in coil				
Layer Insul.	double 40-#	007K					
Test Volt.	14007V						
Wrapper	2W05GA	3W05GA					
TUBE	102007+14007V		IMPREGNATION	Varnish			
CORE			PRIMARY V.A.				
MOUNTING	Unencased. over -						



DESIGNED BY *SW*

DATE 6/28/38

EP-103-115-125

SEE # 727

BRISTOL W

ES-5.1V-CT-13amp

SPEC. NO.

4111

FILAMENT

5.35

Winding	P	S					
Turns	670	31					
Taps	560-615	15					
Wind. Lgth.	1 1/32	double					
Wire Size	#25	#14					
T.P.L.	70-10						
Kind Term.	WIRE ONLY						
Term. Lgth.	3"	3"					
Layer Insul.	40#						
Test Volt.							
Wrapper	360056A	360056A					

TUBE

76007

IMPREGNATION

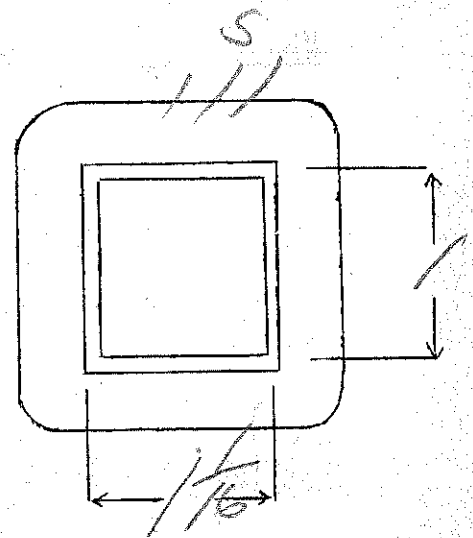
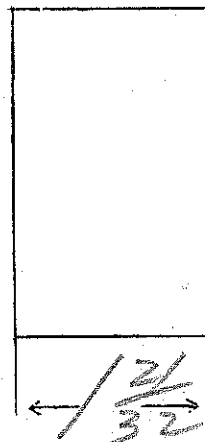
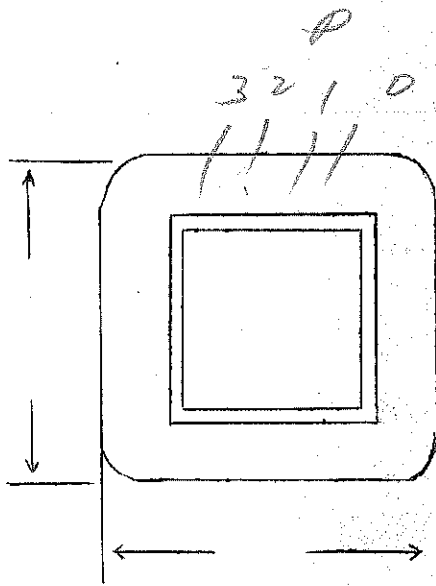
Varnish

CORE

PRIMARY V.A.

MOUNTING

B



DESIGNED BY

6/29/38

DATE

Geo

EP - 0 - 32 - 64 - 120V  
 ES - 550VCT - 70ma  
 EF - 6.3V - 2.1 amp

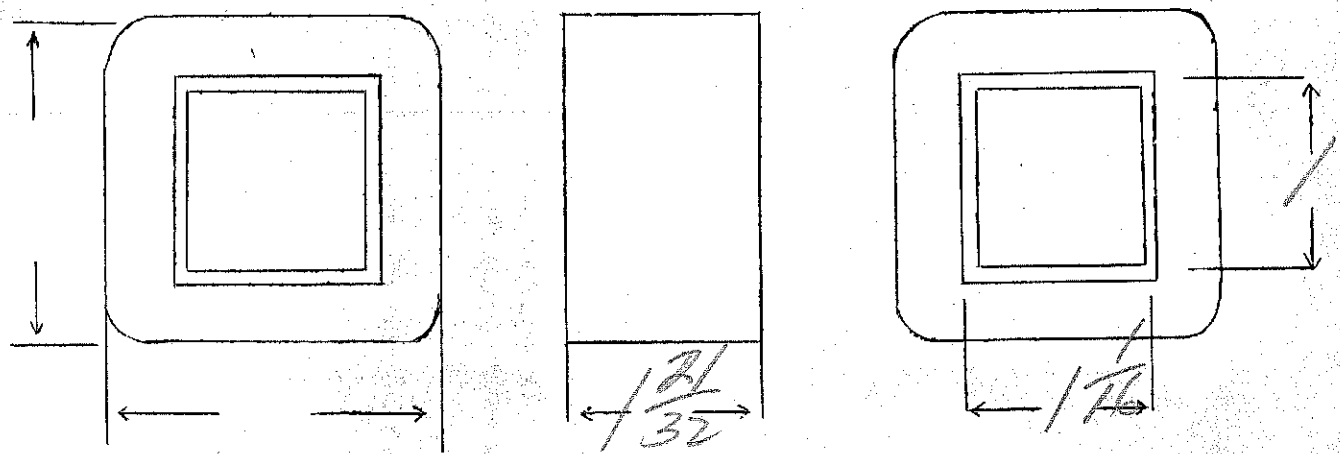
SPEC. NO. 4112

	<i>Continuation</i>						
Winding	SEC	SHIELD	PRI		FIL		
Turns	3800	1	316	420	46		
Taps	1900		158				
Wind. Lgth.	$1 \frac{15}{32}$						
Wire Size	#34	shim stock	#23	#27	#21		
T.P.L.	192-20		55-6	87-5	16		
Kind Term.	#70 D32				W.O.		
Term. Lgth.	9"				9"		
Layer Insul.	double 16		50#	40#			
Test Volt.							
Wrapper	2 L005K	1 L005K		2 L005GA	2 L005GA		

TUBE 7L007 IMPREGNATION Varnish  
 CORE PRIMARY V.A.

MOUNTING A - Copper strip over lamination

Pri Start - White  
 1 Tap - Black  
 2 Tap - Yellow  
 2 Tap - Brown



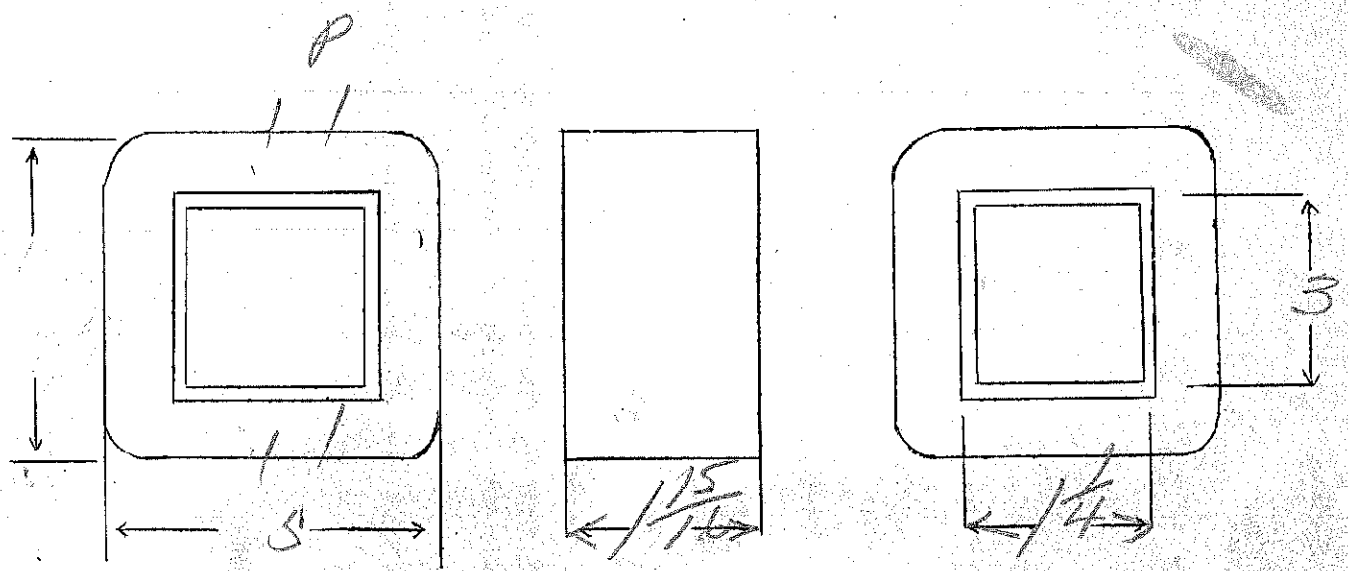
DESIGNED BY SW DATE 6/30/38

EP-220  
 ES-240 - 250 watt

SPEC. NO. 4113

Winding	P	S					
Turns	360	42					
Taps	-	-					
Wind. Lgth.	175						
Wire Size	#20	#12					
T.P.L.	46-8	3L					
Kind Term.	#14 motor cable						
Term. Lgth.	12"						
Layer Insul.	007K						
Test Volt.							
Wrapper	26076A 26076A						
TUBE	71007		IMPREGNATION	Varnish			
CORE			PRIMARY V.A.				
MOUNTING	S - thru fibre grommet						

metal stamp case



DESIGNED BY gwr

DATE 6/28/39

# Current Transformer

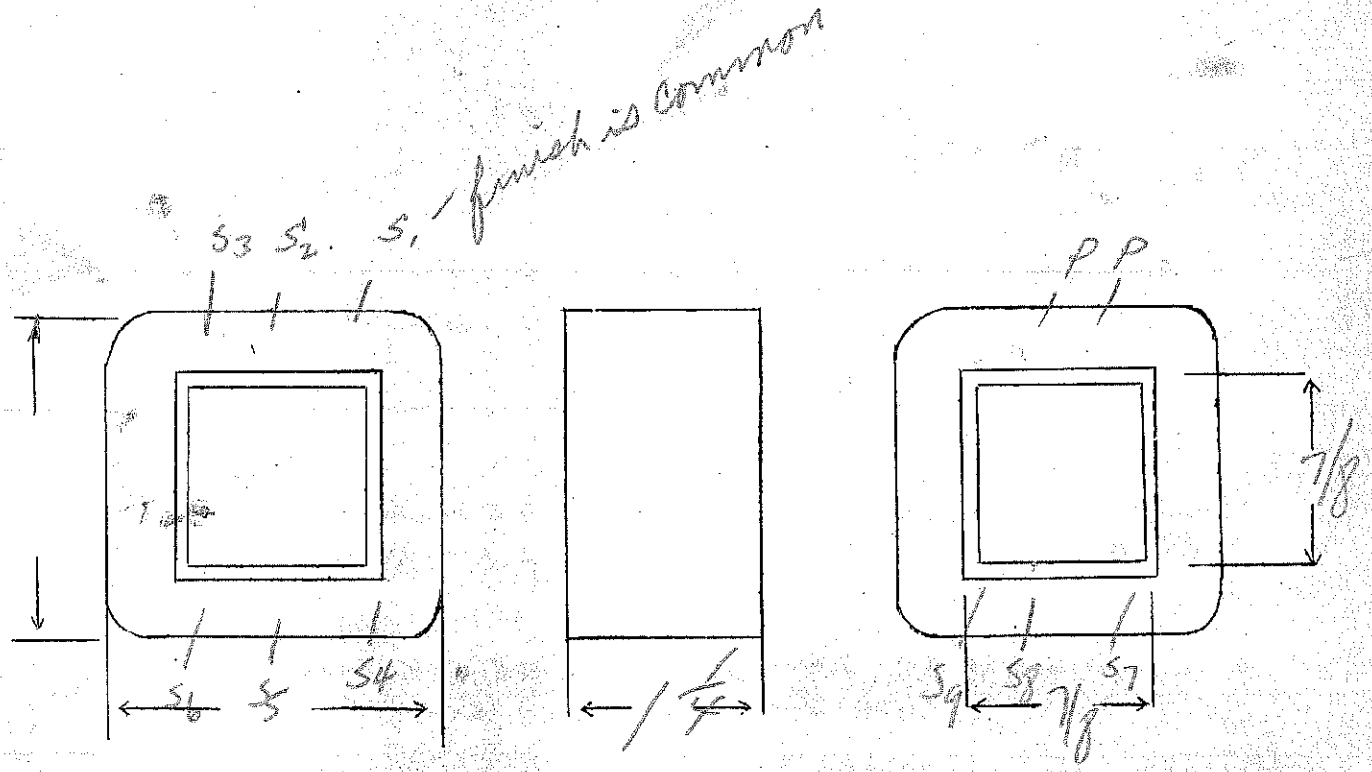
meter - 5 ohm - draws 2 amp at 110-600  
CALIFORNIA INST. OF TECH.

for currents .05, .1, .2, .5, 1.0, 2.5, 5, 10 amp

SPEC. NO. 4114

Winding	PRI	Continuous							SEC
Turns	50	100	50	30	10	6	2	1	1
Taps									
Wind. Lgth.	$1\frac{1}{16}$								
Wire Size	#20	#26	#24	#21	#21	#18	#15	#13	#10
T.P.L.	2L	2L					12		
Kind Term.	WIRE ONLY								
Term. Lgth.									
Layer Insul.	50#								
Test Volt.									
Wrapper	2005VC								1000VC 2005VC
TUBE	6L007	IMPREGNATION			Varnish				
CORE	29 B - B Grade - 2x2				PRIMARY V.A.				
MOUNTING	D								

- 10 - 1
- 5 - 2
- 2.5 - 4
- 1.0 - 10
- .5 - 30
- .2 - 50
- .1 - 100
- .05 - 200



DESIGNED BY *SW*

DATE *7/2/38*

# Voltage Transformer

Model - 50kva - 2amp 220V-60Hz

CALIF. INST. OF TECH.

for voltages .2, .5, 1, 2, 4, 8, 10, 20, 40, 80  
100, 200, 400, 800, 1000

N/E-10

SPEC. NO.

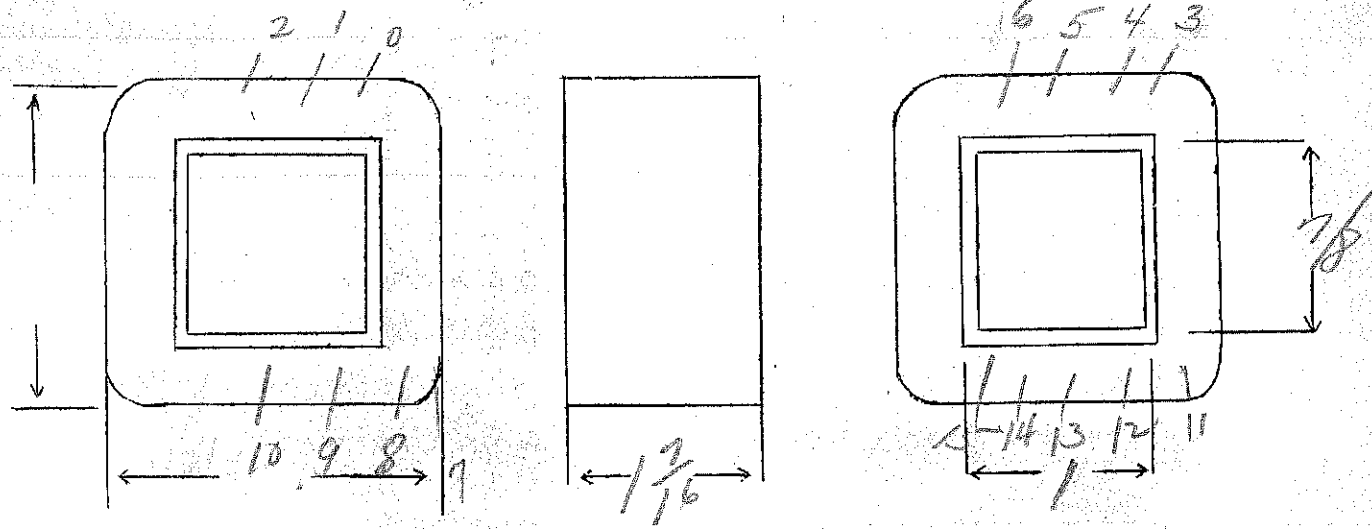
4/15

Winding	Continuous						
	1	2	3	4	5	6	7
Turns	6000	3000	600	300	60	30	10
Taps	2000	2000	200	200	20	20	8-5
Wind. Lgth.	1 1/25						
Wire Size	#39	#38	#37	#33	#30	#24	20
T.P.L.	254	230	202	131	94		
Kind Term.	Sil. Br					W.C.	
Term. Lgth.	3"						→
Layer Insul.	20#	20#	30#	30#	40#		
Test Volt.							
Wrapper							2100 V 1600 VSA

TUBE	52007	IMPREGNATION	Varnish
CORE	29-B-2X2	PRIMARY V.A.	
MOUNTING	BB		

End of winding is common  
S.W - Right  
M.W - Left

Spiral leads into position



DESIGNED BY

*GW*

DATE

7/2/38

Ep - 0-12-24-120V

Es - 550V CT - 70 ma

Ef - 6.3V - 2.1 amp

SPEC. NO.

4116

Winding	JEC	SHIELD	PRI	SEC	FLK		
Turns	3800	1	616	118	46		
Taps	1900		BL	59	-		
Wind. Lgth.	1 15/32				-		
Wire Size	#34	shim stock	#27	#20	#21		
T.P.L.	192-20		88-7		12		
Kind Term.	#29 strand		#20	w.o.	w.o.		
Term. Lgth.	9"		9"	9"	9"		
Layer Insul.	double 167						
Test Volt.							
Wrapper	2005VC	1005VC			2005GA		

TUBE

7007

IMPREGNATION

Varnish

CORE

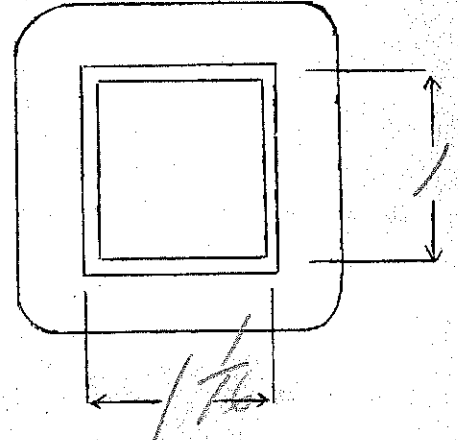
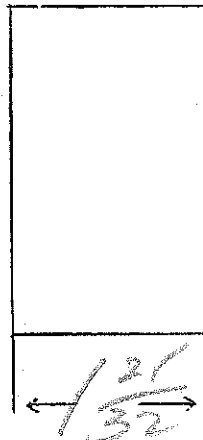
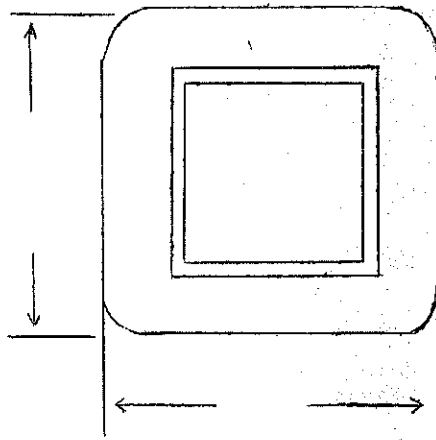
PRIMARY V.A.

MOUNTING

A - Copper strip over laminator

M.W - Right

S.M - Left



DESIGNED BY

Gw

DATE

6/30/38

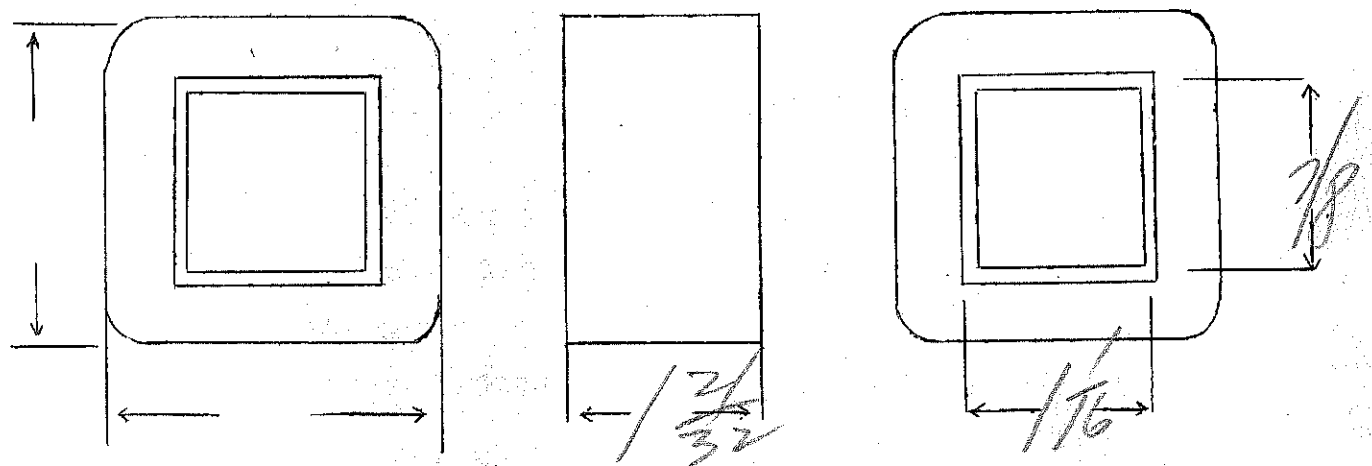


Ep-115  
 ES-700VCT-50ma  
 EF-5V-2amp

EF-6.3V-1.2 amp  
 EF-6.3V-8amp  
 WE-1amp

SPEC. NO. 4117

Winding	SEC	SH.	PRI	F1	F2	F3
Turns	4320	78	700	33	41	41
Taps	2160				-	-
Wind. Lgth.	1 1/32	✓	✓	✓	✓	✓
Wire Size	#36	#26	#26	#20	#22	#23
T.P.L.	240-18		78-9			
Kind Term.	#20 P.B.		#20 P.B.	WIRE ONLY		
Term. Lgth.	9"		9"	9"	9"	9"
Layer Insul.	4-16#		40#	-	-	-
Test Volt.						
Wrapper	1007VC	1005UC	260050A	✓	✓	✓
TUBE	5007			IMPREGNATION		Varmed
CORE				PRIMARY V.A.		
MOUNTING	A					



DESIGNED BY GM

DATE 6/30/38

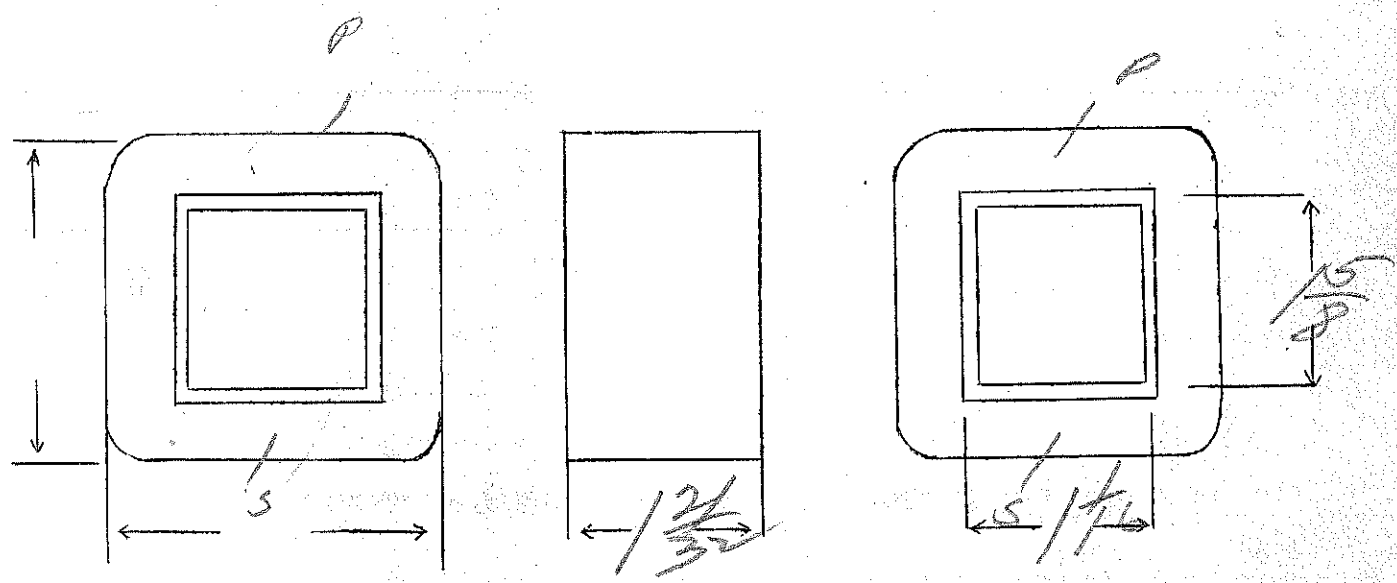
Ep-440 V - 100 watt  
 ES - 110V

KBAR

SPEC. NO. 4118

37

Winding	P	S					
Turns	1630	444					
Taps	-	-					
Wind. Lgth.	1 15/32	-					
Wire Size	#28	#22					
T.P.L.	98-17	50-9					
Kind Term.	motor cable						
Term. Lgth.	9"	9"					
Layer Insul.	40#	50#					
Test Volt.							
Wrapper	1200VC	20056A					
TUBE	62007		IMPREGNATION	Varnish			
CORE			PRIMARY V.A.				
MOUNTING	S						



DESIGNED BY *GW*

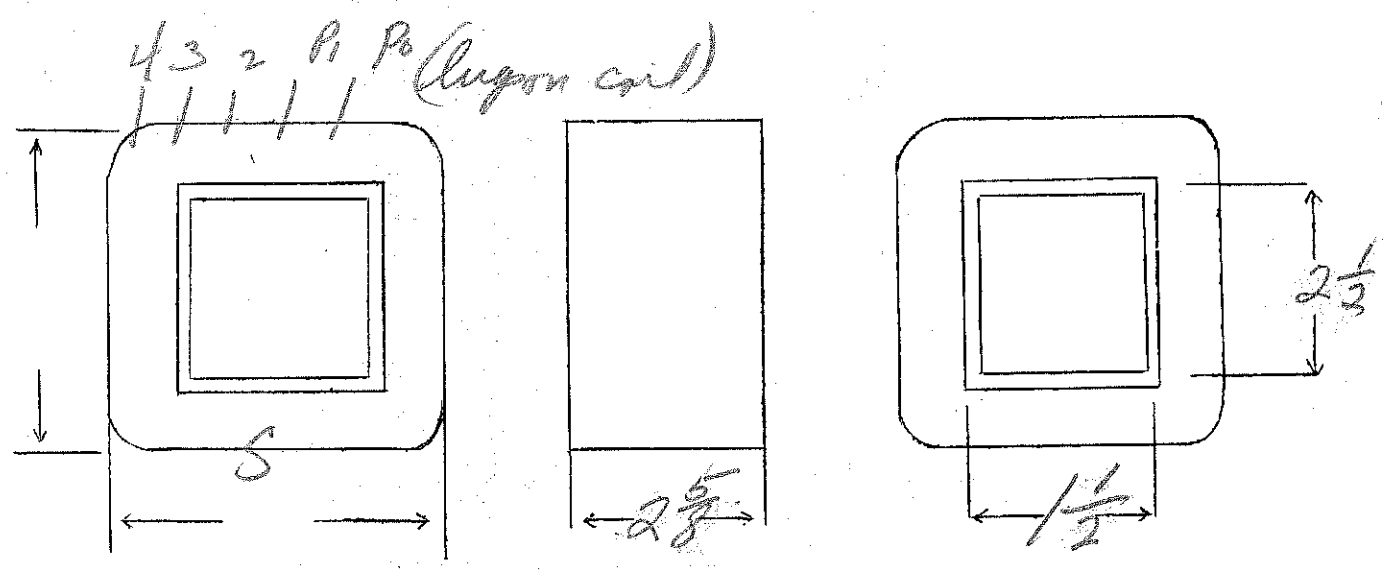
DATE 7/1/38

Ep-115-138-166-200  
 ES-12V-30amp

SPEC. NO. 4719

cost 1.55

Winding	P	P	S				
Turns	180	133	23				
Taps		78-20					
Wind. Lgth.	2 1/4						
Wire Size	#17	#18	double #10				
T.P.L.	4L	3L	3L				
Kind Term.	WIREF ONLY to copper lugs						
Term. Lgth.	4"	4"	4"				
Layer Insul.	007K						
Test Volt.							
Wrapper		310056A	310056A				
TUBE	104007		IMPREGNATION		Varnish		
CORE					PRIMARY V.A.		
MOUNTING	Open -						



DESIGNED BY *Geo*

DATE 9/1/38

12V per each side of

ES-650VCT-40 ma

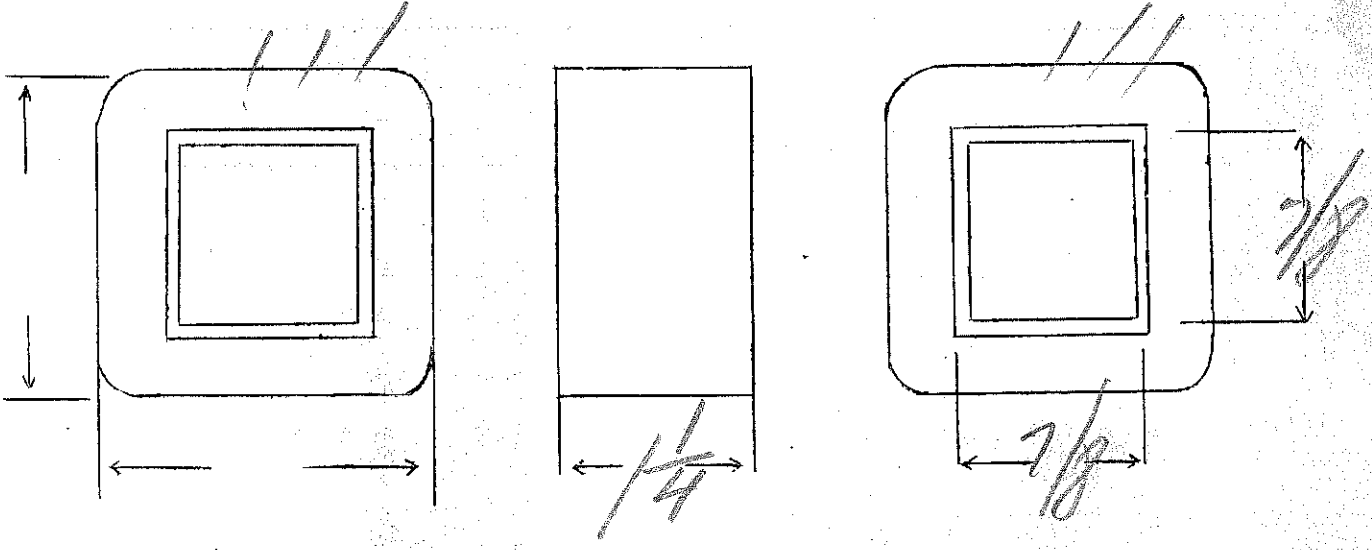
SPEC. NO. 4120

Winding	SEC	SHIELD	PRI				
Turns	4060	1	132				
Taps	2030		66				
Wind. Lgth.	1 1/16						
Wire Size	#36	Shim Stock	#21				
T.P.L.	173-24		42.!!				
Kind Term.	#20 PBC	Sil BR.	W.O.				
Term. Lgth.	9"	3"	9"				
Layer Insul.	d-16#		50#				
Test Volt.							
Wrapper	14007K	21005GA	21005GA				

TUBE 72007 IMPREGNATION Varnish

CORE PRIMARY V.A.

MOUNTING A - Copper shield over laminations



DESIGNED BY gwr

DATE 6/30/38

EP-120

POWER

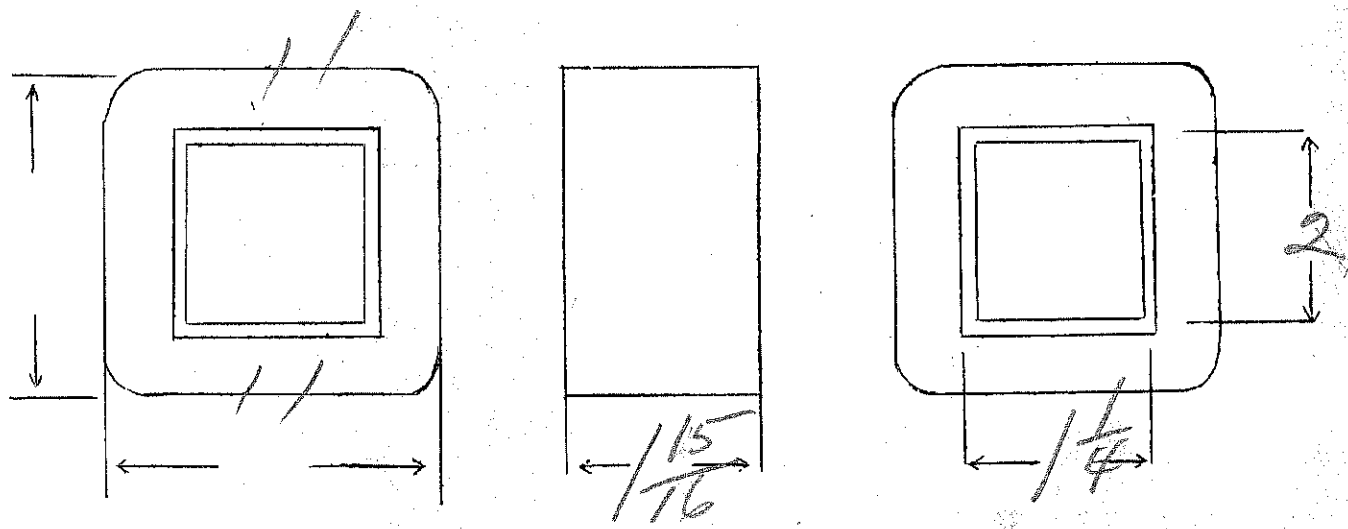
CALIF. INST. OF ELECT.

ES-24V-150VA

2.6

SPEC. NO. 4/21

Winding	$\phi$	S					
Turns	310	68					
Taps	-	-					
Wind. Lgth.	1.75	1.75					
Wire Size	#20	#13					
T.P.L.	47-7	3L!!					
Kind Term.	WIRE ONLY						
Term. Lgth.	3"	3"					
Layer Insul.	007K						
Test Volt.							
Wrapper	210076A 210076A						
TUBE	6L007		IMPREGNATION	Varnish			
CORE			PRIMARY V.A.				
MOUNTING	S - 12" #14						



DESIGNED BY Gw

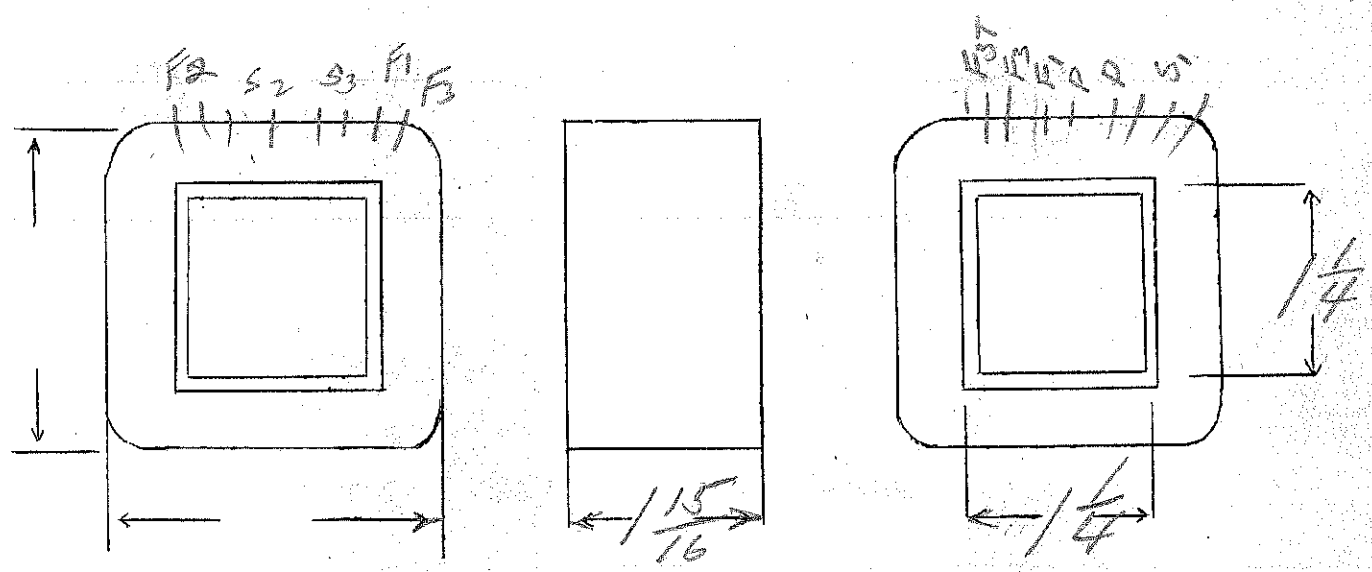
DATE 7/15/38

EP-15  
 ES<sub>1</sub> - 500VCT 20mA  
 ES<sub>2</sub> - ES<sub>3</sub> - 350V - 80mA

EF<sub>1</sub> - 5V - 2amp  
 EF<sub>2</sub> - 2.5V - 2amp  
 EF<sub>3</sub> - 7.5V - 2.5amp  
 SPEC. NO. 3.7

4/22

Winding	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>	φ	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
Turns	1920	1400	1400	42.5	20	10	30
Taps	960	-	-	-	-	-	15
Wind. Lgth.	1.75	1.75	1.75	-	-	-	-
Wire Size	#37	#33	#33	#23	#20	#20	#19
T.P.L.	320-6	200-7	200-7	66-7	-	-	-
Kind Term.	sil braid						
Term. Lgth.	3"	3"	3"	-	-	-	-
Layer Insul.	double 16#	-	-	50#	-	-	-
Test Volt.	-	-	-	-	-	-	-
Wrapper	1005VC	1005VC	1005VC	2007GA	-	-	2007GA
TUBE	7L007			IMPREGNATION		Varnish	
CORE					PRIMARY V.A.		
MOUNTING	B						



DESIGNED BY *DW*

DATE 7/12/38

Ep-110/115

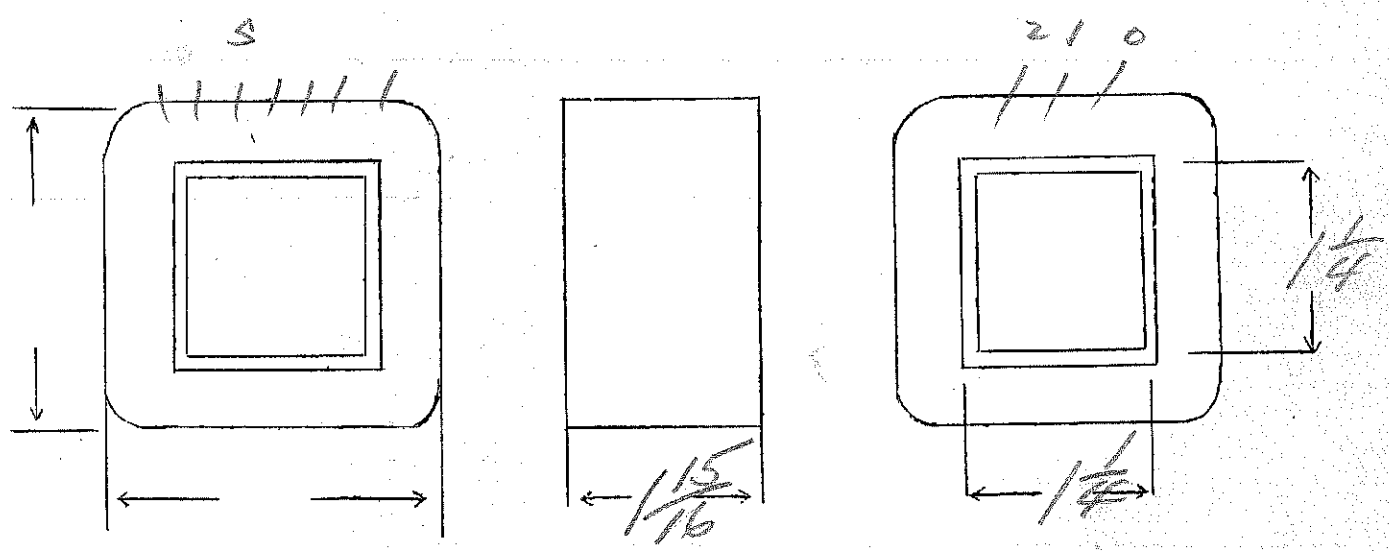
Es. 125, 175, 072250 each side etc - 250 ma

DAVE LUMIN

408

SPEC. NO. 4124

Winding	SEC		SHIELD	PR1			
Turns	2040	1820-1600	112	470			
Taps	0-220	440-1020		450			
Wind. Lgth.	1.75		1.75				
Wire Size	#28		#28	#23			
T.P.L.	112-20			66-8			
Kind Term.	Sil Braid	W.O.	W.O.	W.O.			
Term. Lgth.	3"	3"	3"	3"			
Layer Insul.	40#			50#			
Test Volt.							
Wrapper		11007NC	11007NC	21007CA			
TUBE	71007		IMPREGNATION		Varnish		
CORE					PRIMARY V.A.		
MOUNTING	C						

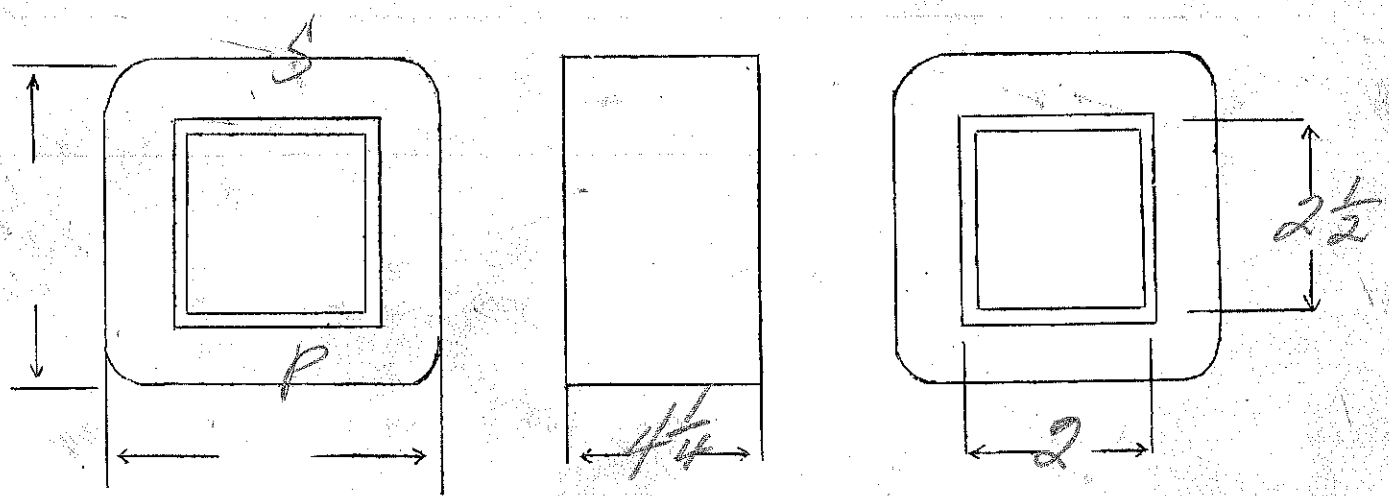


DESIGNED BY G. Weaver DATE 6/6/38

EP-115  
 ES = 7000 V rms - 500 VA - 20,000 V Test Ins.

13 SPEC. NO. 4125

Winding	P	S				
Turns	150	9,600				
Taps	—	—				
Wind. Lgth.	4"	2 1/8"				
Wire Size	#13	#32				
T.P.L.	32.	220-44				
Kind Term.	W.O.	#20 Dulac	Start lead in cut			
Term. Lgth.	6"	6"	Spiral first two + last two			
Layer Insul.	.007K	double 50#	layers - double glassine			
Test Volt.						
Wrapper	8L007K 3L005GA	8L007K 3L005GA				
TUBE	10L007+14007K		IMPREGNATION	Varnish		
CORE			PRIMARY V.A.			
MOUNTING	J - Insulators in bakelite					



DESIGNED BY *Gu* DATE *7/2/38*



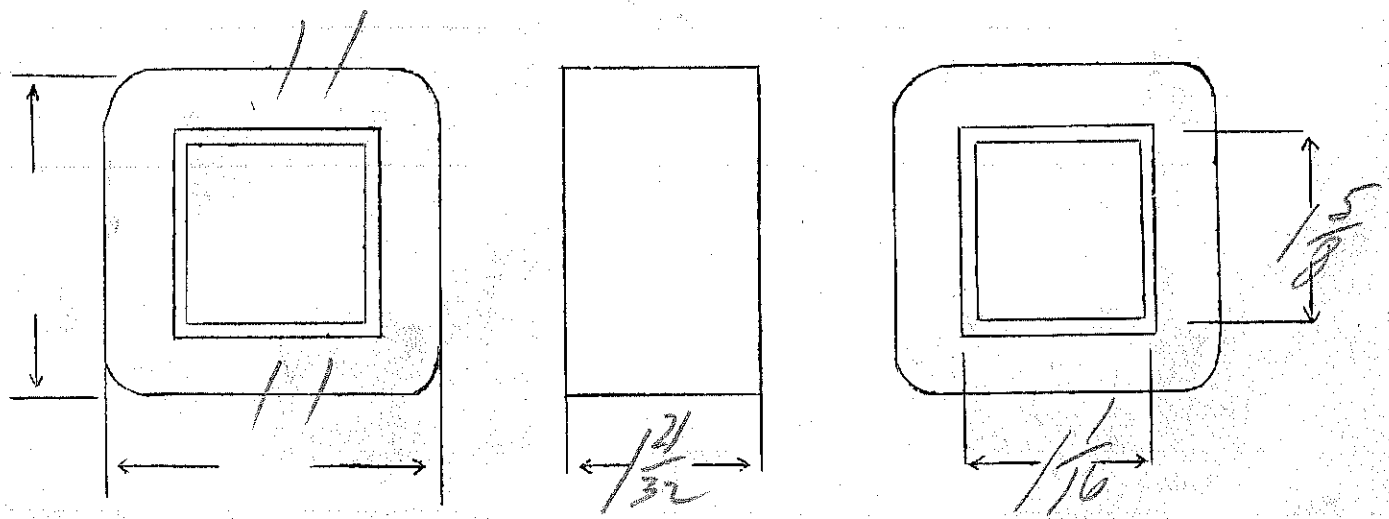
Ep - 120V

E<sub>s</sub> - 24V - 100VA

3.7

SPEC. NO. 4126

Winding	P	S					
Turns	444	98					
Taps	—	—					
Wind. Lgth.	1 <sup>15</sup> / <sub>32</sub>						
Wire Size	#22	#17					
T.P.L.	50-9	4L					
Kind Term.	WIRE ONLY						
Term. Lgth.	3"	3"					
Layer Insul.	50#	—					
Test Volt.							
Wrapper	26005GA	26005GA					
TUBE	76007		IMPREGNATION	Varnish			
CORE			PRIMARY V.A.				
MOUNTING	S - #14 motor cable - 12"						



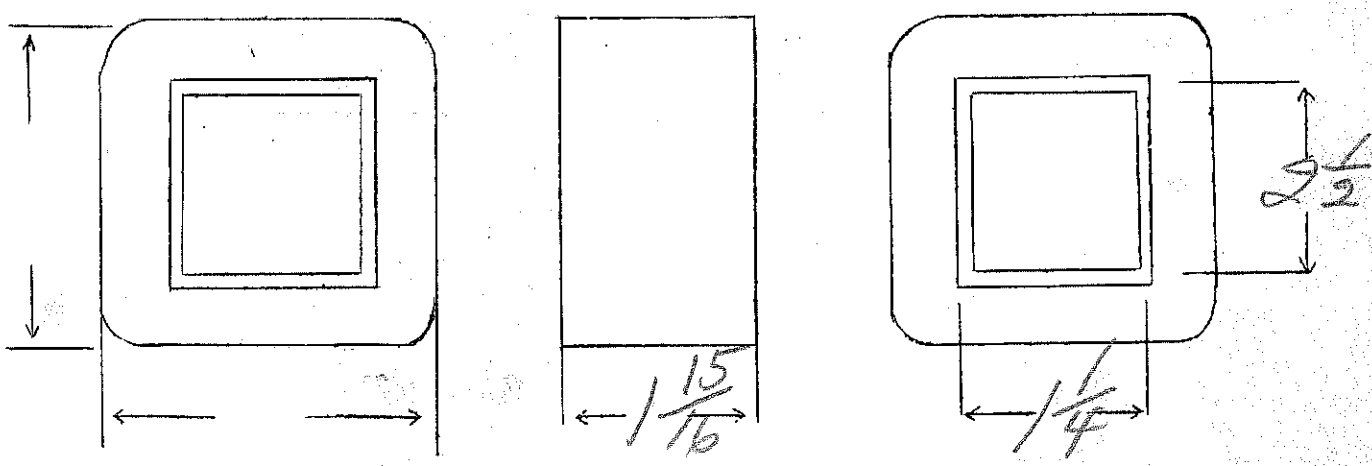
DESIGNED BY

DATE

Ep - 115V  
 E3 - 1000VCT - head tap 105V  
 EF1 - 2.5V - 3amp  
 200mA  
 EF2 - 2.5V - 10.5amp  
 EF3 - 2.5V - 2amp

Wt - 2.1 SPEC. NO. 4127

	SEC	SHIELD	PRI	Red F1	Dark F2	White F3	
Winding	SEC	SHIELD	PRI	F1	F2	F3	
Turns	2300	128	242	6	6	6	
Taps	1150-1406				3	3	
Wind. Lgth.	1.75						
Wire Size	#29	#29	#20	#18	double #15	#20	
T.P.L.	128-18						
Kind Term.	#20 Pin B.	5/16"	#20 Pin B.	WIRE ONLY			
Term. Lgth.	9"	3"	9"	9"	9"	9"	
Layer Insul.	double 20#		50#				
Test Volt.							
Wrapper	200VNC	100VNC	200VNC			200VNC	
TUBE	71007 + 1000VNC			IMPREGNATION		Varnish	
CORE				PRIMARY V.A.			
MOUNTING	A						



Ep-110/220

same as 445

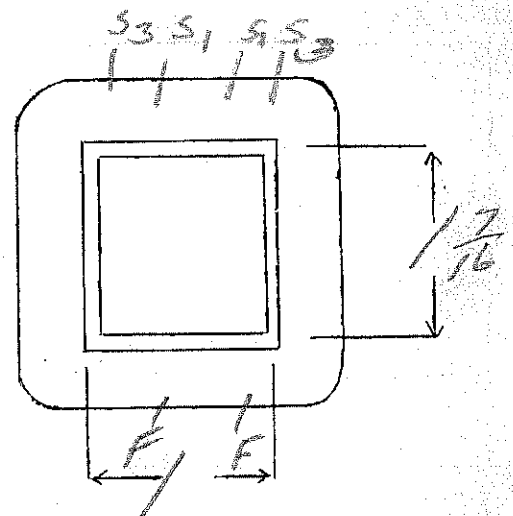
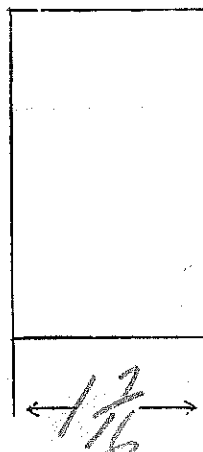
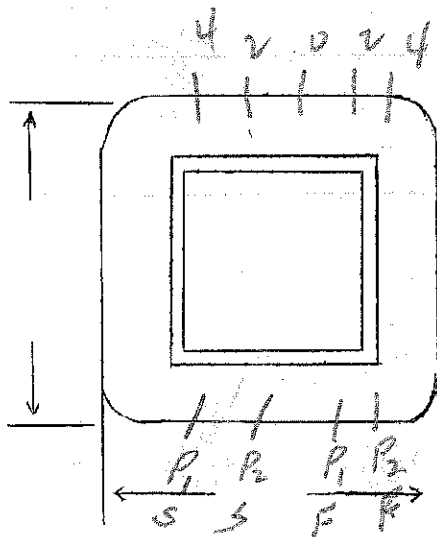
KARK

404

SPEC. NO.

4128

Winding	SEC			SHIELD	PRI.	PR2	FL
Turns	2660			160	465	465	23
Taps	160-370	480-1330	2340-2500		—		—
Wind. Lgth.	1.25	2.180			—		
Wire Size	#34			#34	#29	#29	#20
T.P.L.	160-18				93-5		
Kind Term.	Sil Brand				Sil Br		W.O.
Term. Lgth.	3"						
Layer Insul.	d-16#				30#	30#	
Test Volt.							
Wrapper			16007VC	16005VC	16005VC	26005GA	26005GA
TUBE	66007			IMPREGNATION	Varnosh		
CORE					PRIMARY V.A.		
MOUNTING	B						

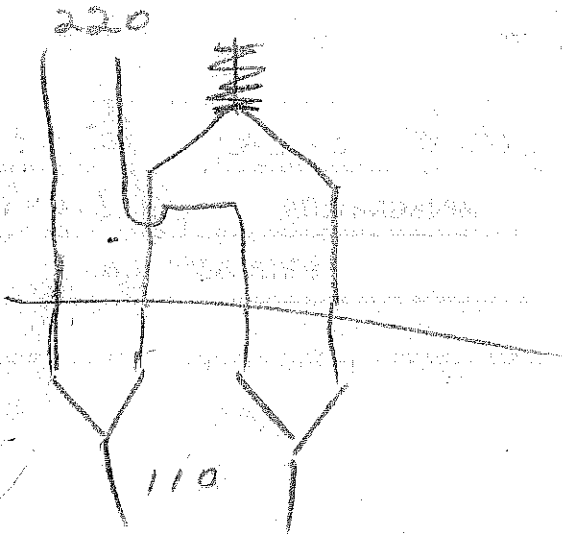


DESIGNED BY

*SW*

DATE

6/30/39



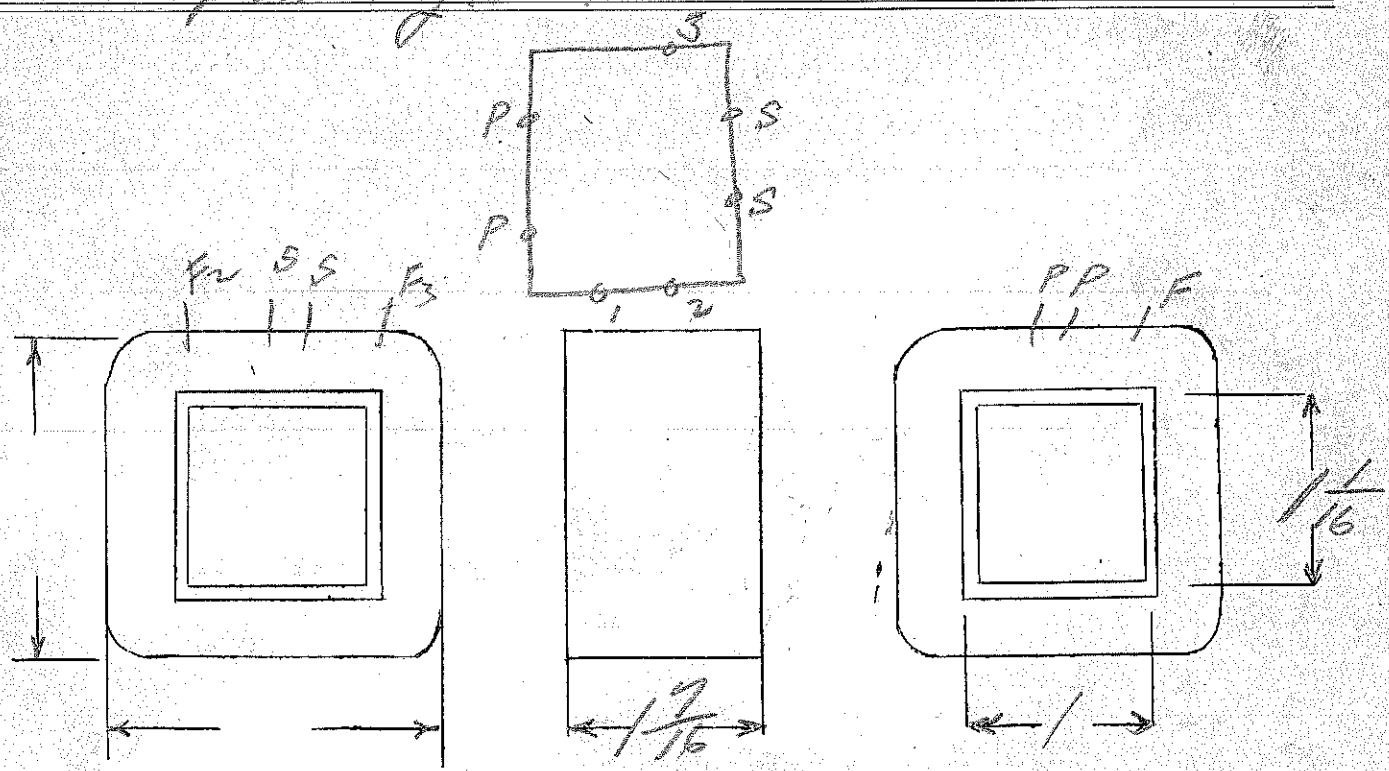
Ep - 115V  
 Es - 320V - 1 watt  
 Ef - 5V - 4 amp  
 Ef - 10V - 3 amp } joined series  
 Mc = 5.12

DESIGN EQUIPMENT CO.  
 SPEC. NO. 4129

Winding	SEC	PRI	Continuous				
			FIL	FIL			
Turns	1790	590	28	56			
Taps	—	—	—	—			
Wind. Lgth.	1.25	1.25	1.25				
Wire Size	#38	#27	#17	#18			
T.P.L.	224-8	74-8					
Kind Term.	Sil Br	WIRE ONLY					
Term. Lgth.	3"	3"	3"	3"			
Layer Insul.	double 16#	40#	—	—			
Test Volt.							
Wrapper	2007VC	2005GA		2005GA			

TUBE 5L007 IMPREGNATION Varnish  
 CORE PRIMARY V.A.

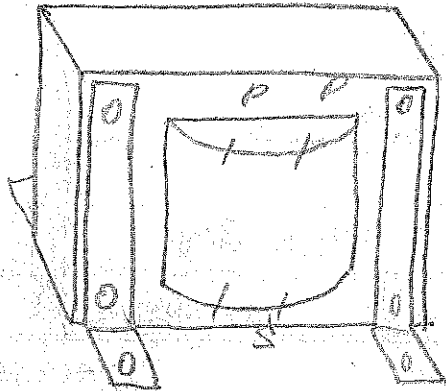
MOUNTING Special leg brackets



DESIGNED BY Geo

DATE 2/11/38

use special leg brackets



$$S = 370$$

$$F_1 = 5.8$$

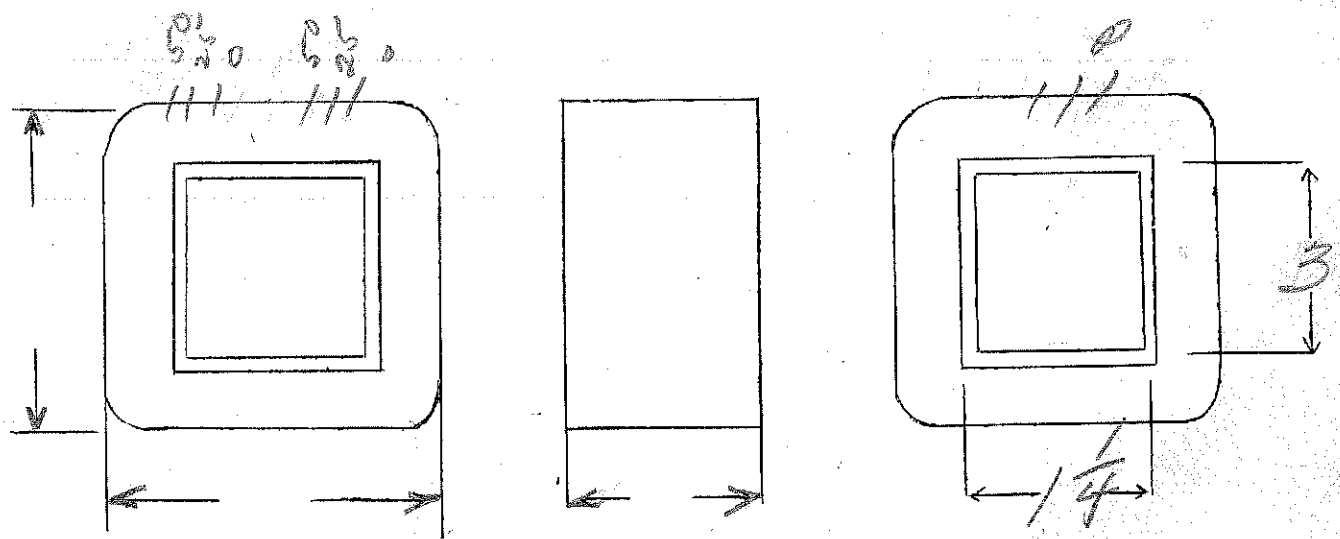
$$F_2 = 11.6$$

output transformer  
 single 6L6 (4000Ω - 80mA) to two windings 0-25-50 Ω  
 Pri - 200 Ω dc - 150 H

SPEC. NO. 4130

W. L. SIMMONS  
 (MR. E. E. SIMMONS)

Winding	PRI	SEC,	SEC <sub>2</sub>				
Turns	5200	575	575				
Taps	-	420	420				
Wind. Lgth.	1.75						
Wire Size	#31	#26	#26				
T.P.L.	164-32	90-7	90-7				
Kind Term.	Sil Br	W.O.					
Term. Lgth.	3"	3"	3"				
Layer Insul.	30#	40#	40#				
Test Volt.							
Wrapper	1007VC	1005VC	1005GA				
TUBE	7L007	IMPREGNATION		VARNISH			
CORE	24 Ga - Butt stack - no gap			PRIMARY V.A.			
MOUNTING	B						



DESIGNED BY *YW*

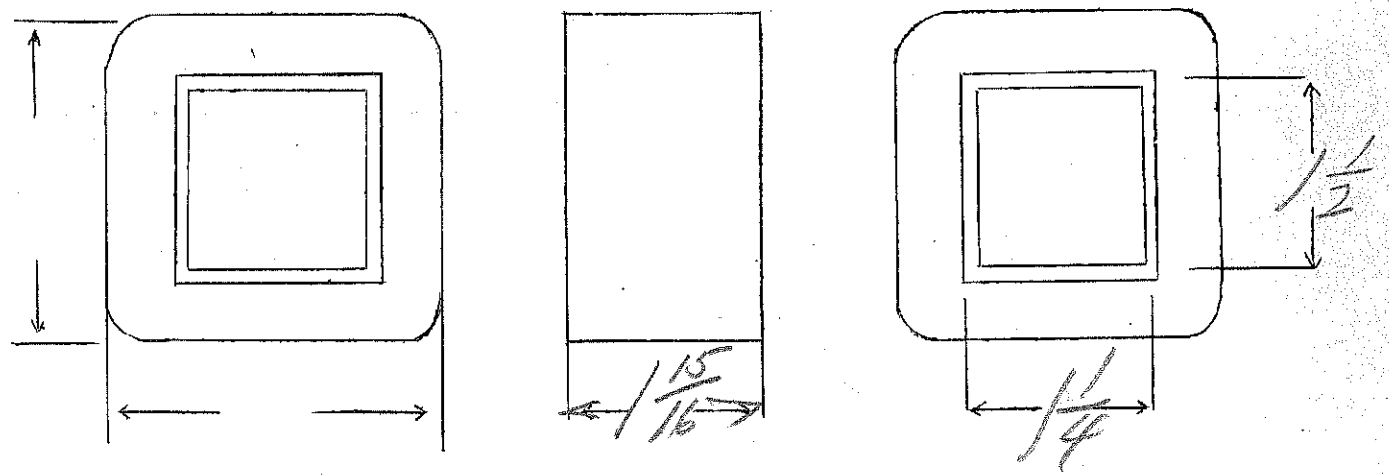
DATE *7/16/38*

P- 6Vdc

J- 800VCT- to deliver 400V dc - 150ma

SPEC. NO. 4/31

Winding	SEC	SH.	PRI				
Turns	3500	1	32				
Taps	1750		16				
Wind. Lgth.	1.75	✓	✓				
Wire Size	#30	Shim stock	#13				
T.P.L.	146-24						
Kind Term.	#20 PBR	sil Pa	W.O.				
Term. Lgth.	9"	3"	9"				
Layer Insul.	double 20#		207K				
Test Volt.							
Wrapper	2100 TNC 2100 TGA 2100 TGA						
TUBE	76007-1160.5VC		IMPREGNATION	Varnish			
CORE			PRIMARY V.A.				
MOUNTING	A- Copper shield over laminations						



DESIGNED BY *GLW*

DATE *7/16/38*

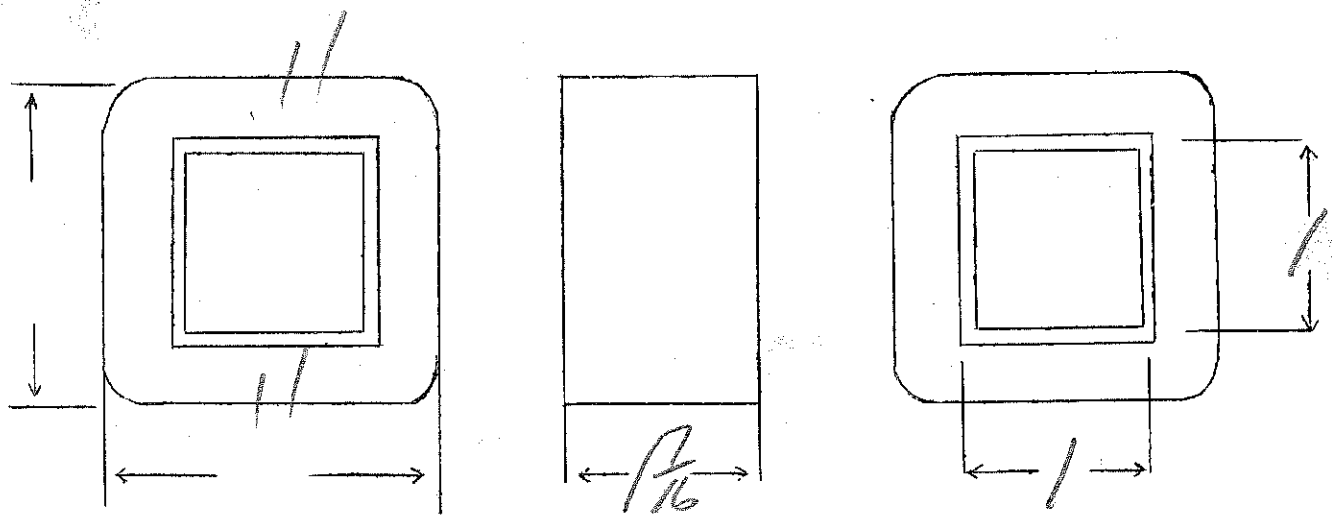


EP-120V

ES - 12V - 4 amp 50VA

SPEC. NO. 4132

Winding	P	S				
Turns	670	74				
Taps	-					
Wind. Lgth.	1.25					
Wire Size	#26	#17				
T.P.L.	67	3L				
Kind Term.	u.o.					
Term. Lgth.	3"	3"				
Layer Insul.	40#					
Test Volt.						
Wrapper	2605GA	2605SA				
TUBE	5607		IMPREGNATION	Varnish		
CORE			PRIMARY V.A.			
MOUNTING	S	- 12" motor cable #14				



DESIGNED BY *Law*

DATE *2/15/39*

EP-120

ES-660VCT-60ma

EK-13.2V-4amp

EF-6.3V-2amp

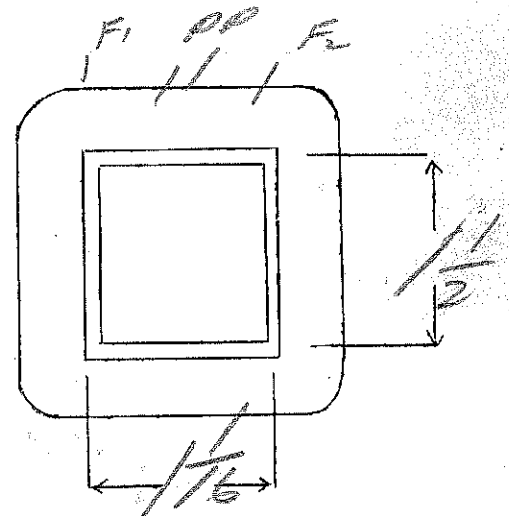
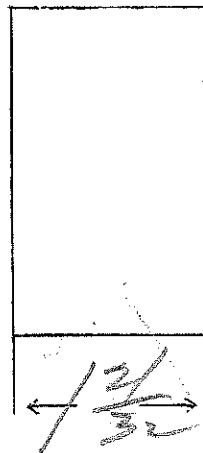
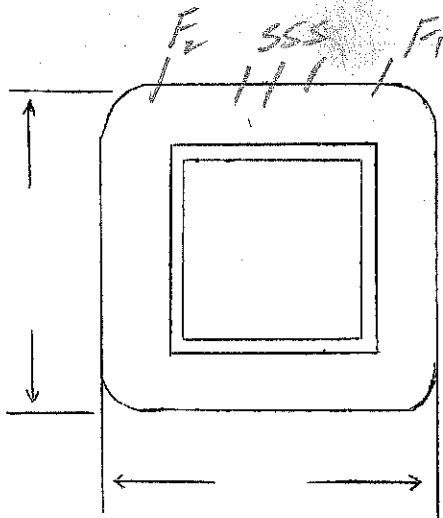
3.6

SPEC. NO.

4/33

Winding	SEC	SHIELD	PR1	F1	F2		
Turns	2600	56	432	25	52		
Taps	1300		—	—	—		
Wind. Lgth.	115/32	—	—	—	—		
Wire Size	#35	#23	#23	#19	# double 19		
T.P.L.	217-12		56-8	1"			
Kind Term.	Sil Bz	W.O.	W.O.	W.O.	W.O.		
Term. Lgth.	3"	3"	3"	3"	3"		
Layer Insul.	double 16#		50#				
Test Volt.							
Wrapper	16007VC	16005VC	26005GA	26005GA	26005GA		

TUBE	52007	IMPREGNATION	Vermah
CORE		PRIMARY V.A.	
MOUNTING	B		



DESIGNED BY

*Geo*

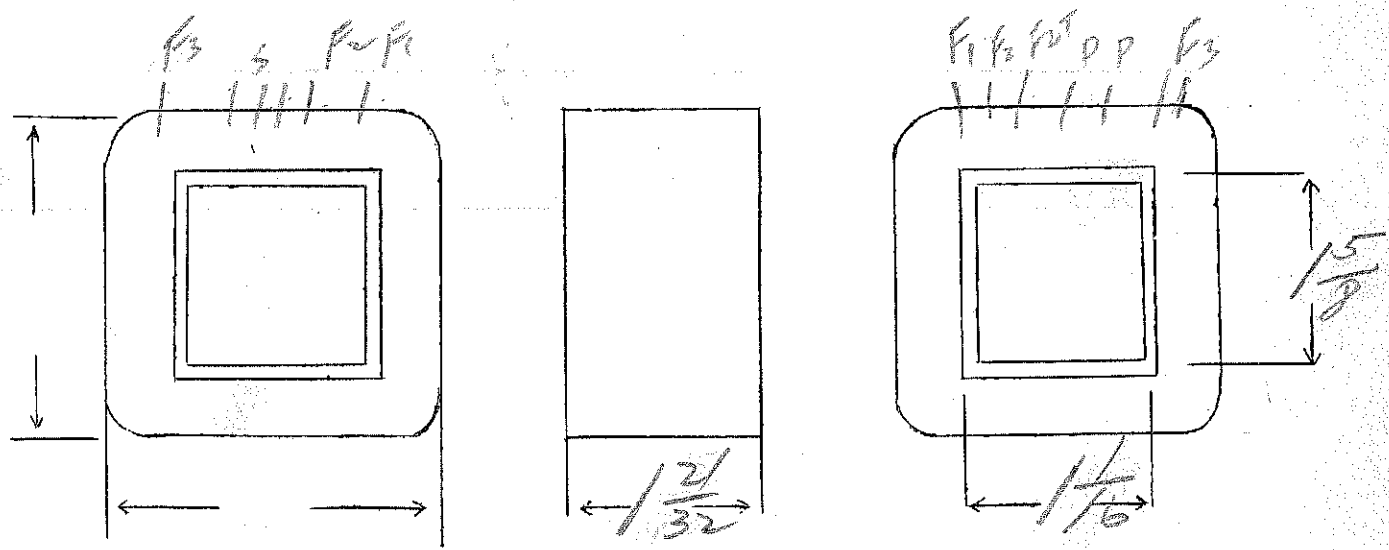
DATE

7/15/30

Ep-115V EF-2.5V-5amp  
 Es-750VCT-100ma EF-7.5V-2.5amp  
 EF-5V-2amp

SPEC. NO. 4134

Winding	SEC	SHIELD	PR	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
Turns	2740	173	380	18	9	27
Taps	1370		—		5	13
Wind. Lgth.	1.15 32					
Wire Size	#33	#33	#22	#19	#16	#19
T.P.L.	173		48-8			
Kind Term.	Silbr		W.O.	✓	✓	✓
Term. Lgth.	3"	3"	3"	✓	✓	✓
Layer Insul.	double 16#		50#			
Test Volt.						
Wrapper	11007VC	11005GA	21005GA			21005GA
TUBE	6L007	IMPREGNATION		Varnish		
CORE		PRIMARY V.A.				
MOUNTING	B					



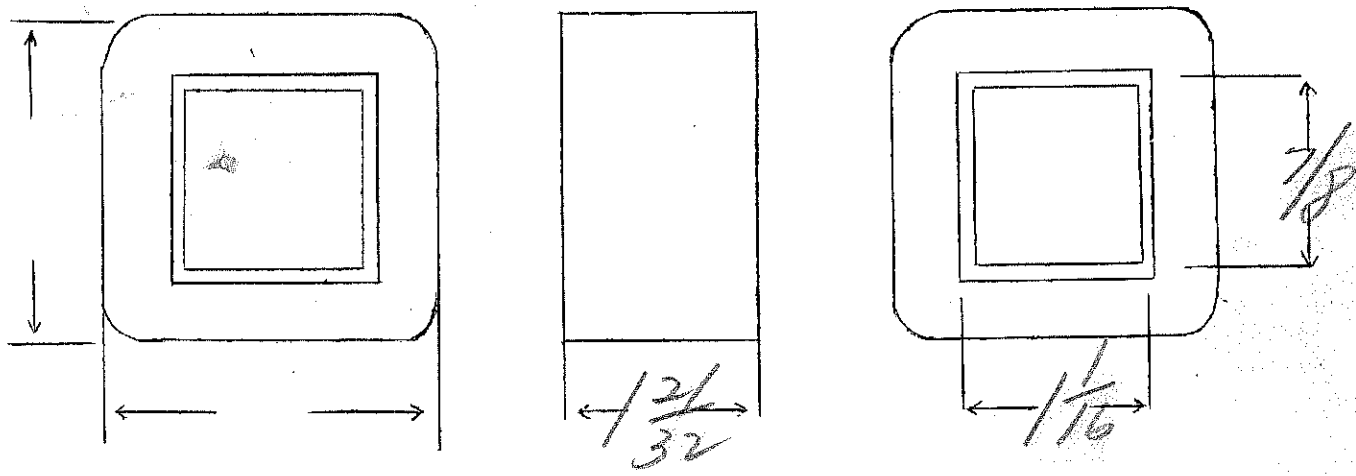
DESIGNED BY *SW*

DATE 7/15/38

Ep - 32V dc vibrator  
 Es - 550 VCT - 70 ma  
 Ef - 6.3V - 2.1 amp

SPEC. NO. 4135

Winding	SEC	SHIELD	PRI	F			
Turns	4600	1	360	56			
Taps	2300		180				
Wind. Lgth.	1 1/2 32						
Wire Size	#34	SHIM STACK	#24	#21			
T.P.L.	192-24		60-6				
Kind Term.	#20 P/B	SIP/B	W.O.				
Term. Lgth.	9"	3"	9"	9"			
Layer Insul.	double 16#		50#				
Test Volt.							
Wrapper	21005VC	24056A	210056A	210056A			
TUBE	71007		IMPREGNATION	varnish			
CORE			PRIMARY V.A.				
MOUNTING	A - Copper strip over laminations						



DESIGNED BY Gen

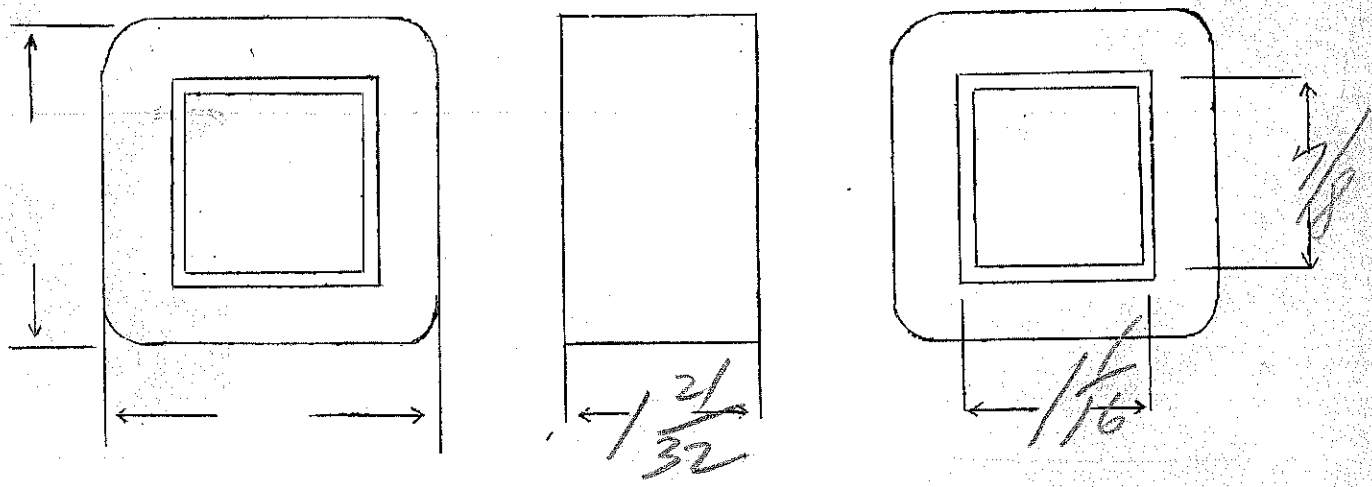
DATE 7/16/38

Ep - 12V dc vibrator  
 Es - 550Vct - 70ma  
 Ef - 6.3V - 2.1 amp

12W

SPEC. NO. 4136

Winding	SEC	SHIELD	DRI	F			
Turns	4200	1	130	51			
Taps	2100		65				
Wind. Lgth.	1 15/32						
Wire Size	#34	SKIM STOCK	#20	#21			
T.P.L.	192-22		4L	1L			
Kind Term.	#20 D.Br.	sil Br	W.O.				
Term. Lgth.	9"	3"	9"	9"			
Layer Insul.	double 16 #		50 #				
Test Volt.							
Wrapper	21005VC	21005GA	21005GA	21005GA			
TUBE	71007	IMPREGNATION		Varnish			
CORE		PRIMARY V.A.					
MOUNTING	A - Copper strip over lamination						



DESIGNED BY *GW*

DATE 7/16/38

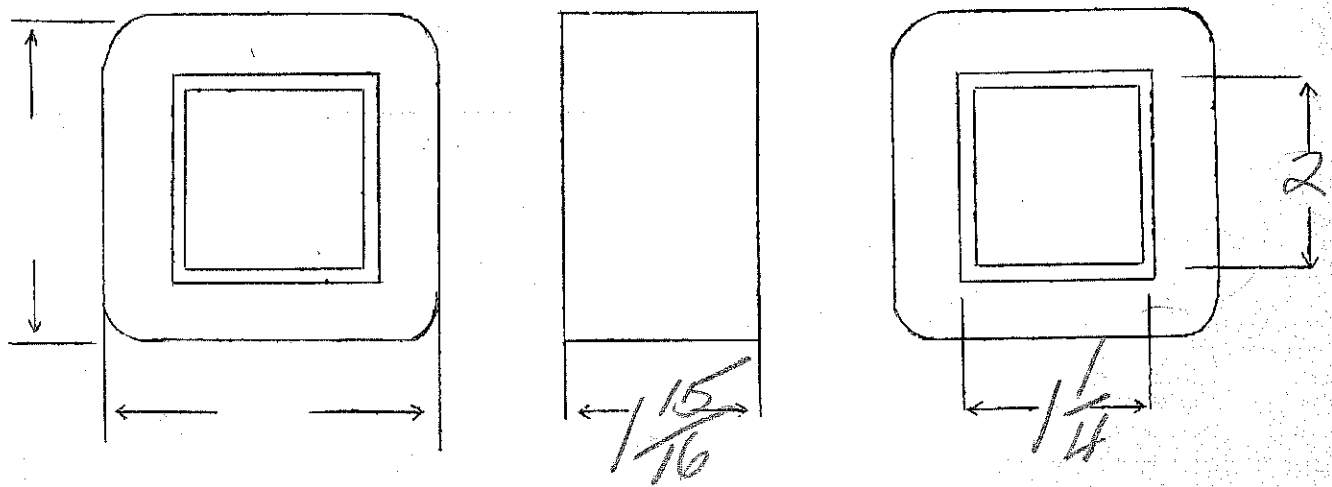
EP - 105-115-125  
 ES - 900VCT-150MA  
 EF - 5VCT-3A  
 EF - 10VCT-1.5amp

EF - 6.3VCT-1amp

2.5

SPEC. NO. 4137

Winding	SEC	SHIELD	PRI	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
Turns	2440	158	315 290	14	28	17
Taps	1220		265	7	14	8
Wind. Lgth.	1.75					
Wire Size	#31	#31	#21	#18	#23	#22
T.P.L.	158-16		53			
Kind Term.	#30 P/W		#20 P/W	WIRE ONLY		
Term. Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	double 20#		50#			
Test Volt.						
Wrapper	21005VC	11007VC	210076A			210076A
TUBE	710074/1007VC			IMPREGNATION		Varnish
CORE				PRIMARY V.A.		
MOUNTING	A					



DESIGNED BY *ew*

DATE 7/25/38

$E_p - 130$   
 $E_s - 700VCT - 80ma.$   
 $E_f - 5V - 2amp$   $E_f - 6.3V - 1.25amp$

$\frac{N}{F} = 5.35$

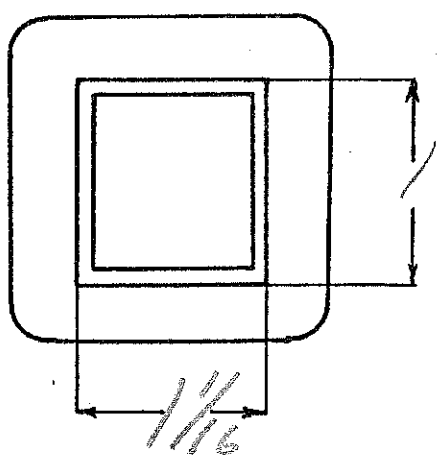
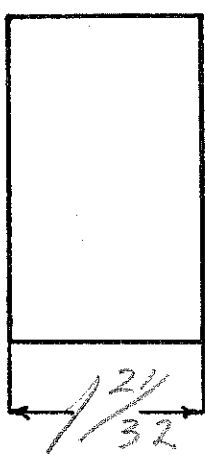
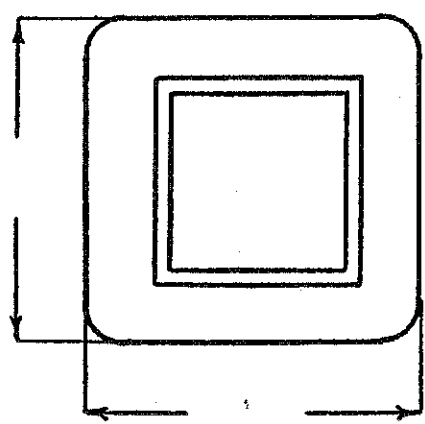
SPEC. NO. 4138-130V

Winding	Sec	Shield	Pri	F <sub>1</sub>	F <sub>2</sub>		
Turns	4100	70	695	30	37		
Taps	2050		-				
Wind. Lgth.	1 $\frac{15}{32}$	✓	✓	✓	✓		
Wire Size	#34	#25	#25	#20	#21		
T. P. L.	188-22	70	70-10				
Finish							
Type Lead	#20 Pa Bn		#20 Pa Bn	Wire Only			
Lead Lgth.	9"		9"	9"	9"		
Layer Insul.	double 16#		50#				
Test Volt.							
Wrapper	1L007VC	1L005VC	2L005GA	2L005GA	2L005GA		

TUBE 7L007 IMPREGNATION Varnish

CORE 1/16 X 1 GA. 24 GRADE D STACK 2 X 2

MOUNTING A



DESIGNED BY JCS

DATE 12-16-38

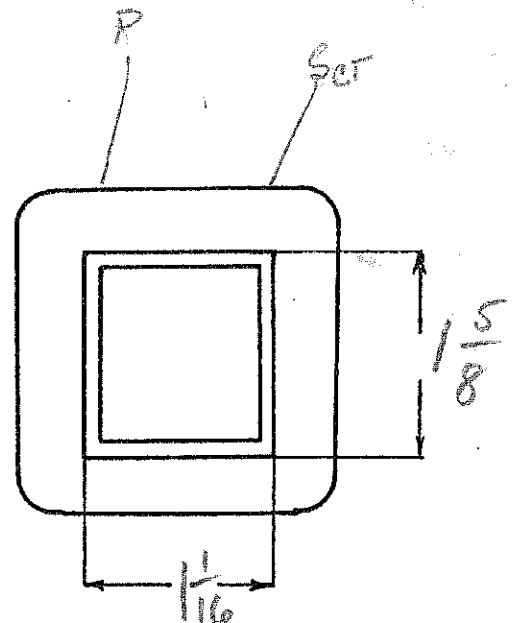
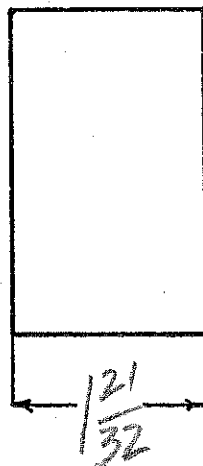
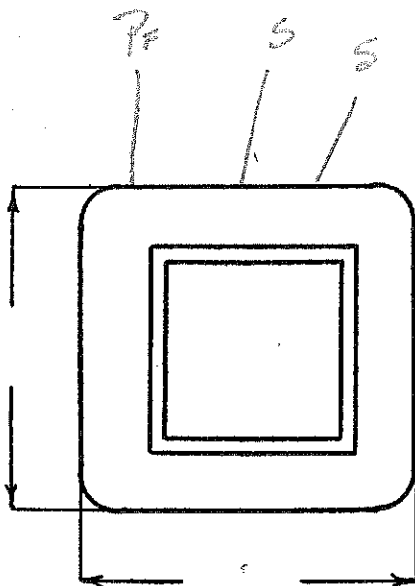
Ep-115  
 Es-700 V. C. T. - 80 Ma.  
 Ep-5 V. - 2 Amp.  
 Es- 6.3 V. - 1.25 Amp.

5.35

4138-250

SPEC. NO.

Winding	SEC	SHIELD	PRI	GREEN	BLUE		
				F <sub>1</sub>	F <sub>2</sub>		
Turns	4100		650	30	37		
Taps	2050						
Wind. Lgth.	1-15/32	1-15/32	1-15/32	1-15/32			
Wire Size	#34	#25	#25	#20	#21		
T. P. L.	188-22		70-9				
Finish							
Type Lead	#20 P.Br.		#20 P.Br.	WIRE ONLY			
Lead Lgth.	9"		9"	9"	9"		
Layer Insul.	Double 16#		50#				
Test Volt.	1L.007VC	1L.005VC	2L.005GA	2L.005GA	2L.005GA		
Wrapper							
TUBE	7L.007			IMPREGNATION		VARNISH	
CORE	1 1/16 x 1 5/8	GA.	24	GRADE	D	STACK	2x2
MOUNTING A							



DESIGNED BY

*J. J. ...* 4/24/39 Form # 4138

DATE



Ep-115  
 Es-700 V. C. T. - 80 Ma.  
 Ef-5 V. - 2 Amp.  
 Ef- 6.3 V. - 1.25 Amp.

5.35

*Delnesson Bros*  
*A.T. Reynolds*

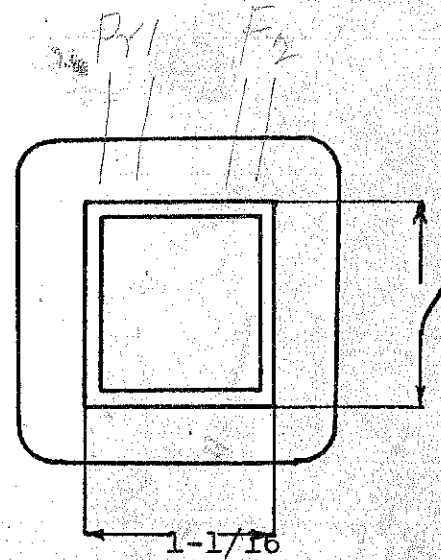
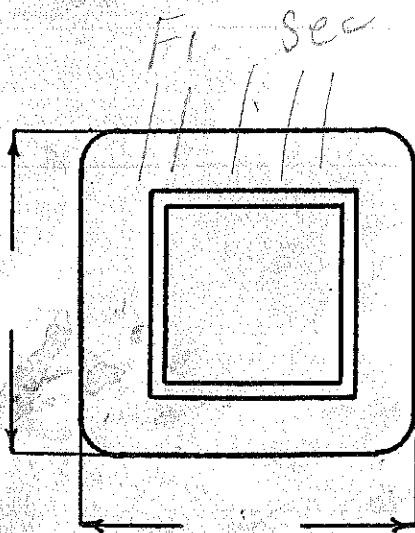
SPEC. NO. 4138

Winding	SEC	SHIELD	PRI	GREEN F <sub>1</sub>	BLUE F <sub>2</sub>		
Turns	4100		630	30	37		
Taps	2050						
Wind. Lgth.	1-15/32	1-15/32	1-15/32	1-15/32			
Wire Size	#34	#25	#25	#20	#21		
T. P. L.	188-22		70-9				
Finish							
Type Lead	#20 P.Br.		#20 P. Br.	W I R E O N L Y			
Lead Lgth.	9"		9"	9"	9"		
Layer Insul.	Double 16#		50#				
Test Volt.	1L.007VC	1L.005VC	2L.005GA	2L.005GA	2L.005GA		
Wrapper							

TUBE	7L.007	IMPREGNATION	VARNISH
------	--------	--------------	---------

CORE	$1\frac{1}{16} \times 1$	GA.	24	GRADE	D	STACK	2x2
------	--------------------------	-----	----	-------	---	-------	-----

MOUNTING A



DESIGNED BY GW

DATE 7/20/38

Ep - 115  
 Es - 780V (open) - 65mA  
 Ef - 5V - 2amp

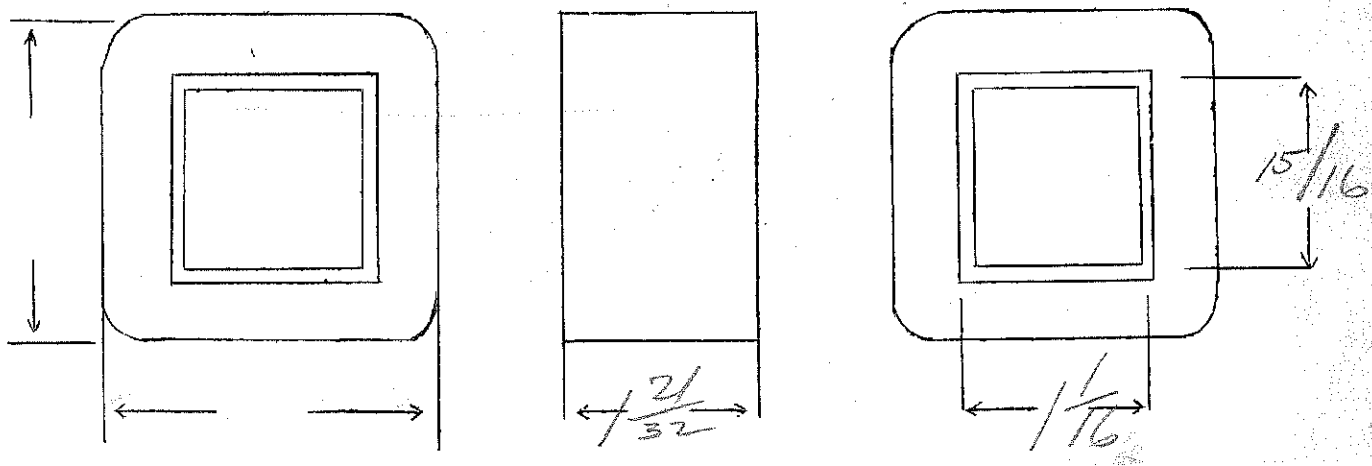
E<sub>2</sub> = E<sub>24</sub> - 2amp  
 E<sub>6.3</sub> - 2.2amp  
 E<sub>5.5</sub>  
 E<sub>0</sub>

OIL FILLED - REV  
 5.48  
 4/39

SPEC. NO.

Winding	SEC	SHIELD	PR1	F1	F2	Continuation
Turns	4250	1	630	31	38	104
Taps	21-25				34	
Wind. Lgth.	1 <sup>15</sup> / <sub>32</sub>					
Wire Size	#35	shims stock	#25	#21	#20	#21
T.P.L.	212-20		70-9			
Kind Term.	#20 P.B.		#20 P.B.	WIRE ONLY		
Term. Lgth.	9"	3"	9"	9"	9"	
Layer Insul.	double 16#		40#			
Test Volt.						
Wrapper	16007VC	16005VC	26005GA	26005GA	26005GA	
TUBE	5L007			IMPREGNATION		Varnish
CORE					PRIMARY V.A.	
MOUNTING	SA					

start - white  
 5.5 - red  
 6.3 - blue  
 24 - black



DESIGNED BY *gwo*

DATE 7/20/38

EP-115 POWER

LEONARD JUNPER

ES - 750V - 150ma

2.7

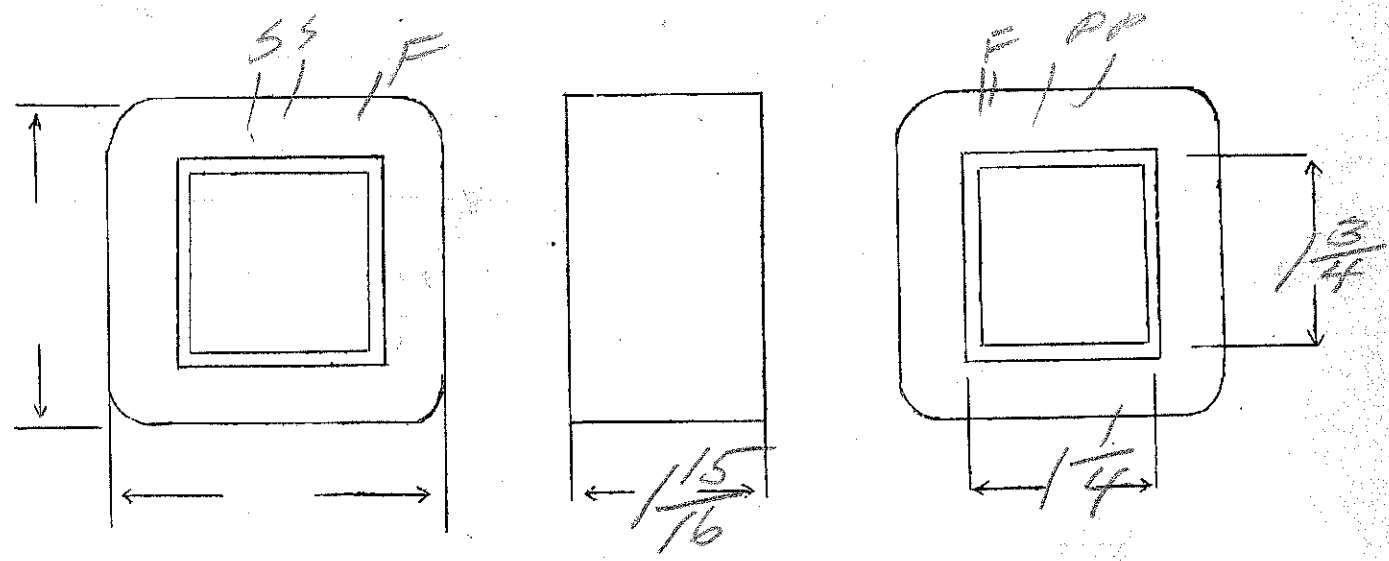
SPEC. NO. 4141

EF - 7.5V - 2.5amp

Winding	SEC	SHIELD	PRI	F <sub>1</sub>			
Turns	2200	130	310	22			
Taps	—			11			
Wind. Lgth.	1.75						
Wire Size	#29	#29	#20	#19			
T.P.L.	130-17		47-7	14			
Kind Term.	W.O.						
Term. Lgth.	3"	3"	3"	3"			
Layer Insul.	double 2071		50#				
Test Volt.	2500						
Wrapper	21007VC	11005VC	210076A	210076A			

TUBE	71007	IMPREGNATION	Varnish
CORE		PRIMARY V.A.	
MOUNTING	B		

*heavy finishing*



DESIGNED BY *Geo*

DATE *7/21/38*

Speed vibrator transformer for neon tubing (8" - 8 mm red)

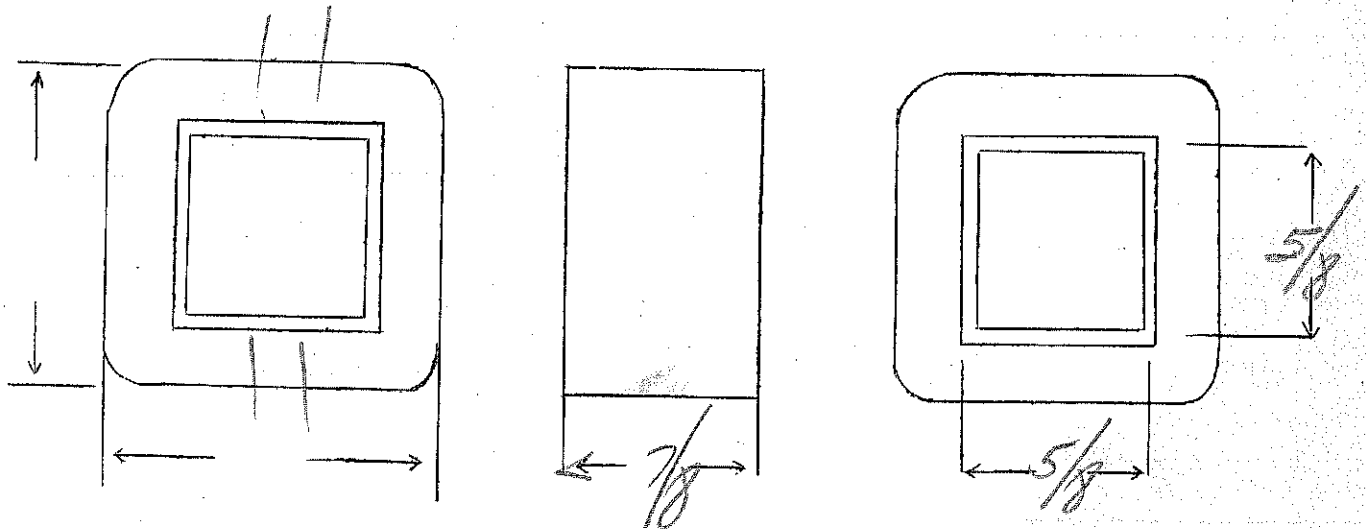
SPEC. NO.

4142

Winding	S	P					
Turns	5640	132					
Taps							
Wind. Lgth.	3/4						
Wire Size	#40	#26					
T.P.L.	190-30	40-4					
Kind Term.	Sil lac	W.O.					
Term. Lgth.	3'	3'					
Layer Insul.	16#	40#					
Test Volt.							
Wrapper	16007VC	200560					

TUBE	41007 + 16005VC	IMPREGNATION	varnish
CORE	5/8 x 5/8 - 29/32 2x2	PRIMARY V.A.	
MOUNTING			

heavy finishing



DESIGNED BY

*glw*

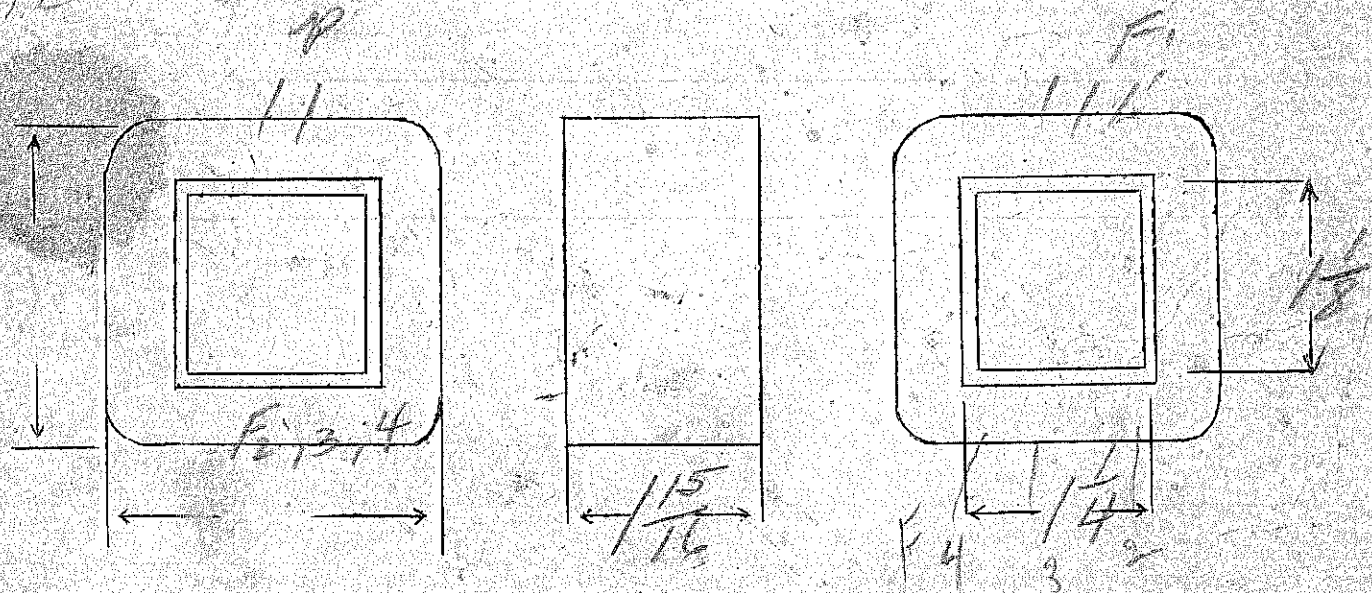
DATE

7/22/38

EP-120V  
 EF1-7.5VOT-4amp  
 EF2-5V-3A  
 EF3-5V-3A  
 EF4-6.3V-4.35A  
 240VOT-60mA  
 SOUND PRODUCTS CO.  
 SPEC. NO. 4143  
*pink green ME-14 white*

Winding	P	F1	F2	F3	F4		
Turns	480	34	22	22	28		
Taps	-	17	-	-	-		
Wind. Lgth.	1.75	-	-	-	-		
Wire Size	#22	#17	#18	#18	#16		
T.P.L.	60-8						
Kind Term.	WIRE ONLY		with sleeving				
Term. Lgth.	6"	6"	6"	6"	6"		
Layer Insul.	50#						
Test Volt.	← 2500		→				
Wrapper	210076A				210076A Double		
TUBE	71007				IMPREGNATION	Varnish	
CORE						PRIMARY V.A.	
MOUNTING	L - Cadmium Case						

F1-4.4  
 F2-5.68  
 F3-5.68  
 F4-7.2



DESIGNED BY *Yw* DATE 7/15/30

EP - 90-100-110-120-130 @ 60V  
 ES<sub>1</sub> - 2000 V.C.T. 200 Ma  
 ES<sub>2</sub> - 1100 V.C.T. 250 Ma

3000 FROM...  
 File 607

n/e 1.43

SPEC. NO. 4144

Winding	SEC <sub>1</sub>	SEC <sub>2</sub>	PRI				
Turns	3100	1750	185	white			
Taps	1550	875	Green	Blue	Red	Black	Black
			172	- 158	- 143	- 130	- 0
Wind. Lgth.	2-5/16	2-5/16	2 1/4"				
Wire Size	#20	#20	#16			0	- Cut bottom
T. P. L.	173-18	146-12	38-51			1	- 90° - Black
Finish	90 1/2%	85 1/2%	88 1/2%			2	- 100 - Red
Type Lead	#20 DULAC	#20 DULAC	#0 - Cotton SLEEVING.			3	- 110 - Blue
Lead Lgth.	6"	8"	start 9"			4	- 120 - Green
			Rest 5"			5	- 130 - White
Layer Insul.	1-L 40-Lb.G	1-L 40-Lb.G	1-L .007"CP			6	
Test Volt.	5000	3500	1250			7	
Wrapper	31007VC	21007VC 21005GA	21005GA			8	
TUBE	91007 4"	11007VC		IMPREGNATION			Shell Varnish

CORE 1/2 x 2 1/4 GA. 24 GRADE D STACK 2x2

MOUNTING L

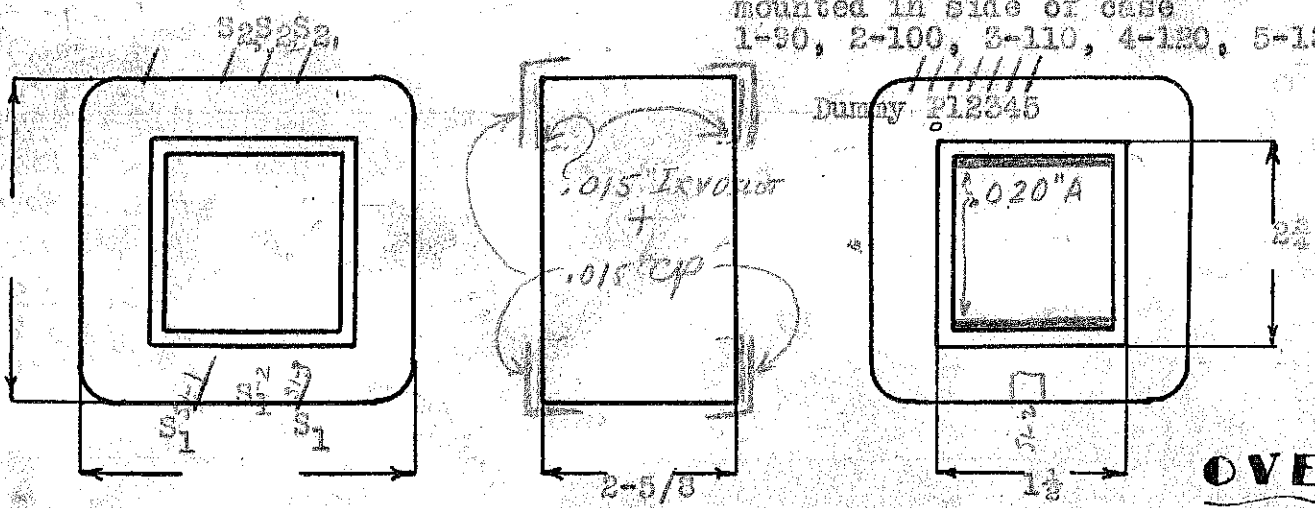
CLL-1054-1064-516 @ 90V  
 FC-72.2 @ 60V  
 TRV-1.43  
 WNW-731(.739)

2 SEC. VA = 337.5  
 PRI. VA = 450  
 PWS. I = 5 Amp @ 90V

S<sub>1</sub> - Red - Blue  
 S<sub>2</sub> - Black - Green

heavy finishing over mica  
 tight winding

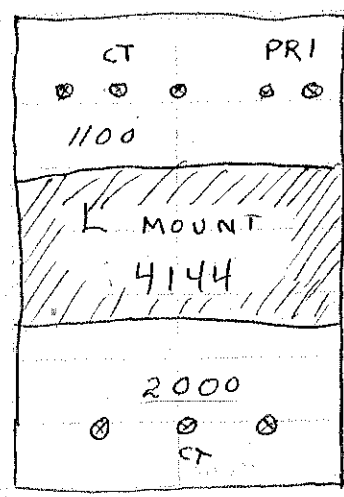
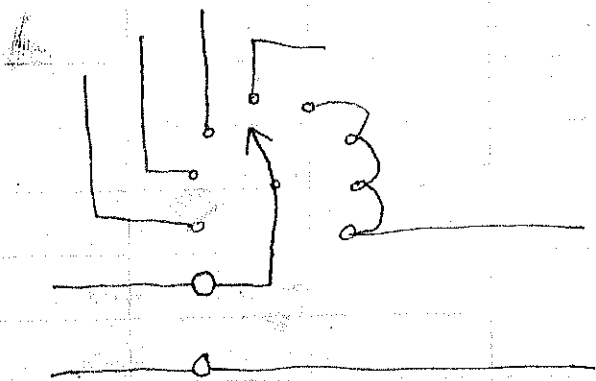
Pri. leads to amphenol switch  
 mounted in side of case  
 1-90, 2-100, 3-110, 4-120, 5-130



OVER

DESIGNED BY GW

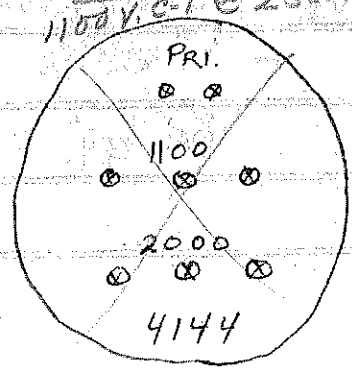
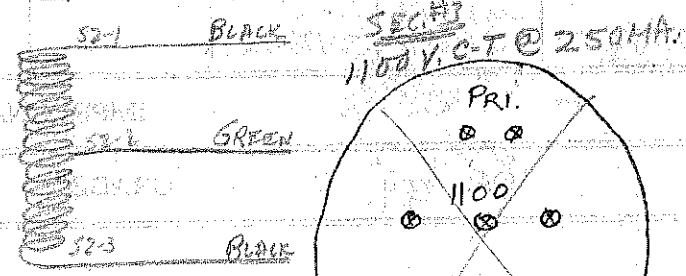
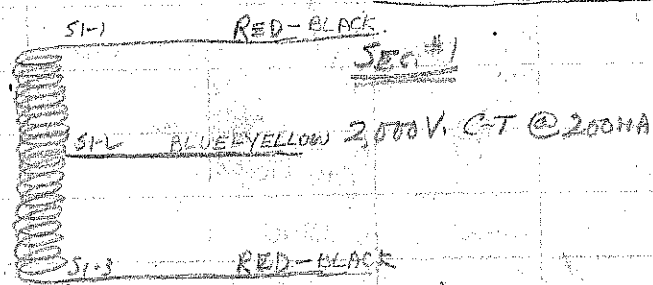
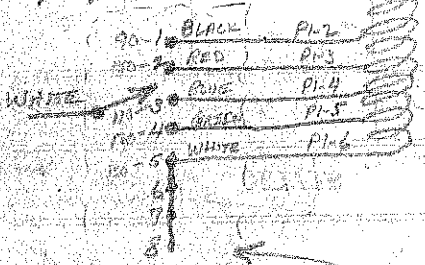
DATE 7/16/38



Bottom

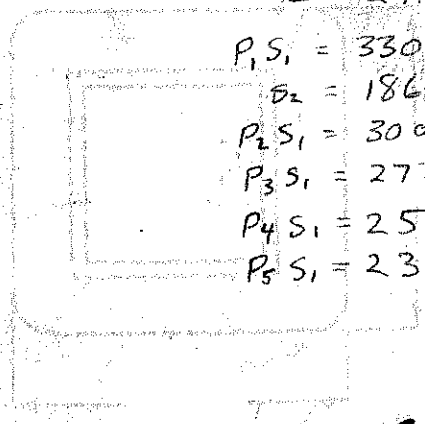
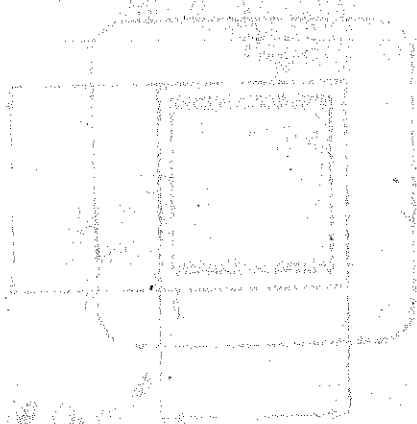
PRI.

90/100/110/120/130V @ 60Hz



$$E = 27.7$$

- $P_1 S_1 = 330$
- $S_2 = 186$
- $P_2 S_1 = 300$
- $P_3 S_1 = 272$
- $P_4 S_1 = 250$
- $P_5 S_1 = 232$



ED-120

EF-5.8V-1.6 amp

Richard Bell  
GILFILCAN

ES-560V (open) - 35 ma

EF-5V-2 amp

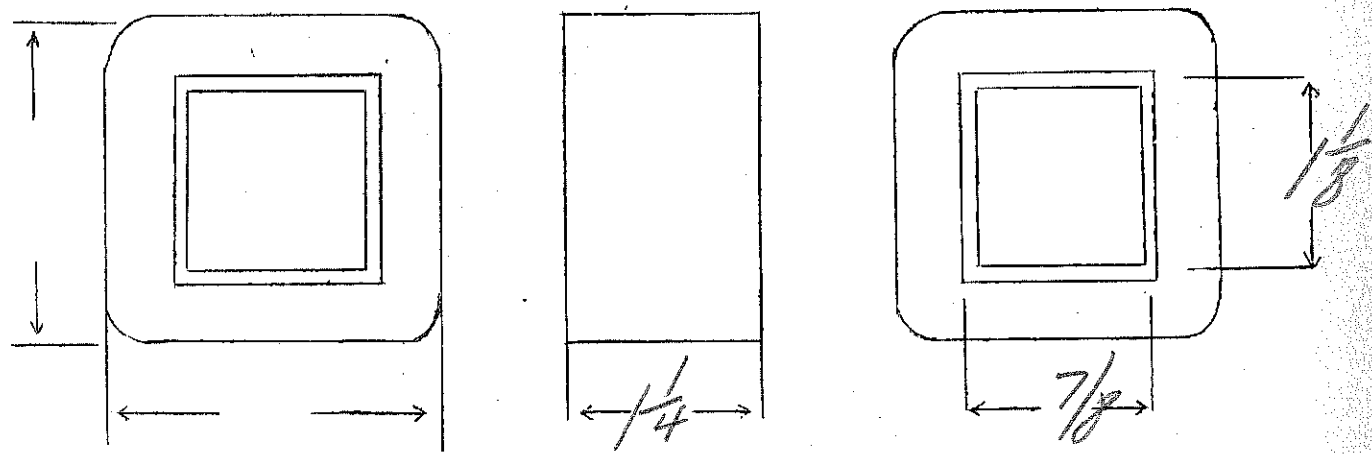
5.25

SPEC. NO.

4145

Winding	SEC	SHIELD	PR1	F <sub>1</sub>	F <sub>2</sub>		
Turns	3000	1	630	30	36		
Taps	1500			-	-		
Wind. Lgth.	13/32						
Wire Size	#37	5/16" STOCK	#28	#21	#22		
T.P.L.	189.16		70-9				
Kind Term.	#22 Cellac	sil Br	#22 Cellac	WIRE ONLY			
Term. Lgth.	9"	3"	9"				
Layer Insul.	double 12#		40#				
Test Volt.							
Wrapper	11005VC	11005VC	21005GA		21005GA		

TUBE 52007 IMPREGNATION Varnack  
 CORE PRIMARY V.A.  
 MOUNTING SA. Fibre gronnet



DESIGNED BY *AW*

DATE 7/25/38

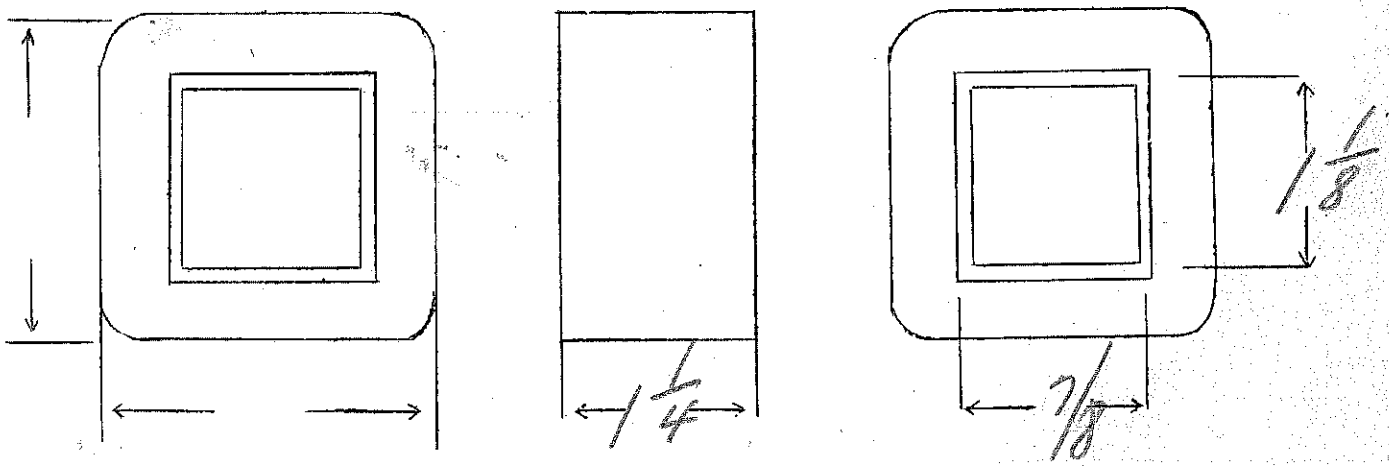


EP-120  
 ES-560V (open) - 35ma  
 EP-5V-2amp  
 EP-5.8V-1.6amp - tap 5.4

5125 SPEC. NO. 4146

Winding	SEC	SHIELD	DR1	F1	F2		
Turns	3000	1	630	30	36	black	
Taps	1500				33	white	
Wind. Lgth.	1 3/32				0	blue	
Wire Size	#37	SHM STOCK	#28	#21	#22		
T.P.L.	189-16		70-9				
Kind Term.	#22 Collac	silbr	#22 Collac	WIRES ONLY			
Term. Lgth.	9" double	3"	9"				
Layer Insul.	127		46#				
Test Volt.							
Wrapper	1005VC	1005VC	21005GA		21005GA		

TUBE 5L007 IMPREGNATION Varnish  
 CORE PRIMARY V.A.  
 MOUNTING SA - Fibre Grannett



DESIGNED BY Sw DATE 7/25/38

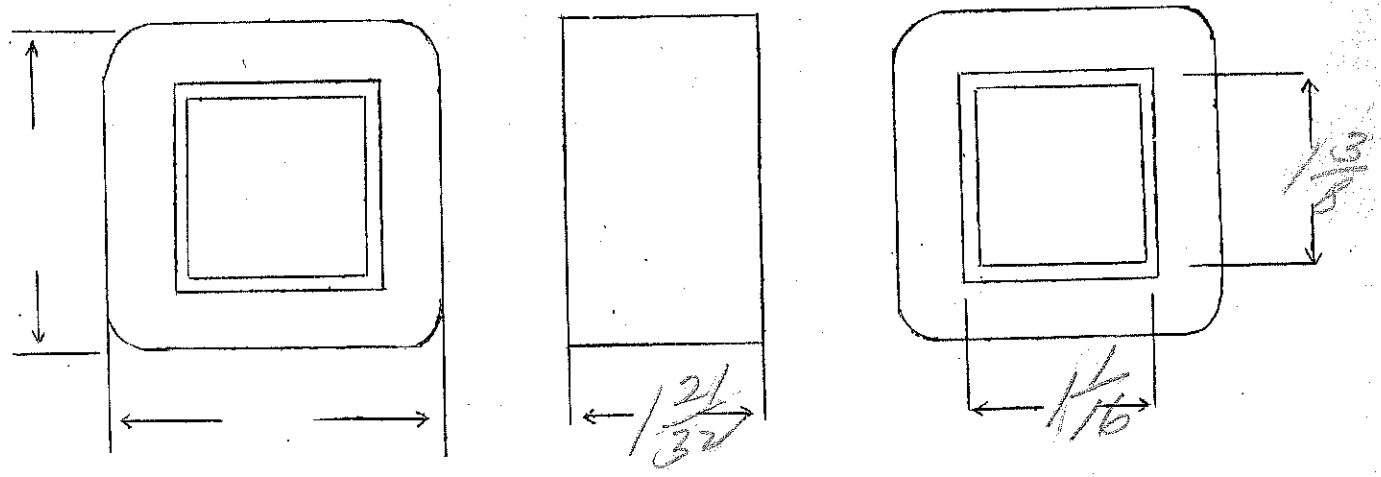
S- 700VCT 110MA  
 5V-2amp  
 6.3V- 1.5amp CT

3.9

SPEC. NO.

4147

Winding	SEC	SHIELD	PR1	F1	F2		
Turns	3000	62	468	22	27		
Taps	1500			-	13		
Wind. Lgth.	1 15/32	L	L	L	-		
Wire Size	#32	#24	#24	#20	#20		
T.P.L.	150-20		62-8				
Kind Term.	#20 P/B		#20 P/B	WIRE ONLY			
Term. Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 16#	-	50#	-	-		
Test Volt.							
Wrapper	16007VC	16005VC	260056A	260056A	260056A		
TUBE	76007	IMPREGNATION			VARNISH		
CORE		PRIMARY V.A.					
MOUNTING	A						



DESIGNED BY

*Law*

DATE

7/29/38

EP - 6V or 110V

Es - 800VCT 150ma (ac) or 100ma (dc)

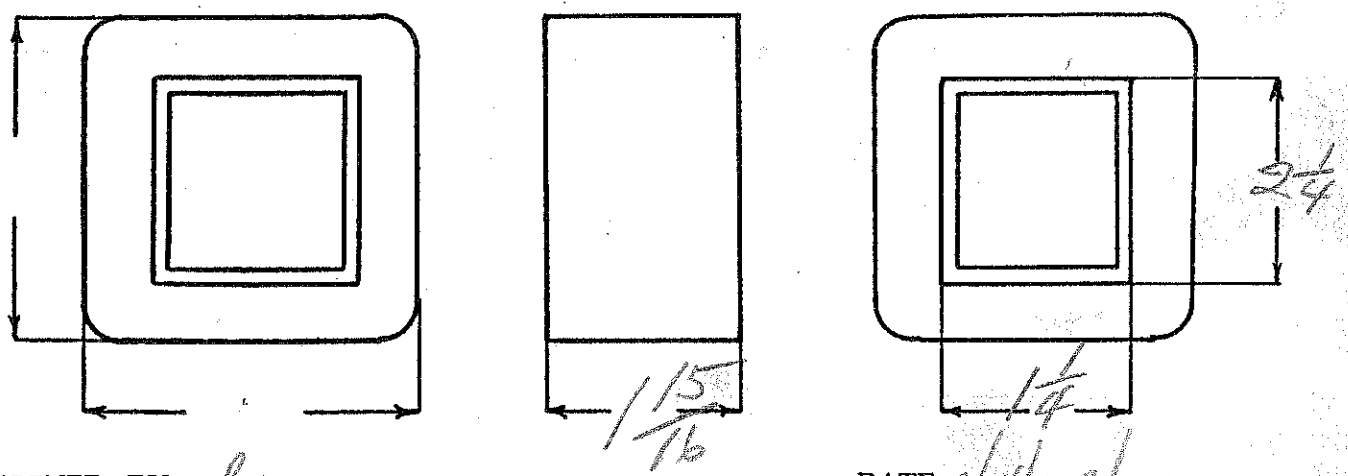
EF - 6.3V 5amp

2.6

SPEC. NO. 4148

Winding	PR1	SHIELD	SEC	SHIELD	PR2	FL
Turns	300	1	2300	1	22	18
Taps			1150		11	9
Wind. Lgth.	1.75					
Wire Size	#22	slim stock	#30	slim stock	#13	double #18
T. P. L.	60.5		146-16		2L	
Finish						
Type Lead	#20 Zn	oil Br	#20 Zn	oil Br	#20 Zn	Pas Br
Lead Lgth.	9"	3"	9"	3"	9"	9"
Layer Insul.	50#		double 16#			
Test Volt.						
Wrapper	21005VC	21007VC	21007VC	21007BA	21007BA	21007BA
TUBE	71007			IMPREGNATION	Varnish	

CORE GA. GRADE STACK  
 MOUNTING A - copper strip over lamination



DESIGNED BY *gsw*

DATE 8/4/38

EP - 105-110-115-120-125

EF<sub>1</sub> - 5V-10amp CT

EF<sub>2</sub> - 5V-10amp CT

10,000V Ins

2.86

SPEC. NO.

4149

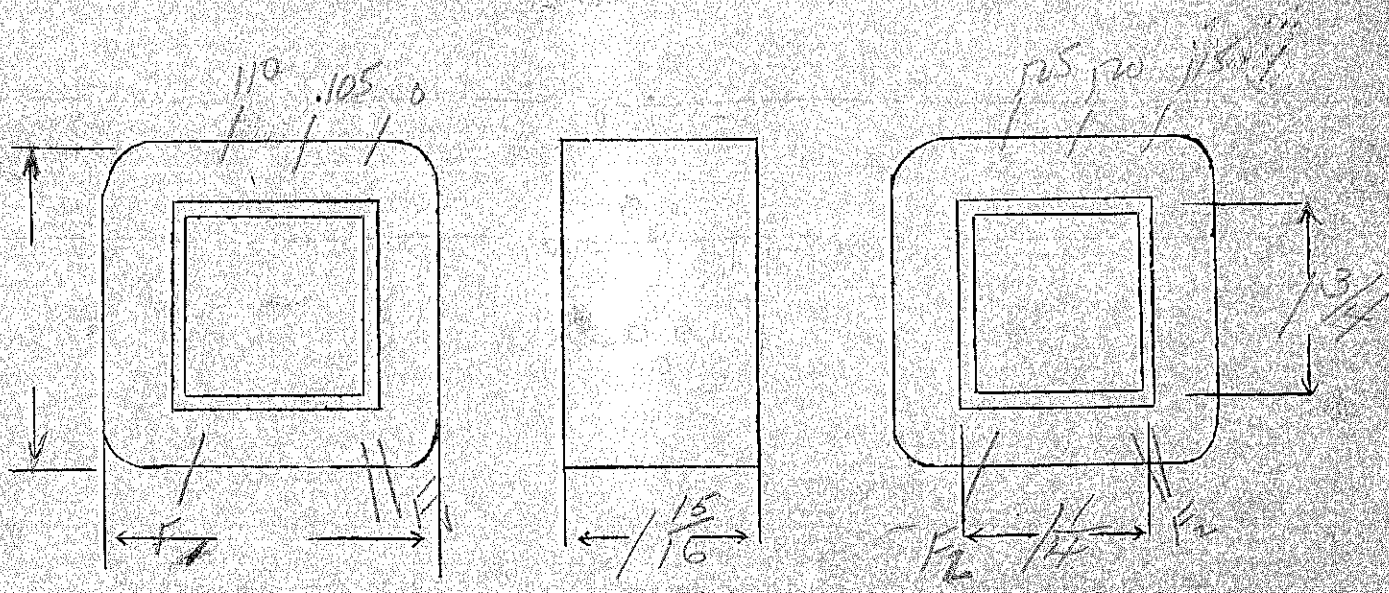
Winding	P	F <sub>1</sub>	F <sub>2</sub>				
Turns	358 343-379	16	16				
Taps	315-300	8	8				
Wind. Lgth.	1.75	double	double				
Wire Size	# 21	# 15	# 15				
T.P.L.	53-7(SW) and	2L	2L				
Kind Term.	WIRE ONLY						
Term. Lgth.	4"	4"	4"				
Layer Insul.	50 #						
Test Volt.							
Wrapper	5L007VC 2L007GA	5L007VC 2L007GA	5L007VC 2L007GA				

TUBE | 7L007 + 12L007VC | IMPREGNATION | Varnish

CORE | | PRIMARY V.A. |

MOUNTING | J - F |

Left  
S. No Right



DESIGNED BY *GW*

DATE 7/30/38

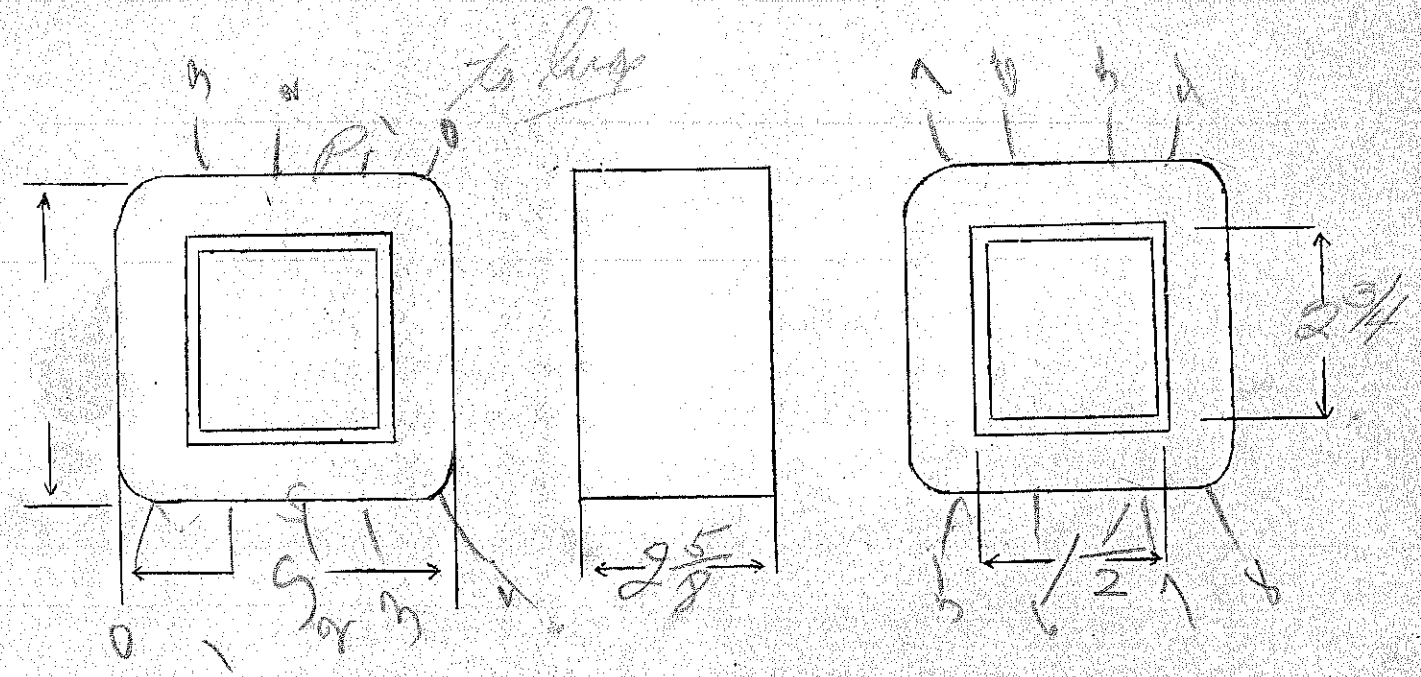
P- 60-70-80-90-100-110-120 Volts (used as auto transf-4 amp)  
 S- 10-15-20-25 V each side to 6 amp

MT. WILSON OBSERVATORY

1.6 SPEC. NO. 4150

Winding	PRI	SEC				
Turns	192-175-160	86				
Taps	144-128-112-96	78-69-61-43-25-17-8-0				
Wind. Lgth.	2 9/8					
Wire Size	#14	#14				
T.P.L.	6L					
Kind Term.	WIRES ONLY					
Term. Lgth.	3"	3"				
Layer Insul.	007K					
Test Volt.						
Wrapper	32005GA	32005GA				

TUBE 94007 IMPREGNATION Varnish  
 CORE PRIMARY V.A.  
 MOUNTING U-



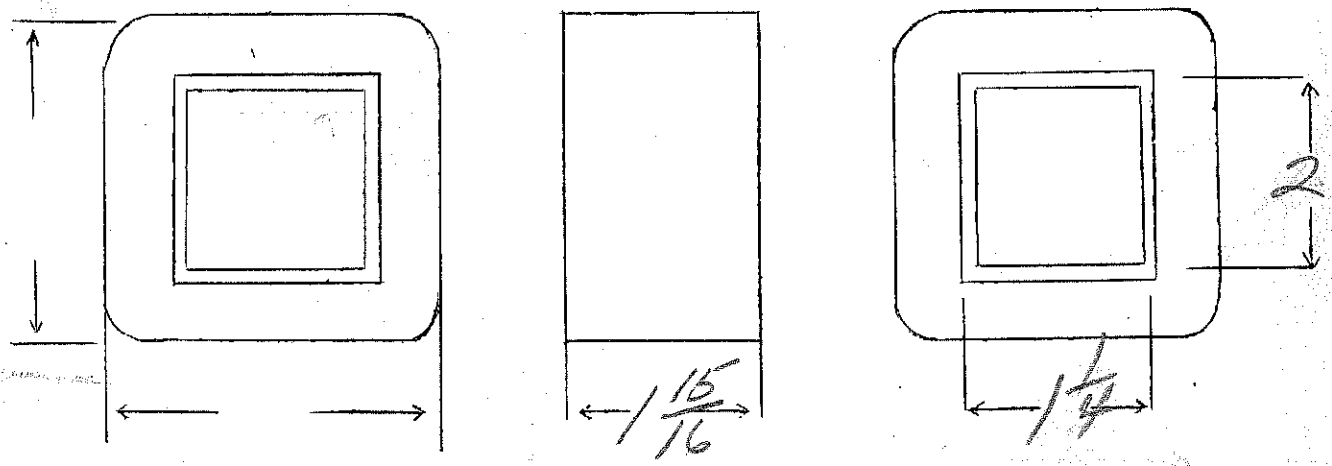
DESIGNED BY

DATE

Ep-115 Ef-2.5VCT-4amp  
 Es-750VCT-200ma Ef-2.5V-16amp  
 Ep-5V-3amp

SPEC. NO. 4151

Winding	SEC	SHIELD	PRI	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
Turns	1800	130	260	12	6	6
Taps	900		-		3	
Wind. Lgth.	1.75		-			
Wire Size	#29	#29	#20	#18	#16	double 14
T.P.L.	130-16		45-6			
Kind Term.	#20 P. Braid		#20 P/B	WIPE ONLY		
Term. Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	double 16#		50#			
Test Volt.						
Wrapper	24007VC	14007VC	24007GA			24007GA
TUBE	7L007			IMPREGNATION		Varnish
CORE					PRIMARY V.A.	
MOUNTING	A					



DESIGNED BY YW DATE 7/25/38

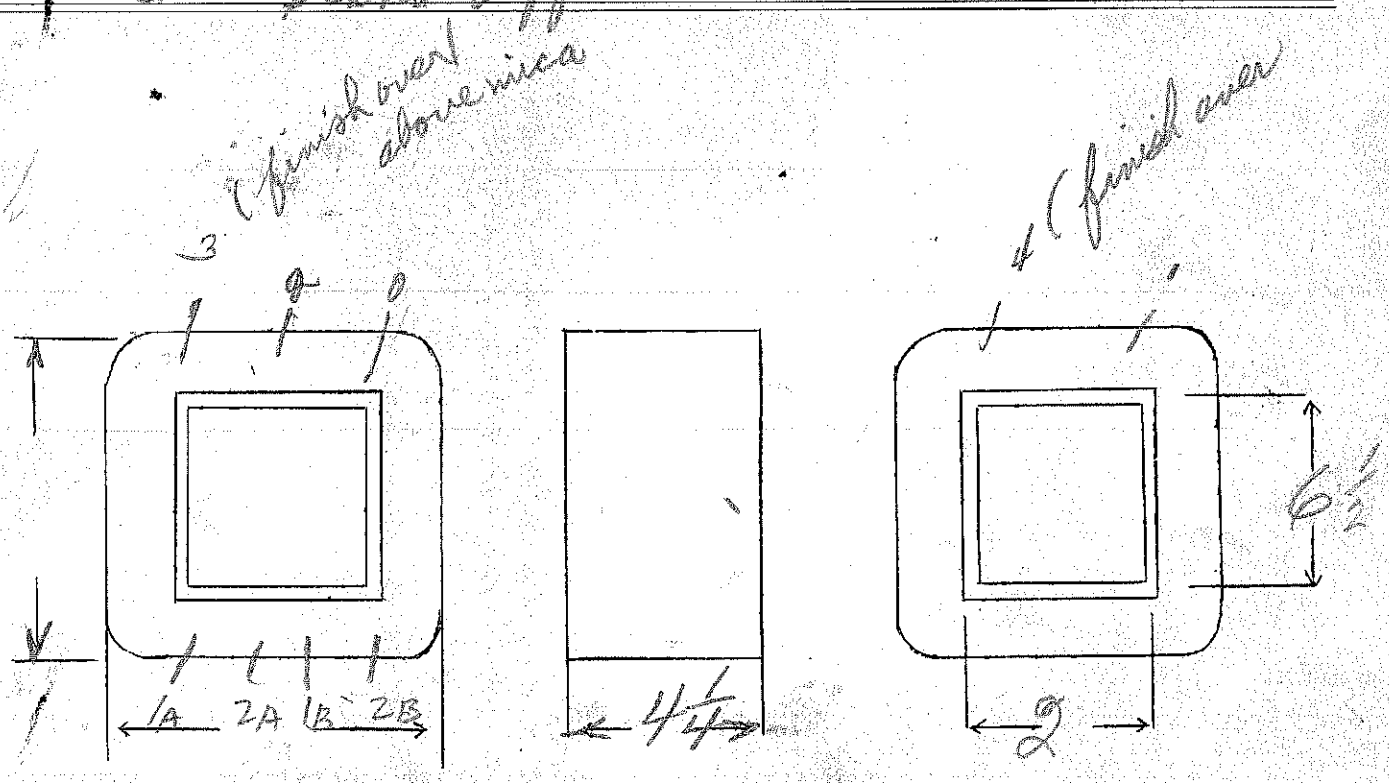
EP - 115V - 230V  
 ES - 7000 VCT - 500ma

KBRK

SPEC. NO. 4153

.61

Winding	SEC		PRI <sub>1</sub>	PRI <sub>2</sub>		
Turns	4368 3176		70	70		
Taps	2184 1092					
Wind. Lgth.	3 1/4"		3 3/4	3 3/4		
Wire Size	#25		#11	#11		
T.P.L.	156-28		2L	2L		
Kind Term.	WIRE ONLY					
Term. Lgth.	6"		6"	6"		
Layer Insul.	double 50#		007K			
Test Volt.	10,000					
Wrapper	102007VC 22005GA	21005GA	31005GA			double Varnish
TUBE	102007 + 24007VC		IMPREGNATION		PRIMARY V.A. make laminations second time	
CORE						
MOUNTING	G - stand off Insulators					



DESIGNED BY Yw

DATE 8/9/38

EP - 11.6VCT (AC vibrator) or 120V AC

SEC 5000

ES - 800VCT. 175 ma

KAIR

EF - 6.3V - 4amp } a.c. only  
 EG - 5V - 3amp }

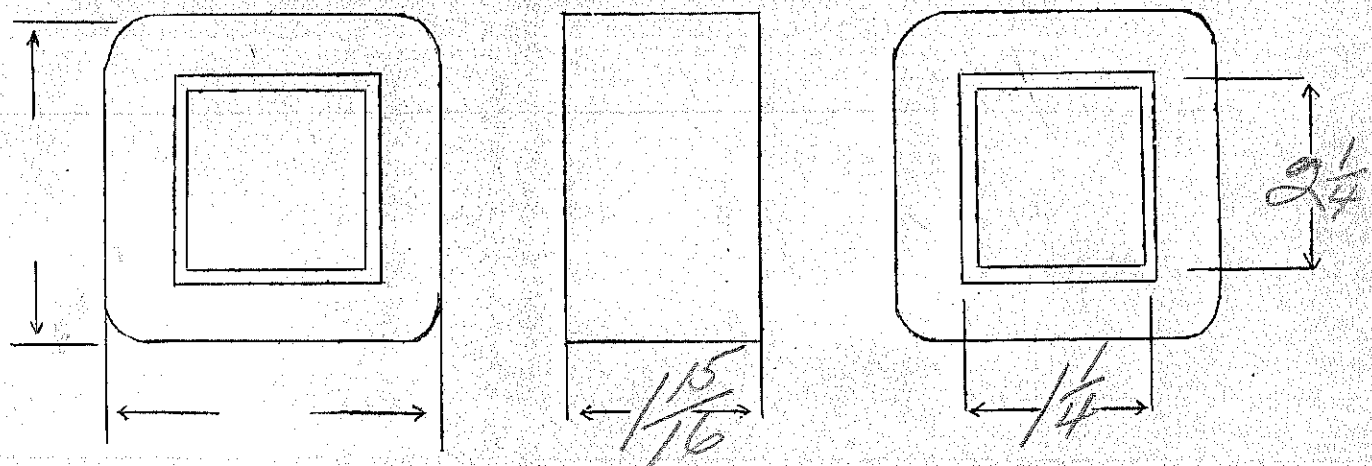
SPEC. NO.

4154

Winding	SEC	SHIELD	P <sub>1</sub>	P <sub>2</sub>	F <sub>1</sub>	F <sub>2</sub>
Turns	2300	1	315	20	15	18
Taps	1150			10		
Wind. Lgth.	1.75	✓	✓	✓	✓	✓
Wire Size	#30	SHIM	#21	#13	#18	#16
T.P.L.	145-16	STOCK	53-6	12		
Kind Term.	#30 Par. 9"	9" PM	#20 PM	WIPE ONLY		
Term. Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	double 20#		50#			
Test Volt.						
Wrapper	210076C	160056C	210076A			210076A

TUBE 92007 | IMPREGNATION Warrick | CORE | PRIMARY V.A.

MOUNTING A - Copper strip over laminations



DESIGNED BY *Law*

DATE 8/15/38

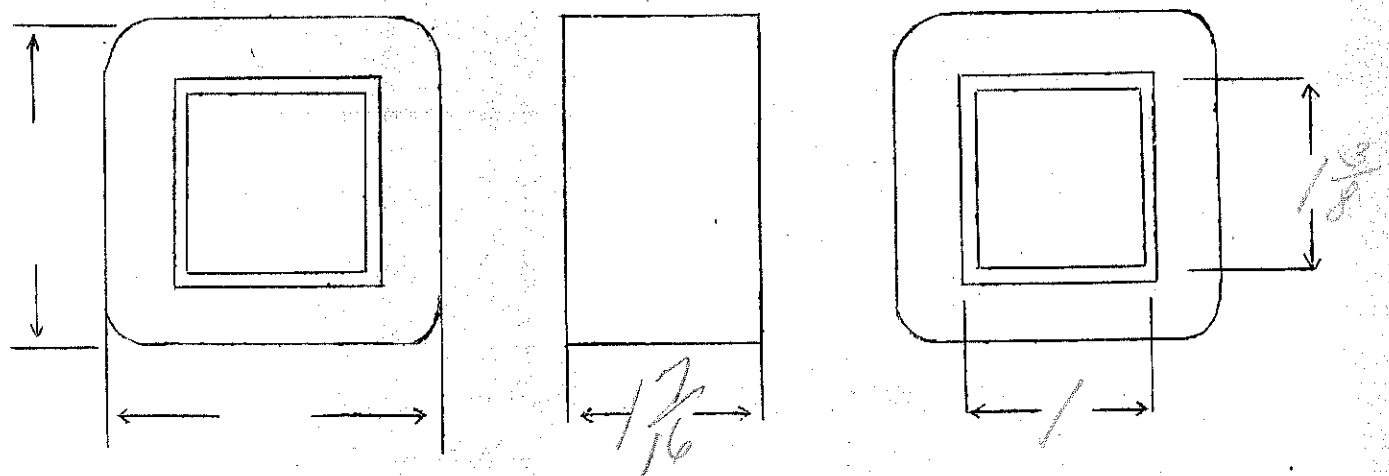


Ed-120  
 E3-600V CT-60ma  
 EF-5V-2amp  
 EF-6.3V-1.75amp

405

SOUND PRODUCTS CO.  
 SPEC. NO. 4155

Winding	SEC	SHIELD	PRI	F1	F2		
Turns	2580	65	487	23	28		
Taps	1290		—	—	14		
Wind. Lgth.	1.25	—	—	—	—		
Wire Size	#35	#26	#26	#20	#21		
T.P.L.	185-14		65-8				
Kind Term.	#20 0.12"	W.O.	#20 0.12"	WIRE ONLY			
Term. Lgth.	12"	3"	12"	12"	12"		
Layer Insul.	d-16#		40#				
Test Volt.							
Wrapper	11007VC	11005VC	210056A	210056A	210056A	Klauc 46	
TUBE	51007		IMPREGNATION		Warrish		
CORE				PRIMARY V.A.			
MOUNTING	A						



DESIGNED BY *Sw*

DATE 7/29/38

Ep-120

EF - 1V open

Richard Bell

Es - 550 open - 30ma

EF - 5.7V open

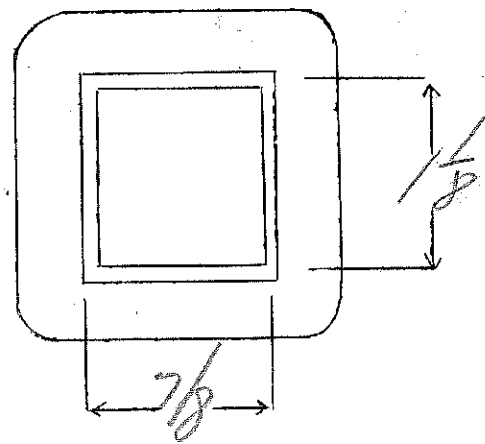
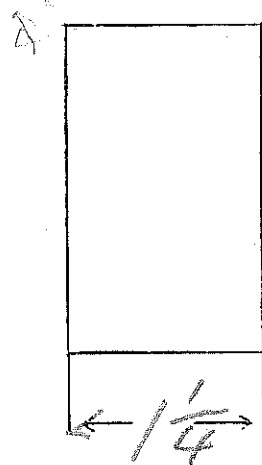
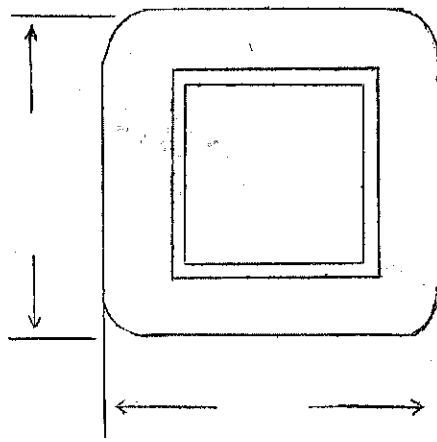
525

SPEC. NO.

4156

Winding	SEC	SHIELD	PR1	F1	F2		
Turns	2900	1	630	30	36		
Taps	1450			-	-		
Wind. Lgth.	1 1/16						
Wire Size	#37	shun	#28	#21	#22		
T.P.L.	182-16		70-9				
Kind Term.	#22 cell		#22 cell	WIRE ONLY			
Term. Lgth.	9" <i>double</i>		9"	9"	9"		
Layer Insul.	16#		40#				
Test Volt.							
Wrapper	11005VC	11005VC	21005GA	21005GA	21005GA		
TUBE	54007		IMPREGNATION		Varnish		
CORE					PRIMARY V.A.		

MOUNTING CA - special mty - no lower bracket - long ball



DESIGNED BY

DATE

Ep-90-100-110-120-130

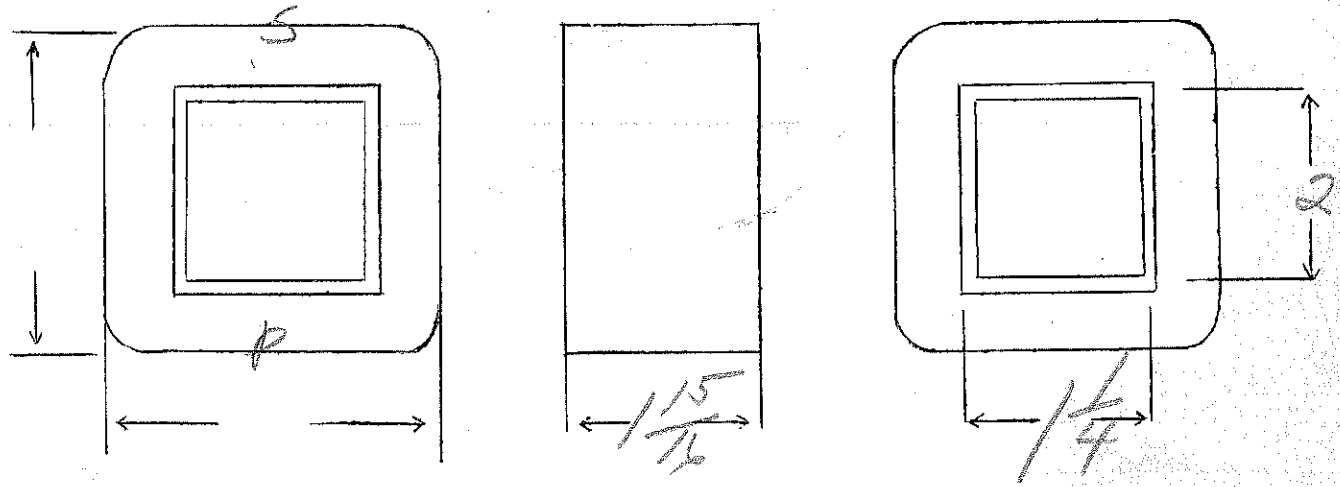
ES-900VCT-200WA

245

SPEC. NO. 4157

Winding	SEC	PR1					
Turns	2340	370					
Taps	1170	294-270-245-220					
Wind. Lgth.	1.75	1.75					
Wire Size	#29	#20					
T.P.L.	130-18						
Kind Term.	Per. Br.	W.O.					
Term. Lgth.	6"	6"					
Layer Insul.	double 20#						
Test Volt.							
Wrapper	200 NC	200 NGA					
TUBE	7007+1005VC		IMPREGNATION	Varnish			
CORE			PRIMARY V.A.				
MOUNTING	L						

90 100 110 120 130  
 0 0 0 0 0  
 S 0 0 0



DESIGNED BY *Gov*

DATE 2/2/38

Ep - 120V  
 Ef - 5V - 2amp  
 Et - 6.3V - 1.5amp

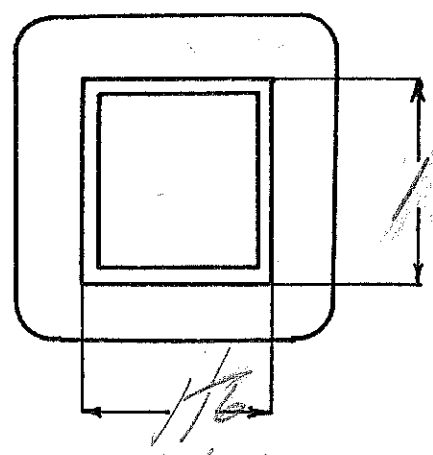
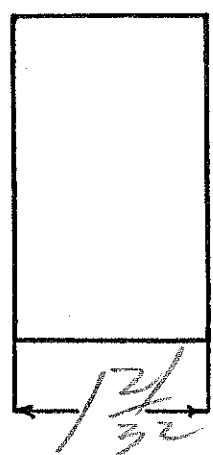
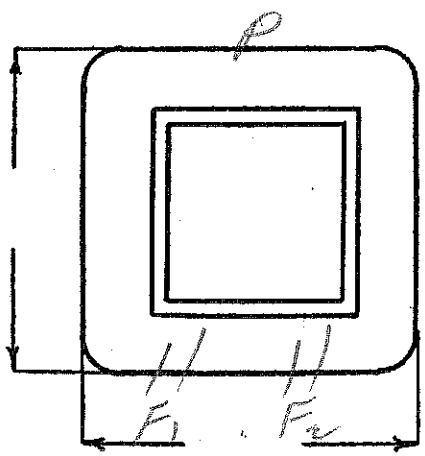
5.3

SPEC. NO. 4158

Winding	DRI	FIL	FIL				
Turns	635	30	37				
Taps		-	18				
Wind. Lgth.	1 15/32						
Wire Size	#24	#20	#14				
T. P. L.							
Finish	WIRE ONLY						
Type Lead	P. BR						
Lead Lgth.	6"	6"	6"				
Layer Insul.	50#						
Test Volt.							
Wrapper	210056A	210056A	210056A				Double Varnish
TUBE	71007		IMPREGNATION		Varnish		
CORE	1/16 x 1	GA. 24	GRADE		STACK		
MOUNTING	L						

00 0

000 00  
F<sub>2</sub> F<sub>1</sub>



DESIGNED BY

gw

DATE

8/3/38

Ep - 220  
 ES - 24V, tap 20-16V - 250 VA

KARR

SPEC. NO. 4159

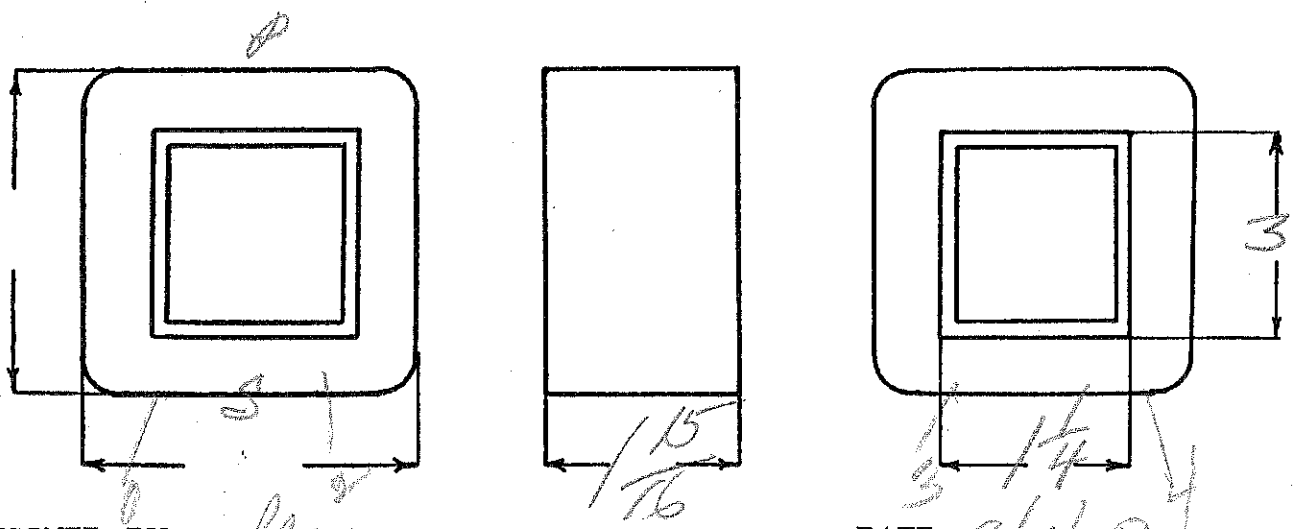
Winding	P	S				
Turns	350	41				
Taps		27-34				
Wind. Lgth.	1.75					
Wire Size	#20	#12				
T. P. L.	46.8	32				
Finish						
Type Lead	#14	motor	Cable			
Lead Lgth.	12"					
Layer Insul.	007					
Test Volt.						
Wrapper	20076A	20076A				

TUBE 76007 IMPREGNATION Varnish

CORE GA. 24 GRADE D STACK 2x2

MOUNTING S - three fibre grommet

metal stamp cases



DESIGNED BY gw

DATE 8/4/38

Ep 115  
 E5 1750 - 2000 - 2500V 400ma.

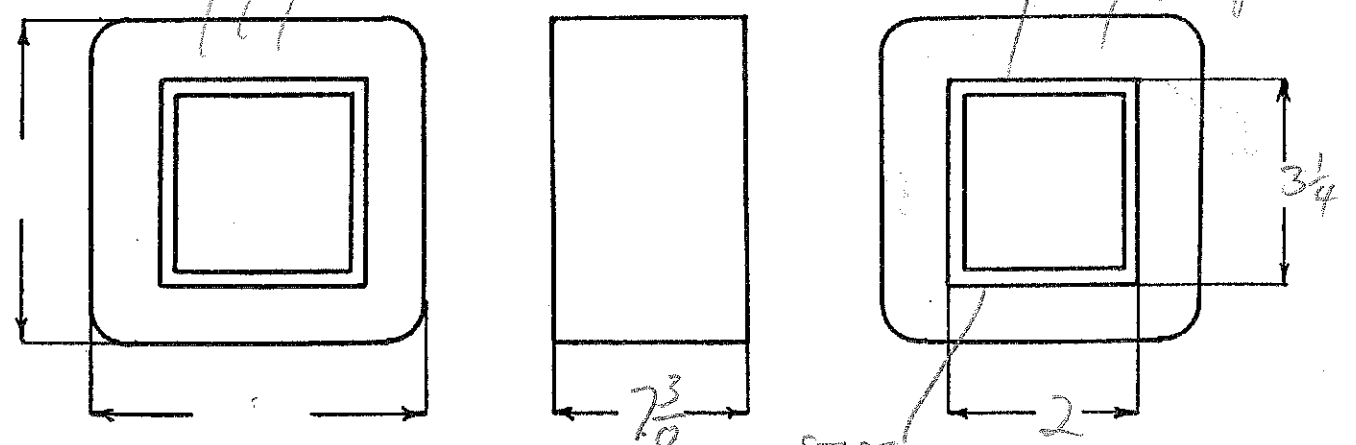
Designed for low stack

SPEC. NO. 4160-252

Winding	Sec		Pri			
Turns	4125		185			
Taps	3425 - 2830					
Wind. Lgth.	5 3/4					
Wire Size	#24		#10 Sq. Dec			
T. P. L.	244-18		4L			
Finish						
Type Lead	WV		WV			
Lead Lgth.	9"		4"			
Layer Insul.	Double 5056		.007			
Test Volt.						
Wrapper	2L 0056A 4L 0071C 2L 0056A		3L 0056A			
TUBE	10 L 0071 + 2L 0071C		IMPREGNATION		VAT	

CORE GA. GRADE STACK Long + Short  
 MOUNTING C - <sup>NO FRAME</sup> Alum. Shell. Special Long + Short E's

START LEAD OUT TOP = 26" #14 MOTOR CABLE  
 If no #14 use #18  
 Dec lugs. P P  
 1/11 lugs



DESIGNED BY J.W. [unclear]  
 4160 1/30/40  
 START SEC LEAD DATE IN COIL

Ep-115

ES 1750-2000-2500V-400ma

.97

SPEC. NO. 4160

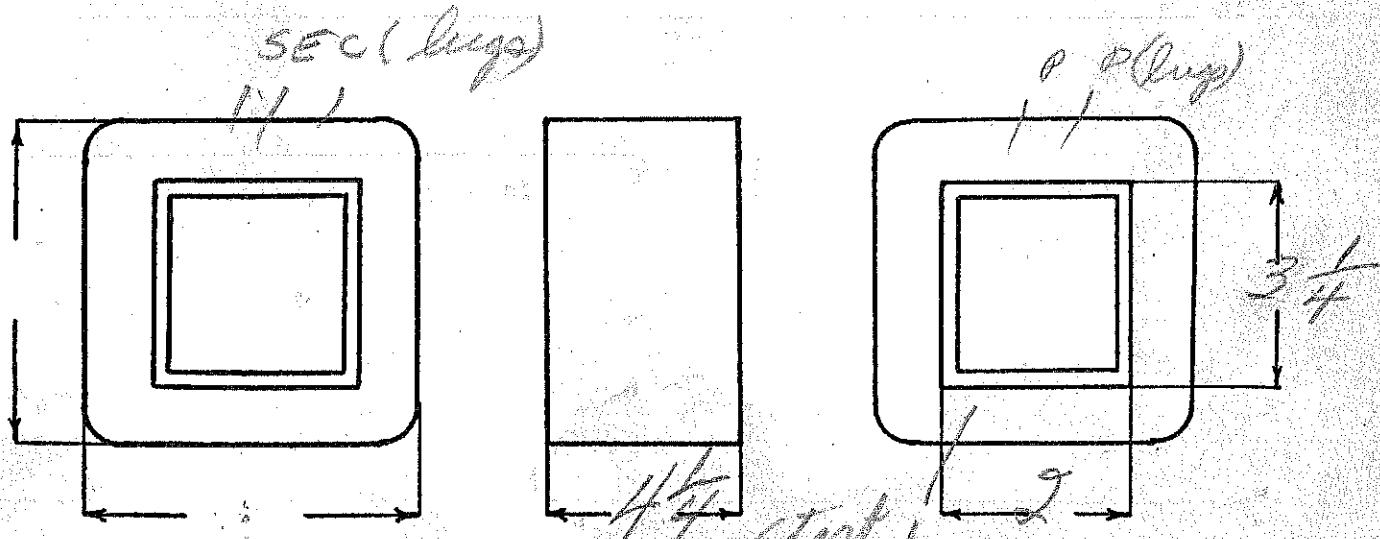
Winding	SEC		PRI			
Turns	2500		112			
Taps	2075-1775					
Wind. Lgth.	3 1/2					
Wire Size	#24		#10 square			
T. P. L.	148.17		4L			
Finish						
Type Lead	WIRE ONLY					
Lead Lgth.	9"		4"			
Layer Insul.	double 50#		107K			
Test Volt.						
Wrapper	21005SA 41007VC 31005SA		31005GA			

TUBE 10 L 007 + 21007VC IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING C - aluminum shell no frame

Start lead out top - 26" #14 motor cable



DESIGNED BY

*[Handwritten signature]*

start sec lead in case DATE 8/3/38

Ep-115

ES - 460VCT-50ma

EF - 6.3V - .5amp

EF - 6.3V - 1amp

55 D.L.

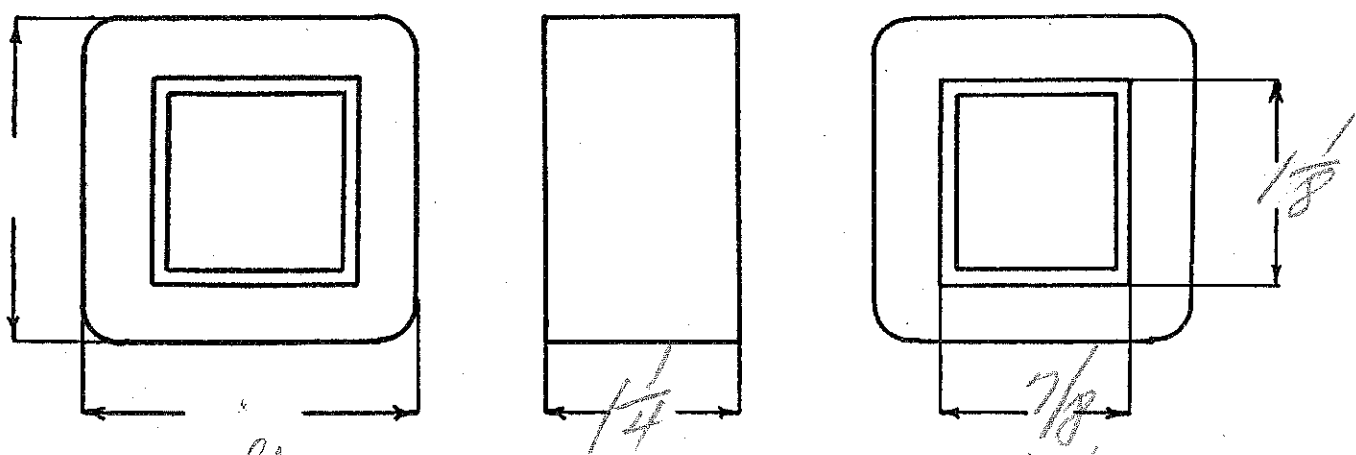
SPEC. NO. 4161

Winding	SEC	SHIELD	PRI	F <sub>1</sub>	F <sub>2</sub> Blue		
Turns	2700		630	39	39		
Taps	1350		-	-	20		
Wind. Lgth.	1 1/16		-	-			
Wire Size	#37	Shim Stack	#28	#23	#23		
T. P. L.	195-14		70-9				
Finish							
Type Lead	#20PR	SILK	#20	WIRE	ONLY		
Lead Lgth.	#9"	3"	9"	9"	9"		
Layer Insul.	1-16#		40"				
Test Volt.							
Wrapper	1005VC	1005VC	20056A	20056A	20056A		

TUBE	5207	IMPREGNATION	Varnish
------	------	--------------	---------

CORE	GA.	GRADE	STACK
------	-----	-------	-------

MOUNTING A



DESIGNED BY *JW*

DATE 8/4/38



E<sub>0</sub> - 118  
 E<sub>3</sub> - 500V - tap 300V.  
 E<sub>F</sub> - 5V - 5amp

6.35

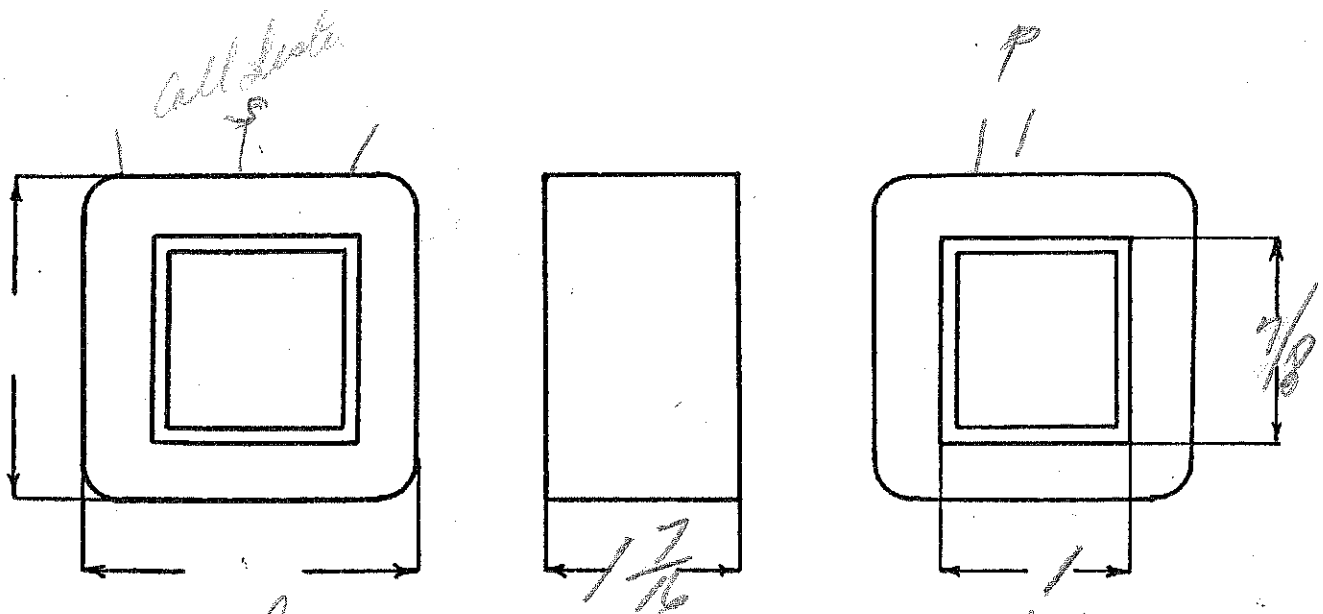
SPEC. NO. 4162

Winding	SEC	PRI	FIL				
Turns	3300	750	37				
Taps	1990		-				
Wind. Lgth.	1.25	1.25					
Wire Size	#39	#28	#16				
T. P. L.	285-12	84-9	22				
Finish	SIPB	W.O.	W.O.				
Type Lead							
Lead Lgth.	3"	3"	3"				
Layer Insul.	16#	40#					
Test Volt.							
Wrapper	11005V	21005GA	21005GA				

TUBE 52007 IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING BB



DESIGNED BY *SW*

DATE 8/4/32

Ep-12Vct dc. vibrator source

LOEW, INC.

ES- 100-110-120-130-140V - 100watts

100 ~

SPEC. NO. 4163

Winding	SEC	PRI					
Turns	547-508	30					
Taps	470-430	15					
	390						
Wind. Lgth.	1.75						
Wire Size	#21	#12					
T. P. L.	12L	2L					
Finish	(500)-11L						
Type Lead	#20 PBR	W.O.					
Lead Lgth.	9"	9"					
Layer Insul.	007K						
Test Volt.							
Wrapper	3L007GA	2L0076A					

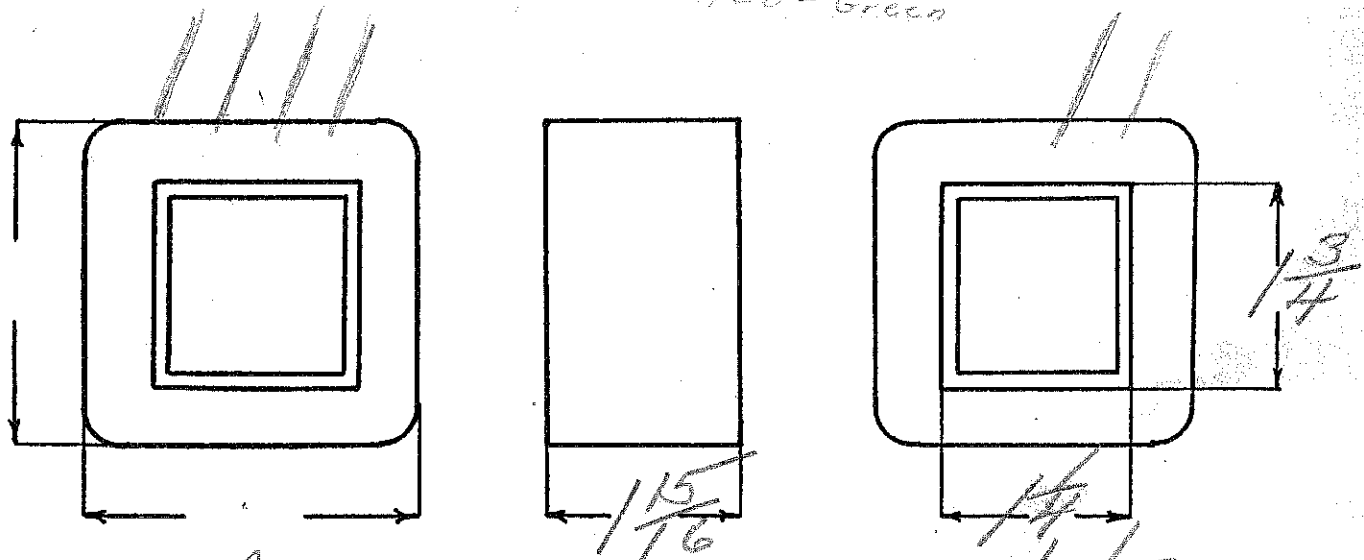
TUBE	7L007	IMPREGNATION	Varnish
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CORE	GA. 24	GRADE	D	STACK	2x2
------	--------	-------	---	-------	-----

MOUNTING N

M.W - Left  
S.W - Right Sec

- a - Black
- Sec - 100 - Red
- 110 - Blue
- 120 - Yellow
- 130 - Brown
- 140 - Green



DESIGNED BY *GW*

DATE 8/5/38

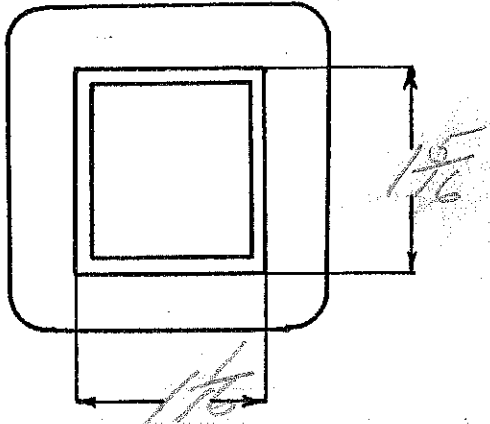
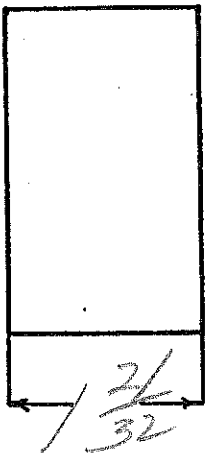
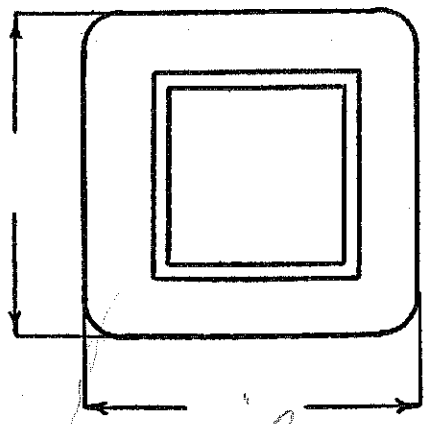
EP-115  
 ES- 840V (open)  
 EF- 5V- 2amp

EF<sub>2</sub> -  $\frac{6.3}{5.5} - 2.2amp$   
 4.15

SPEC. NO. 4164

Winding	SEC, SHIELD	DR1	F <sub>1</sub>	F <sub>2</sub>		
Turns	3460	1	480	23	29	79
Taps	1730				26	
Wind. Lgth.	$\frac{1.5}{32}$					
Wire Size	#34	SHIM	#24	#20	#20	#21
T. P. L.	192-18	STACK	61-8	.57	.72	1.78
Finish						
Type Lead	#20 P.P.	SL BR.	#20 P.P.		WIRE ONLY	
Lead Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	double 16#		50#			
Test Volt.						
Wrapper	14005VC	14005VC	14005VC	21005BR	✓	21005SM
TUBE	62007			IMPREGNATION		Varnish

CORE GA. GRADE STACK  
 MOUNTING SA



DESIGNED BY *[Signature]*

DATE 8/14/30

$F_p = 115V AC - 6V DC$   
 $F_s = 500V tap - 300V - 1Watt$   
 $F_r = 5V - 4amp - AC$

See TURN

$N/F = 5.1$

SPEC. NO. H65-75N

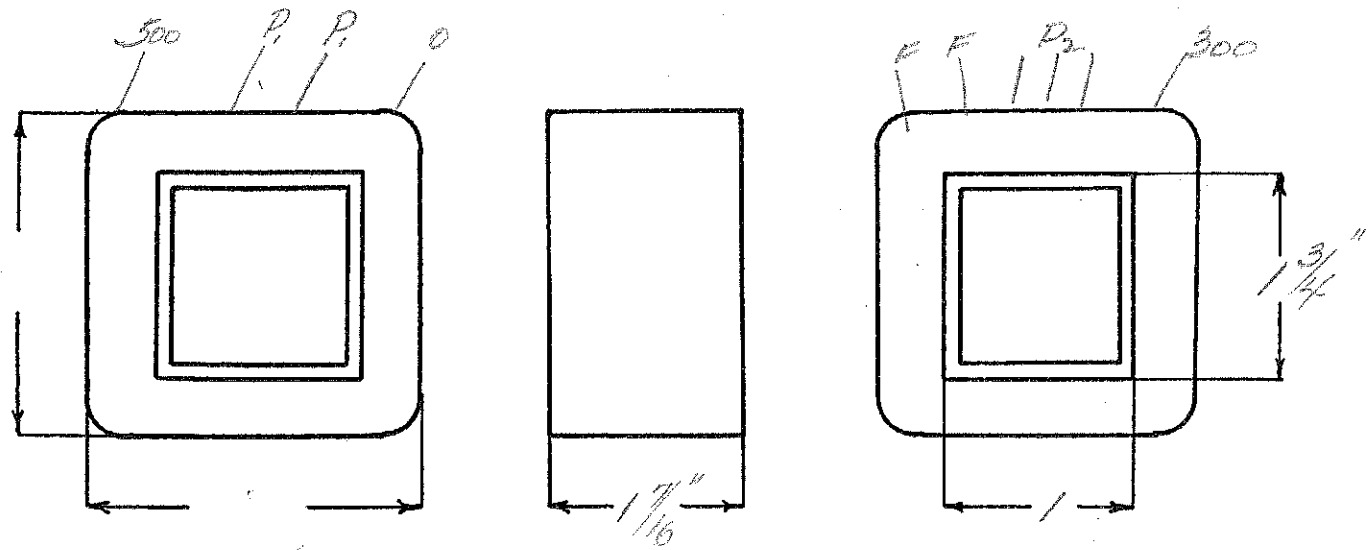
Winding	Sec	P <sub>1</sub>	P <sub>2</sub>	Fil.			
Turns	2500	610	60	28			
Taps	1710		30				
Wind. Lgth.	1.25	-	-	-			
Wire Size	#38	#28	#22	#16			
T. P. L.	250-10	80-8	1.4L	1.3L			
Finish							
Type Lead	Sil Per	Wire	Only				
Lead Lgth.	3"	3"	3"	3"			
Layer Insul.	double 16#	40#	-	-			
Test Volt.	2500	1250					
Wrapper	16.007 VC	40056	-	27.005 GA			

TUBE 6h.007 K IMPREGNATION Varnish

CORE 1" x 1 3/4" GA. 24 GRADE D STACK 2 x 2

MOUNTING B. B.

Heavy Finishing Bracket with Pri #1 at left



DESIGNED BY [Signature]  
Serial 4165

DATE 4/18/40

Ep 230V or 8VDC  
 Es 500V - tap 300 - 1 watt  
 Es (a only) 5V 1/2 Amp

5.1

SPEC. NO. 4165-230V

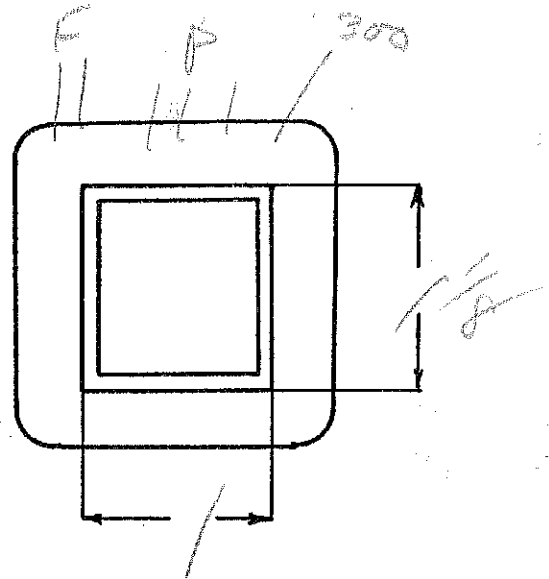
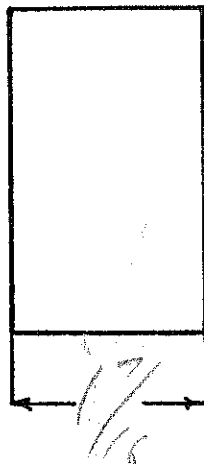
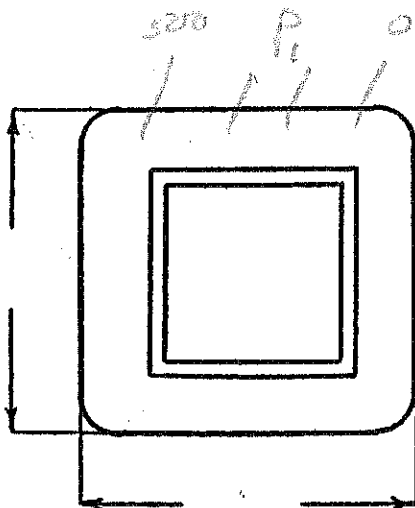
Winding	Sec	P <sub>1</sub>	P <sub>2</sub>	F			
Turns	2850	1220	60	28			
Taps	1710		30				
Wind. Lgth.	1/4						
Wire Size	#38	#31	#22	#16			
T. P. L.	250-13	113-11	-3	-			
Finish							
Type Lead	Wired		Wire Only				
Lead Lgth.	3"	3"	3"	12"			
Layer Insul.	Double 6"	30"					
Test Volt.	Standard						
Wrapper	1L007UC	2L0056A		2L0056A			

TUBE 6L007 6K IMPREGNATION Varnish

CORE 1 X 1/8 GA. 24 GRADE D STACK 2 X 2

MOUNTING BB - no B

Bracket with pins #1 at left



DESIGNED BY

W.C.C.

DATE

7-14-39

Ep - 115 V. a.c. or 6 V. d.c.  
 Es - 500 V. - tap 300 V. - 1 watt  
 Ef - (a.c. only) - 5 V. - 4 Amp.

*File Copy*  
*Jester Equip.*

n/e - 5.1

SPEC. NO. 4165

Winding	1-2-3 SEC	4-5 P <sub>1</sub>	6-7-8 P <sub>2</sub>	9-10 FIL			
Turns	2500	610	60	28			
Taps	1750		30				
Wind. Lgth.	1.25						
Wire Size	#38	#28	#22	#16			
T. P. L.	250-10L	80-8L	1.4L	1.3L			
Finish							
Type Lead	Sil. Br.	Wire	only				
Lead Lgth.	3"	3"	3"	3"			
Layer Insul.	Double 16#	40#					
Test Volt.	2000	1500	1250	1250			
Wrapper	1L007VC	2L005GA		2L005GA			

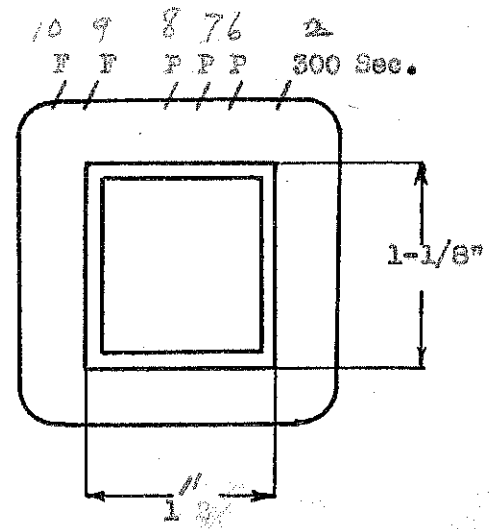
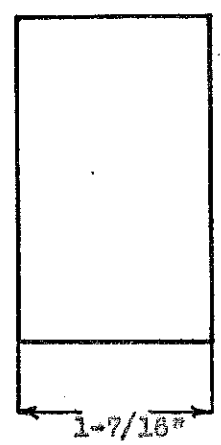
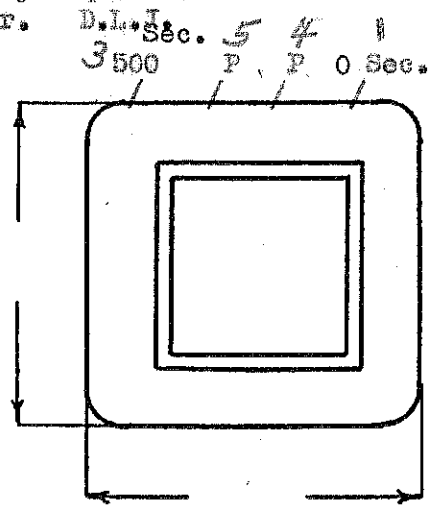
TUBE	6L007	IMPREGNATION	VARNISH
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CORE  $1 \times 1 \frac{1}{8}$  GA. 24 GRADE D STACK 2X2

MOUNTING BB - not B

Heavy finishing - bracket with primary #1 at left.

Secondary turns changed  
 4/4/40 by request of  
 customer.



DESIGNED BY CW

DATE 8/19/38

Ep-120V

M. M. MILLER

ES-900VCT-200ma

EF-5V-3amp

EF-63V-5amp CT

SPEC. NO. 4166

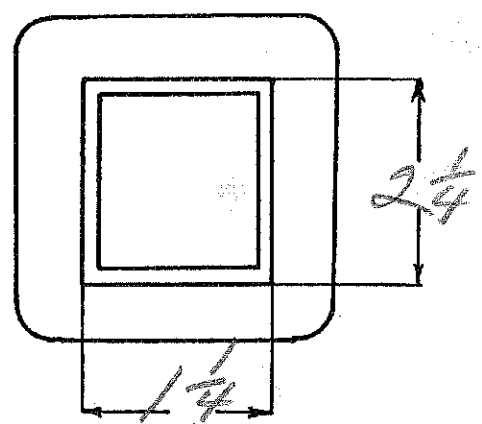
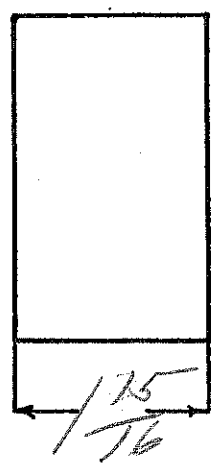
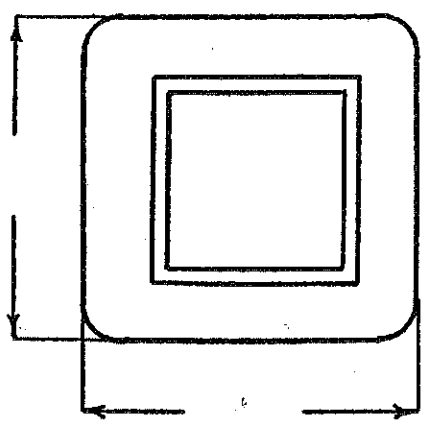
Winding	SEC	5 WELD	PR1	F <sub>1</sub>	F <sub>2</sub>		
Turns	2200	125	265	12	15		
Taps	1100		-	-	7		
Wind. Lgth.	1.75						
Wire Size	#29	#29	#20	#18	#15		
T. P. L.	125-18		45-6	1 layer			
Finish							
Type Lead	#20 on	W.D.	#20 on	WIRE ONLY			
Lead Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 20#		50#				
Test Volt.							
Wrapper	21005VC	11005VC	210076A	✓	210076A		

TUBE 71007+11005VC IMPREGNATION YARN 15#

CORE GA. 24 GRADE Dynam STACK 2x2

MOUNTING N

3 7/8 x 2 3/4



DESIGNED BY

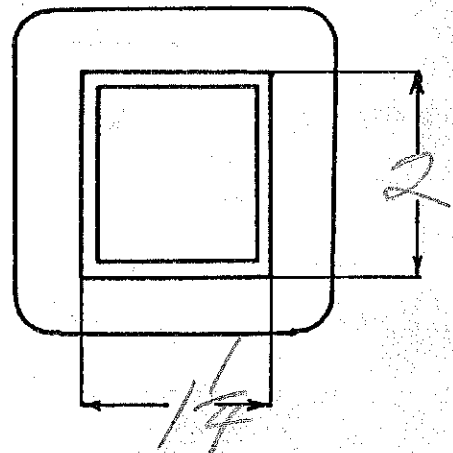
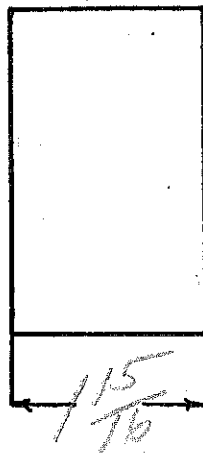
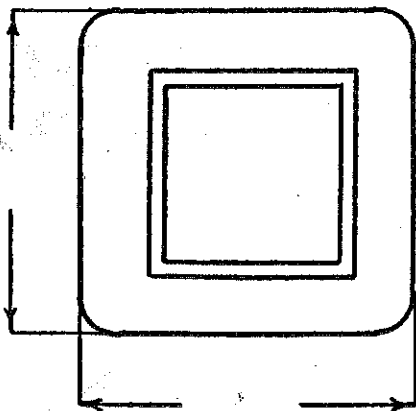
*[Signature]*

DATE

8/18/38

similar to #183 with 115V additional <sup>3.5</sup> ~~2.5~~   
 also 6.3V-3amp filament   
 RADIO EQUIPMENT DIST.   
 SPEC. NO. 4167

Winding	SEC	SHIELD	PRI <sub>1</sub>	PRI <sub>2</sub>	F.		
Turns	2600	1	400	26	24		
Taps	1300		—	13	—		
Wind. Lgth.	1.75						
Wire Size	#31	Shinn	#23	#13	#17		
T. P. L.	163-16	Stock	67-6	1.2L	.7L		
Finish							
Type Lead	#20 P.P.C.	silbr	#20 DB	W.O.			
Lead Lgth.	9"	3"	9"	9"			
Layer Insul.	double 20#		50#				
Test Volt.							
Wrapper	2600 VC	1200 VC	2400 76A	2600 76A			
TUBE	7L007			IMPREGNATION		Varmask	
CORE	GA.		GRADE		STACK		
MOUNTING	A						



DESIGNED BY

DATE



EP-120 (open)  
 ES-570V CT-30ma

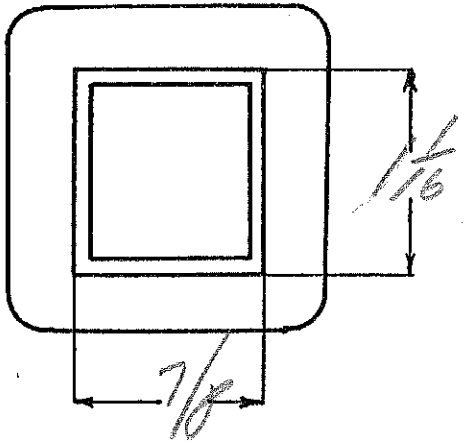
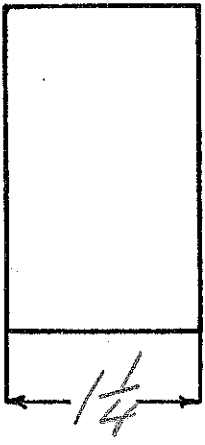
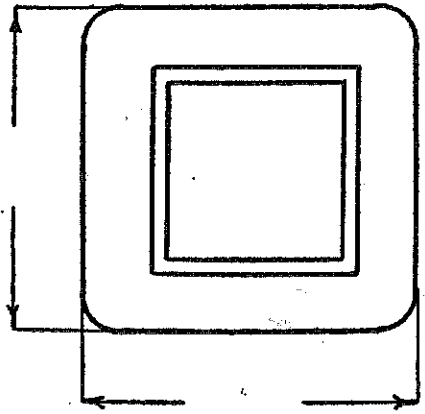
EF-7.05 (open) - 1.6amp Richard Bell

EF-5.95-2amp (open)

555

SPEC. NO. 4/68

Winding	SEC	SHIELD	PRI	F <sub>1</sub>	F <sub>2</sub>		
Turns	3136	68	666	39	33		
Taps	1568			-	-		
Wind. Lgth.	13/32		1/16				
Wire Size	#38	#28	#28	#22	#22		
T. P. L.	224-14		68-10				
Finish							
Type Lead	#22 cellar		#22 cellar	WIRE	ONLY		
Lead Lgth.							
Layer Insul.	12#		30#				
Test Volt.							
Wrapper	1005VC	1005VC	2005GA		2005GA		
TUBE	52007			IMPREGNATION		Varnish	
CORE		GA.		GRADE		STACK	
MOUNTING	SA - long bolts						



7.0  
6  
7.1

DESIGNED BY

DATE

EP-111-113-115-117-119V

ASP-54131

ERPI

ES-10V-tap8

SPEC. NO. 4169

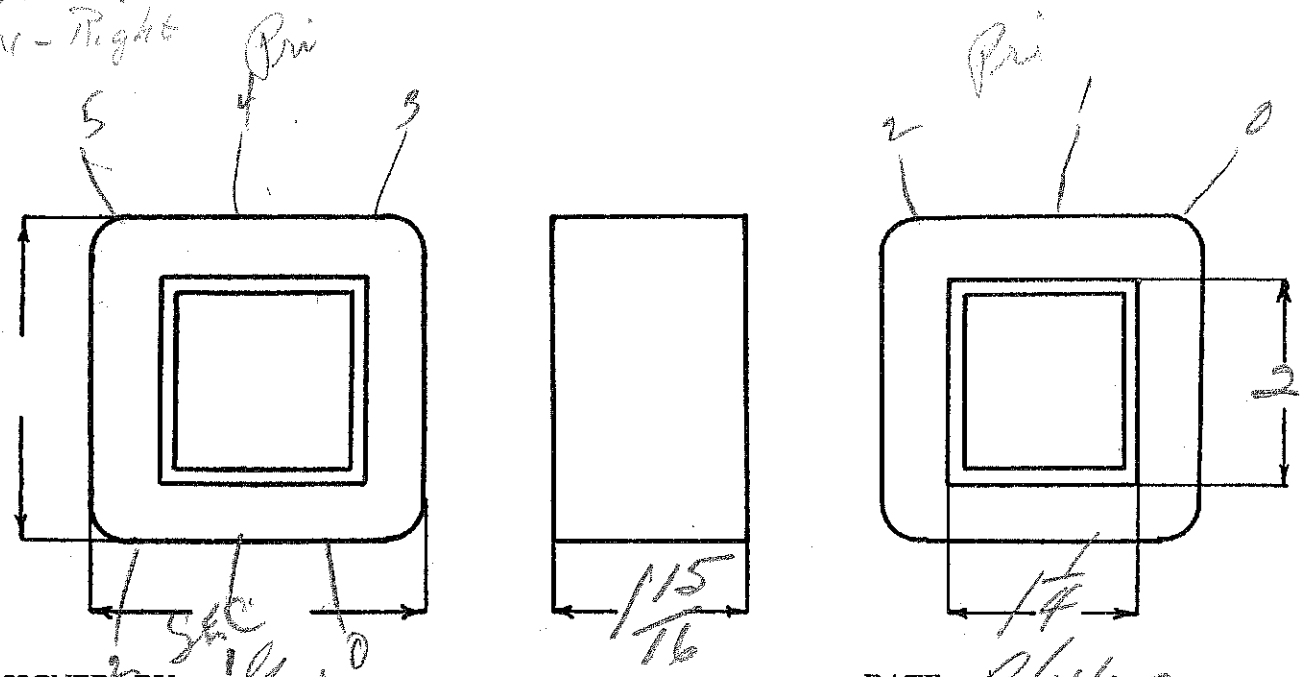
Winding	P		S			
Turns	347		30			
Taps	341-335 329-323		24			
Wind. Lgth.	1.75					
Wire Size	#21		#12			
T. P. L.	52					
Finish	W.O.		W.O.			
Type Lead						
Lead Lgth.	4"		4"			
Layer Insul.	50#		007K			
Test Volt.						
Wrapper	21007GA		21007GA			

TUBE	71007	IMPREGNATION	Varnish
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CORE	GA.	GRADE	STACK
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MOUNTING F

M.V. Veff  
S.W. - Right



DESIGNED BY Sw 0

DATE 8/11/38

Pri 6V vibrator TRANSF.

KERR'S RADIO SHOP

Sec - 700V, C.T. - 150 ma

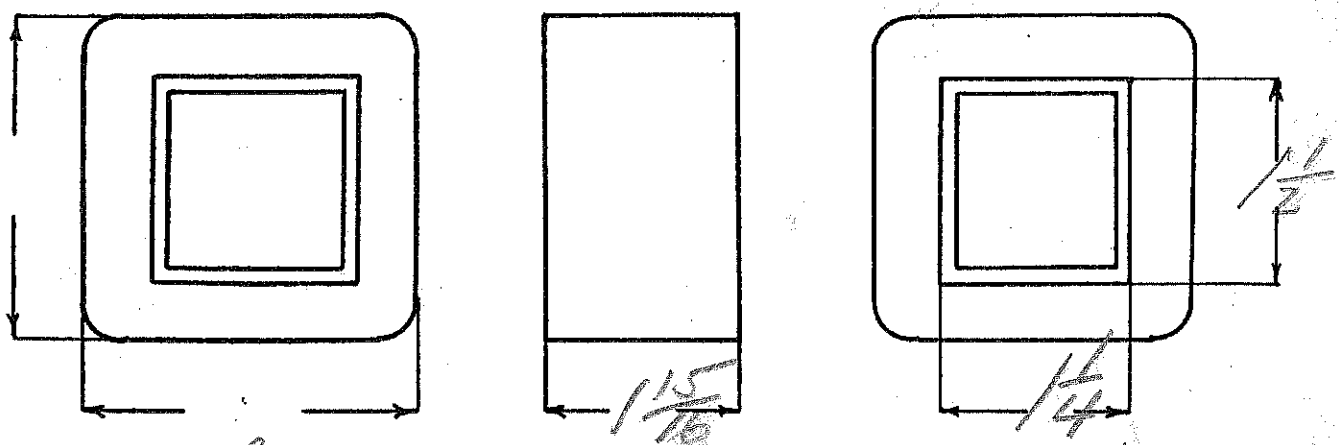
SPEC. NO. 4170

Winding	SEC	SHIELD	PR1			
Turns	3160		36			
Taps	1580		18			
Wind. Lgth.	1.75	✓	✓			
Wire Size	#30	shin	#13			
T. P. L.	145-22	Stack	2L			
Finish						
Type Lead	#20	Sil to	W.O.			
Lead Lgth.	9'	3'	9'			
Layer Insul.	double					
Test Volt.	20V					
Wrapper	2W07W	2W176A	2L0076A			

TUBE 7007 + 1005VE IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING A - Copper strip over laminations



DESIGNED BY Greener

DATE 8/20/38

E<sub>p</sub> - 120 V.  
 E<sub>s</sub> - 650 V.C.T. (680 open) - 63 Ma.  
 E<sub>T</sub> - 5 V. - 2 Amp.  
 E<sub>F</sub> - 6.3 V. - tap 5.5 - 2.5 Amps.

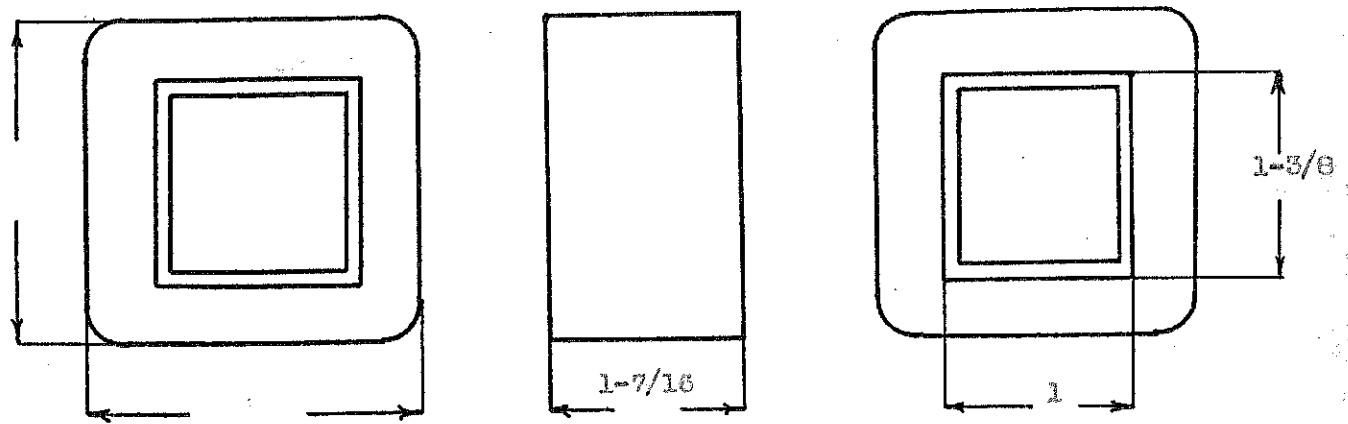
4.0

SPEC. NO. 4172

Winding	SEC	SHIELD	PRI	GREEN F <sub>1</sub>	F <sub>2</sub>		
Turns	2740	1	480	22	20 - Blue - 9"		
Taps	1370			-	24 - Red - 8"		
Wind. Lgth.	1.25				0 - Black - 7"		
Wire Size	#36	Shim Stock	#35	#21	#19		
T. P. L.	200-14		60-8	-	-		
Finish							
Type Lead	#22 Celled		#22 Celled	W.O.	W.O.		
Lead Lgth.							
Layer Insul.	Double 16#		40#				
Test Volt.							
Wrapper	3L.G1 1L.005VC	1L.005VC	2L.005GA	2L.005GA	2L.005GA		
TUBE	5L.007			IMPREGNATION		VARNISH	

CORE	GA.	GRADE	STACK
MOUNTING	SA - Fibre grommet		

Ep - 122  
 345  
 5.6  
 6.1 - 7.1



DESIGNED BY GW

DATE 8/4/53

Ep - 120V - 25 cycle  
 Es - 650VCT (680open) - 63ma (peak) 52ma actual  
 Ef - 5V - 2amp  
 Ff - 6.3V - tap 55 - 2.5amp

392

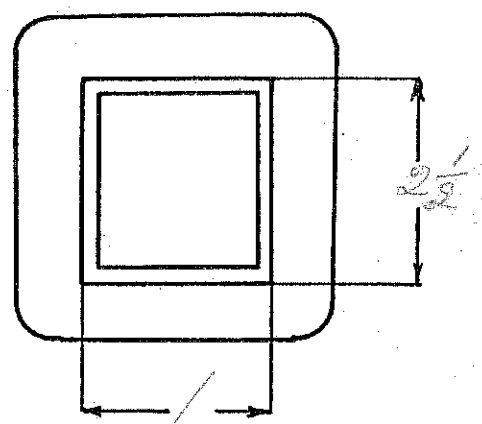
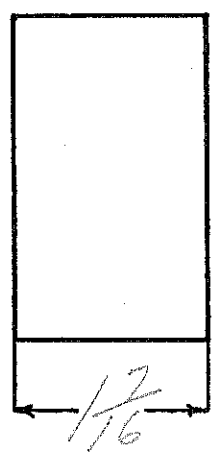
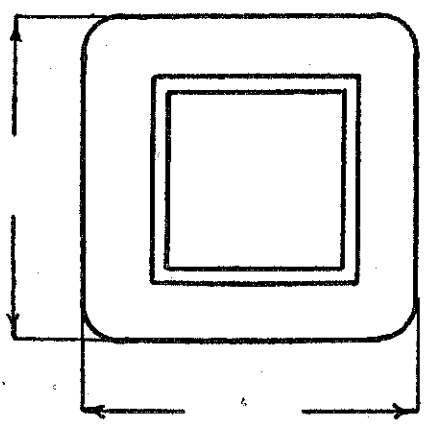
SPEC. NO. 4172-25A

Winding	SEC	SHIELD	DRI	F <sub>1</sub>	F <sub>2</sub>		
Turns	2740	1	470	22	28 - Blue		
Taps	1370			-	24 - Red		
Wind. Lgth.	1.25	-	-	-	2 - Black		
Wire Size	#36	341M STACK	#25	#21	#19		
T. P. L.	200-14		59-8				
Finish		834					
Type Lead	#20 P Br	SIP Br	#20	wire only			
Lead Lgth.	see	lead length	customer's spec.				
Layer Insul.	1-16 #		50 #				
Test Volt.							
Wrapper	3L 10L 1407W	1405V C	2L005GA	2L005GA	2L005GA		

TUBE 71007 IMPREGNATION VARNISH

CORE GA. 24 GRADE D STACK 2x2

MOUNTING SA - fibre grommet - short bolts



DESIGNED BY *glw*

DATE 11/2/38

715V 60W  
 700V CT @ 100ma  
 500V CT @ 50ma  
 5V @ 2A  
 5V @ 2A

2.5V CT @ 5A  
 7.5V CT @ 2.5A

Buistow

SPEC. NO. 4173

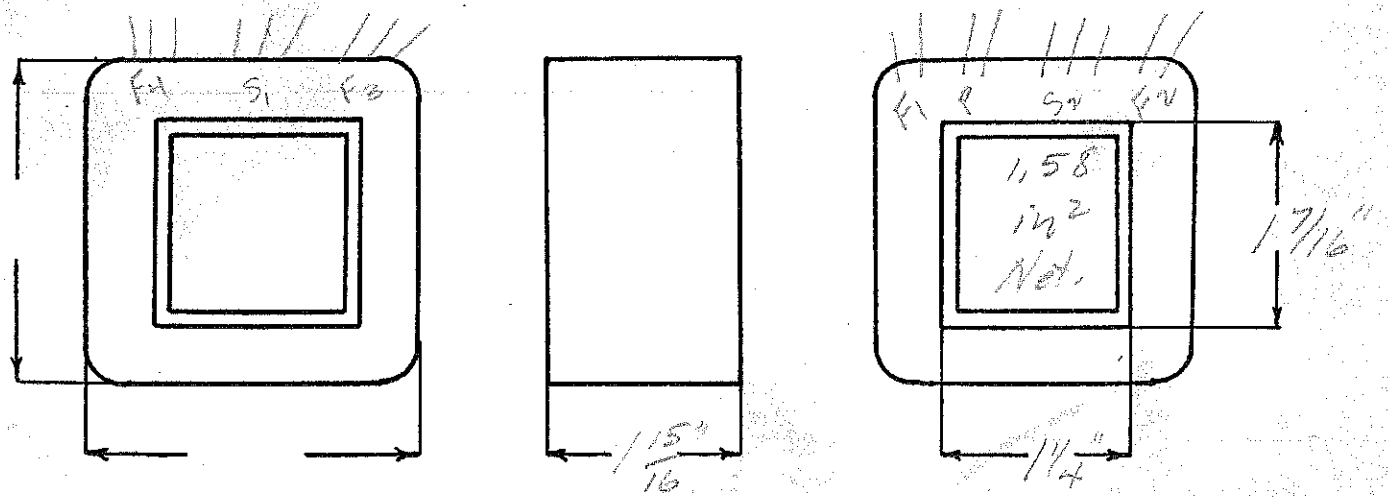
Winding	S <sub>1</sub>	S <sub>2</sub>	P <sub>11</sub>	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>
Turns	1710	2540	378	18	18	9	27
Taps	855	1270	—	—	—	5	13
Wind. Lgth.	1 3/4	1 3/4	1 3/4	← 1 3/4" →		← 1 3/4" →	
Wire Size	#36	#32	#21	#20	#20	#15	#19
T. P. L.	286-6L	192-16L	54-7	18-1/2L	18-1/2L	9-1/2L	27-1/2L
Effish P <sub>100%</sub>	90%	90%	92%	35%	35%	30%	58%
Type Lead	Sil. Br.	Sil. Br.	W. O.	W. O.	W. O.	W. O.	W. O.
Lead Lgth.	3"	3"	3"	3"	3"	3"	3"
Layer Insul.	2L 20#6	2L 20#6	1L 50#6	← ONE Layer →		← ONE Layer →	
Test Volt.	2500	2500	—	—	—	—	—
Wrapper	1L 007VC	1L 007VC	2L 005GA	← 2L → 005GA		← 2L → 005GA	
TUBE	7L-007" GR + 1L-005VC			IMPREGNATION		Varnish	

CORE 1 1/4" x 1 7/16" E-I GA. 24 GRADE D STACK 2x2

MOUNTING "C" - Note: No Shield. \* (Spiral CT in To Position)

C<sub>0</sub> = 833-1050-705-512-512-650-515  
 Fe = 72.2 @ 60W  
 TPV = 3.28  
 Wire Net = 0.538 (0.511")

See VA = 98.7 This Winding  
 P<sub>11</sub> VA = 132  
 P<sub>11</sub> I = 1.15 Amp.  
 n = 83, 1230 = 90



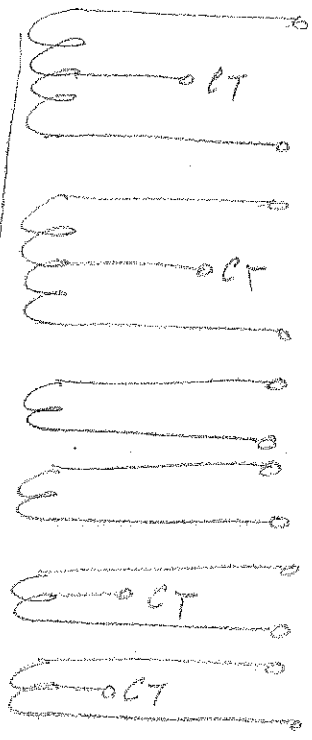
DESIGNED BY HWS

DATE 8-7-41

10VCM

115V  
60W

NO  
Shield



700V CT @ 100mA  
S<sub>2</sub>

80MA

S<sub>1</sub>  
500V CT @ 50mA

40MA

5V @ 2A

F<sub>1</sub>

2A

5V @ 2A

F<sub>2</sub>

2A

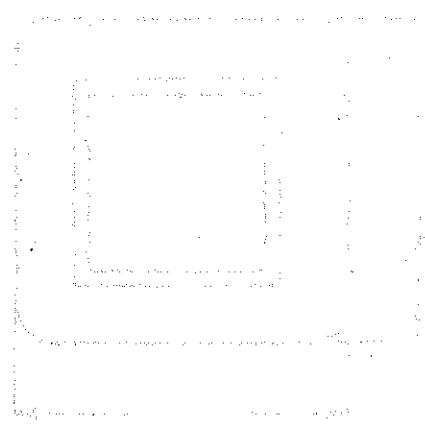
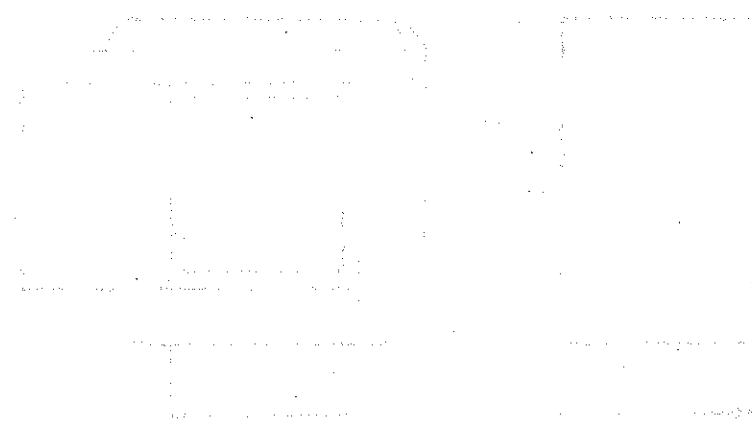
2.5V @ 5A

F<sub>3</sub>

- 1.5A

7.5V @ 2.5A

F<sub>4</sub>



Step Down 250/115 V - 40 cycle

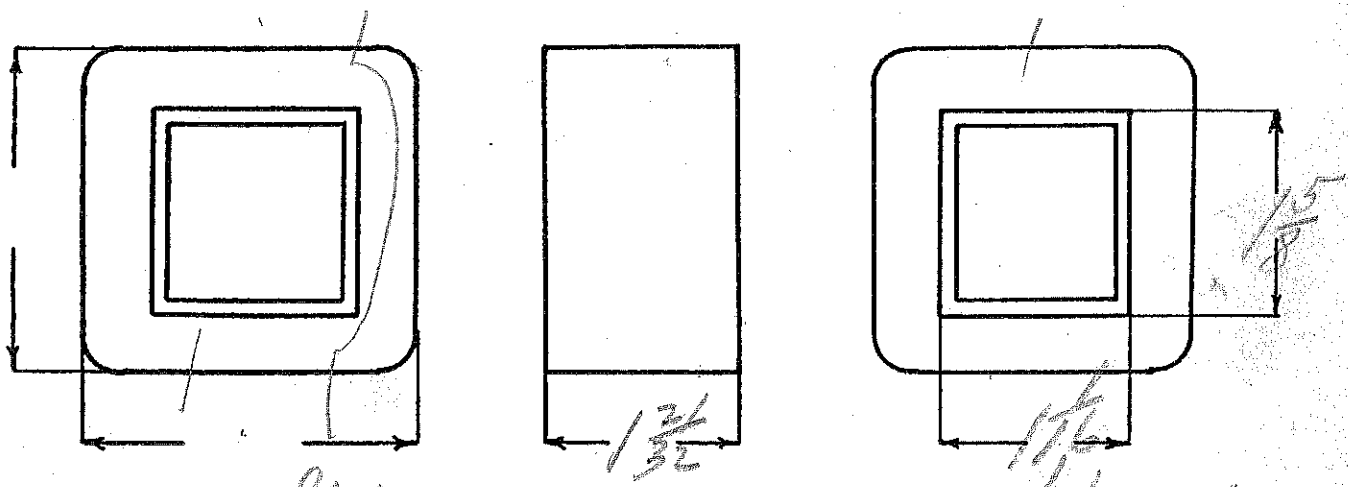
SCHIRESON

SPEC. NO. 4174

Winding	Ø					
Turns	1000					
Taps	515					
Wind. Lgth.	1 <sup>15</sup> / <sub>32</sub> "					
Wire Size	#23					
T. P. L.	55					
Finish	W.O					
Type Lead						
Lead Lgth.	6"					
Layer Insul.	50#					
Test Volt.						
Wrapper	2005GA					
TUBE	72007	IMPREGNATION		Double varnish		

CORE	GA.	GRADE	STACK
MOUNTING	T		

End is common



DESIGNED BY *Law*

DATE 2/19/38

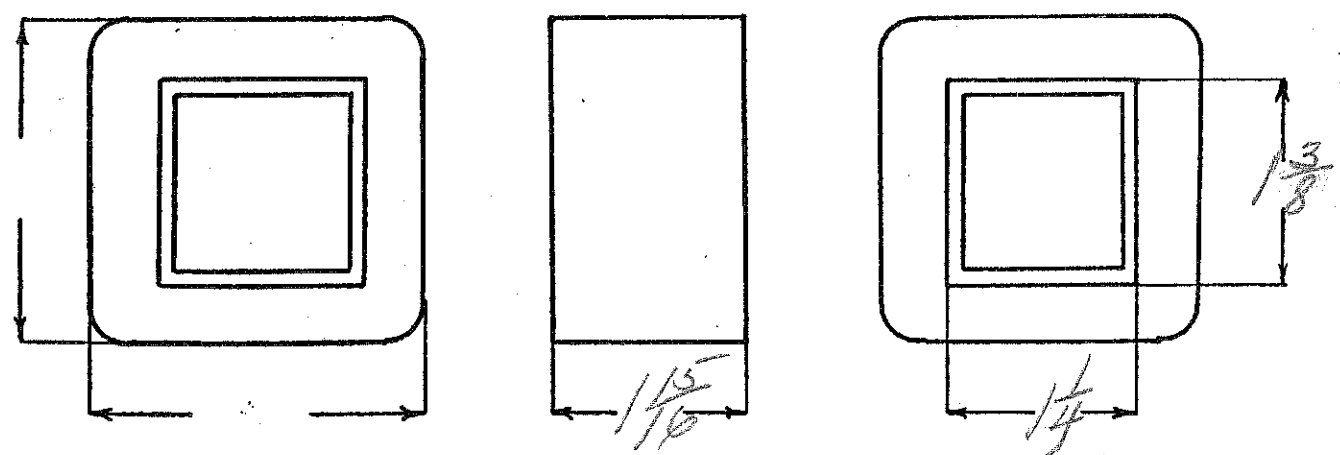


Ep-120  
 E<sub>3</sub>-700VCT-125 mA  
 E<sub>F</sub>-5V-2amp  
 E<sub>F</sub>-6.3VCT-1.4amp

E<sub>F3</sub>-6.3V-5.5V tap 22 amp  
 E<sub>S2</sub>-24V-2amp (Intermittent)  
 3.45  
 SPEC. NO. 4175

Winding	SEC	SHIELD	PRI	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	S <sub>2</sub>
Turns	2600	1	415	19	24	24	90
Taps	1300	-	-	-	12	21	-
Wind. Lgth.	1.75						
Wire Size	#31	SHIM STOCK	#22	#20	#21	#19	#21
T. P. L.	163-16		60-7				
Finish							
Type Lead	#20 PRV	Sil Br	#20 PRV	WIRE ONLY			
Lead Lgth.	9"	3"	9"	9"			
Layer Insul.	double 16#		50#				
Test Volt.							
Wrapper	11007V6	11005V6	21005GA				21005GA
TUBE	7L007			IMPREGNATION		VARNISH	

CORE GA. GRADE STACK  
 MOUNTING SA- short bolt fiber grommet



DESIGNED BY *gw*

DATE 8/10/38

Ep-120  
 E3-900VCT 150ma  
 EF-5V-3amp  
 EF-603V-2amp

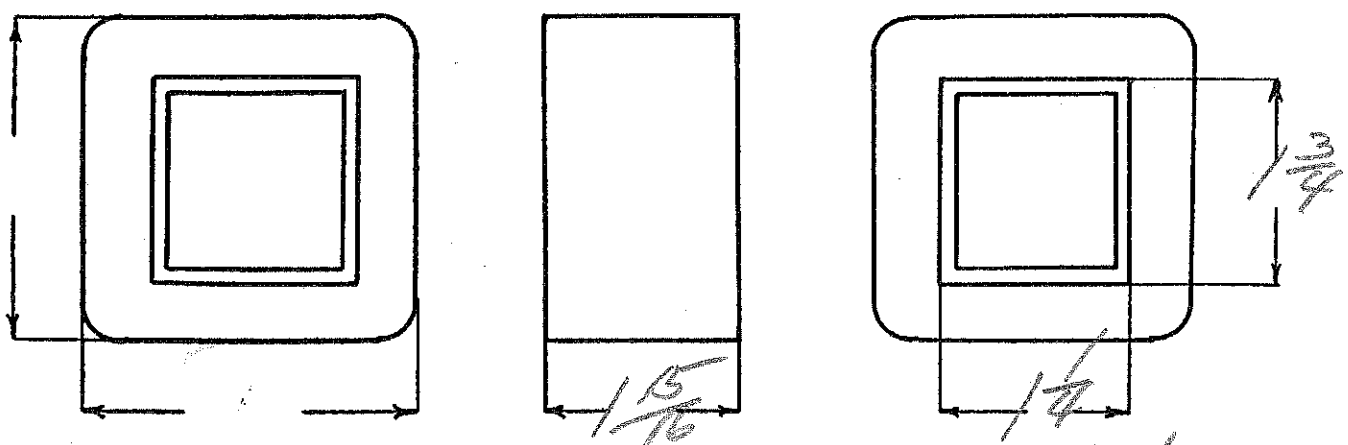
SPEC. NO. 4176

Winding	SEC	SHIELD	PRI	F	FL		
Turns	2840	160	348	16	20		
Taps	1420				10		
Wind. Lgth.	1.75						
Wire Size	#31	#31	#21	#18	#19		
T. P. L.	160-18		53-7				
Finish							
Type Lead	#20 100 Pm		#20 100 Pm	WIRE ONLY			
Lead Lgth.	9"		9"	9"	9"		
Layer Insul.	double 20 #		50 #				
Test Volt.							
Wrapper	2005VC	1005VC	2007GA		2007GA		

TUBE 2007+1005VC IMPREGNATION Varnish

CORE GA. 24 GRADE Dynamo STACK 2x2

MOUNTING A



DESIGNED BY *GW*

DATE 8/18/38

Special choke

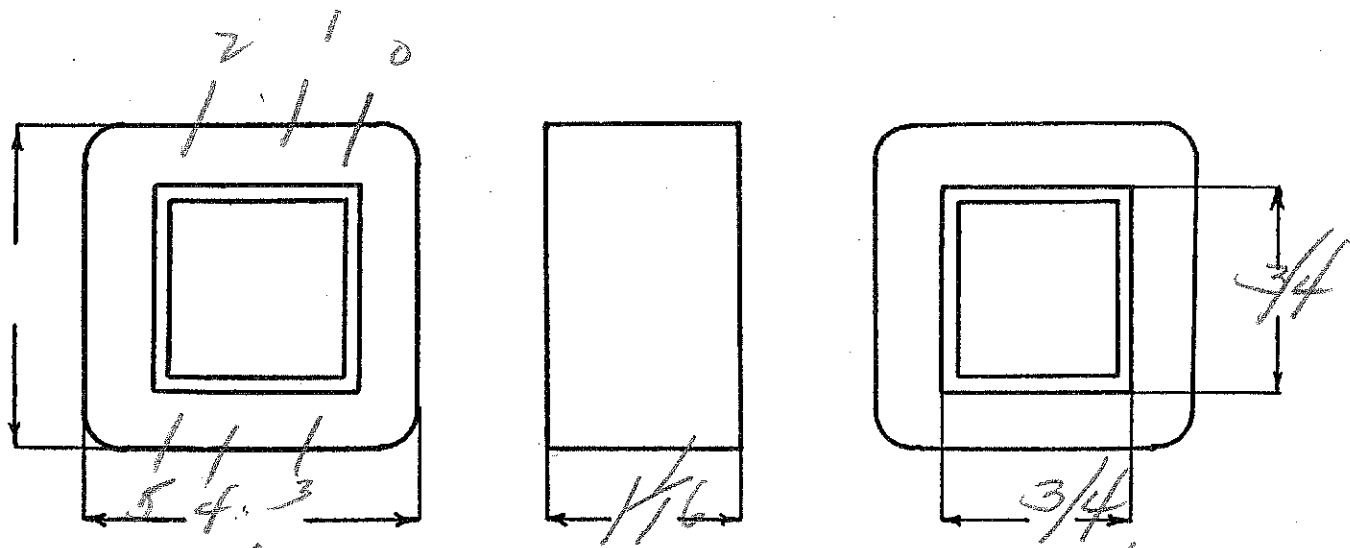
SPEC. NO. 4177

Winding						
Turns	325					
Taps	198-	230-	274-	295		
Wind. Lgth.	7/8					
Wire Size	#23					
T. P. L.	B3-					
Finish	W.O.					
Type Lead						
Lead Lgth.	3'					
Layer Insul.	50#					
Test Volt.						
Wrapper	2L0056A					

TUBE 52007 IMPREGNATION varnish

CORE 3/4 X 3/4 GA. 24 GRADE Aluminum STACK 2x2

MOUNTING D



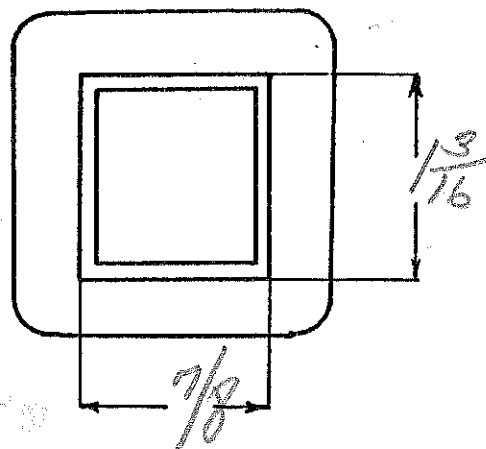
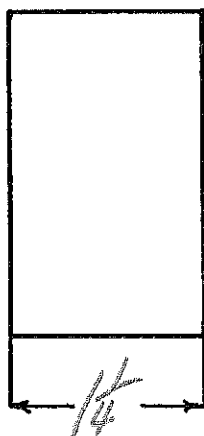
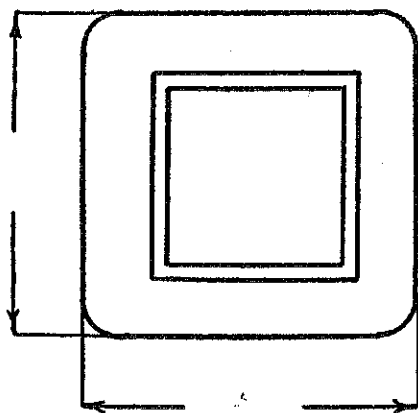
DESIGNED BY Law

DATE 8/19/38

Same winding as 4178 except for psi

SPEC. NO. 4178CA-240V

Winding	SEC	SHIELD	PR1	F <sub>1</sub>	F <sub>2</sub>		
Turns		1	1332				
Taps							
Wind. Lgth.							
Wire Size		Sheet Copper	#31				
T. P. L.			98-14				
Finish							
Type Lead							
Lead Lgth.							
Layer Insul.							
Test Volt.							
Wrapper							Double varnish
TUBE				IMPREGNATION			
CORE	GA.	GRADE		STACK			
MOUNTING <i>CA</i>							



DESIGNED BY

*SW*

DATE

*12/28/38*

Ep - 120  
 Es - 540 V. C.T. - 30 Ma.  
 EF - 5V - 2 amp.  
 EF - 6.3V - 1.6 amp.

Packard Bell

SPEC. NO. 4178

n/e 5.55

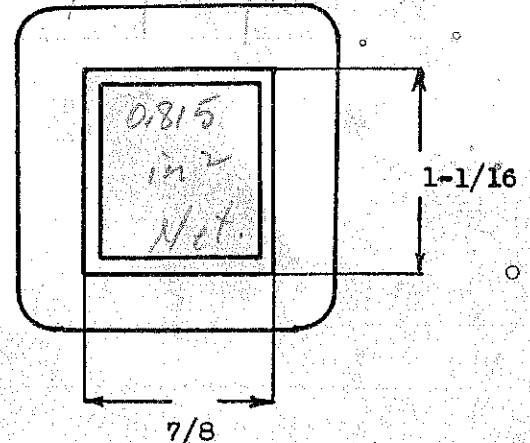
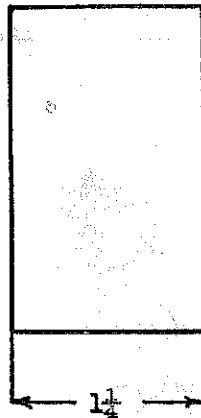
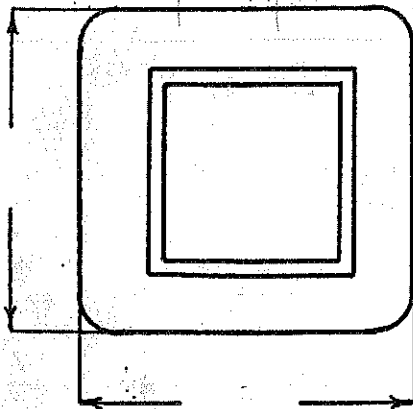
Winding	SEC	SHIELD	PRI	Blue F <sub>1</sub> 6 1/2"	Green F <sub>2</sub>		
Turns <i>(0%)</i>	3000	<del>58</del> /	666	39 <i>(10 1/2)</i>	33 <i>(19 1/2)</i>		
Taps	1500	-	-	-	-		
Wind. Lgth.	1-1/16	-	-	-	-		
Wire Size	#38	<del>#28</del> <sup>001</sup> #28 <i>Shive</i>	#28	#22	#21		
T. P. L.	218-14	/	<del>68-10</del> 67-10	39-12	33-12		
Finish <i>Rich</i>	<i>90%</i>	-	<i>85%</i>	<i>97 1/2%</i>	<i>92 1/2%</i>		
Type Lead	#22 cellac		#22 cellac	wire only			
Lead Lgth.	?						
Layer Insul.	double 12#		30#	-	-		
Test Volt.	<i>2000v</i>						
Wrapper	1L005VP 2L g1	1L005VP	2L005GA	-	2L005GA		
TUBE	6L007GA *		IMPREGNATION		Varnish		

CORE GA. GRADE STACK

MOUNTING CA - ring bracket only on bottom

*Co = 873 - 513 - 401 - 405*  
 Bl 7.3 supply special ring with shipments  
 Gr 6.2  
 S 280 v  
*FE = 93 @ 60v*  
*TFV = 5.55*  
*wire Net. = 0.300" (0.302")*  
 S S

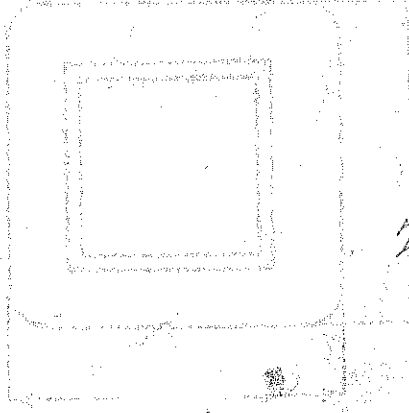
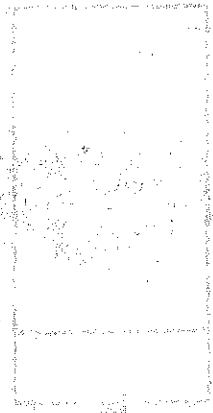
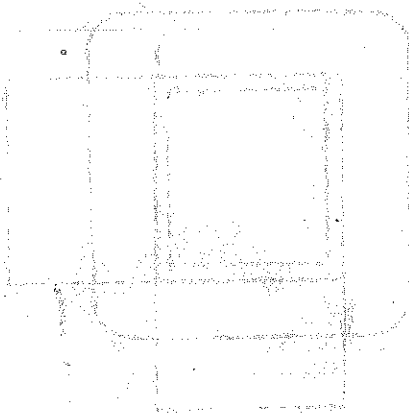
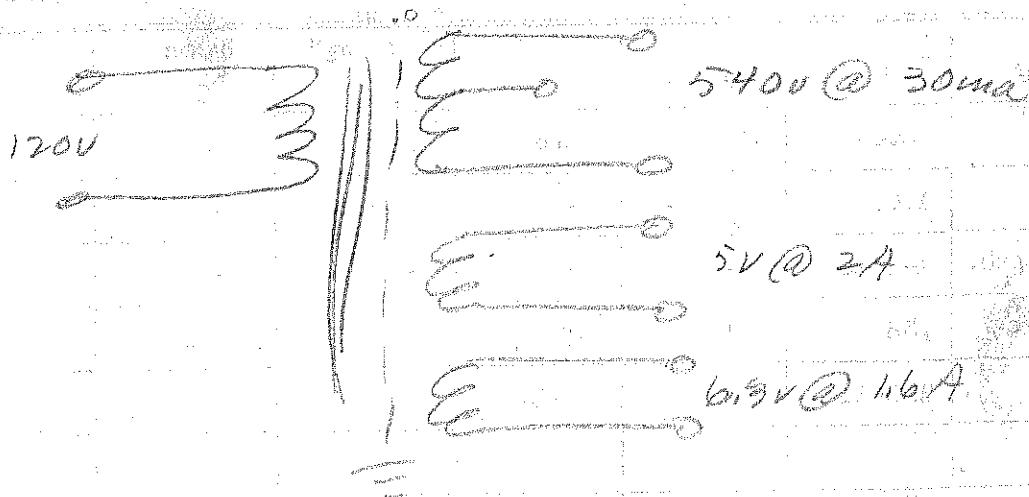
*2 Sec VA = 28*  
*Pri VA = 37.5*  
*Pri I = 312 ma*  
*n = 53*  
*cos φ = 90*  
 P P Set



DESIGNED BY GW

*OU PL*

DATE 11/18/38



275-27  
715  
605

REVISIONS

E6-120  
 E5-1100VCT-150ma  
 E4-75VCT-2.5 amp

EF-7.5VCT-1.25amp  
 EF-2.5V-1.75amp  
 EF-2.5V-5.25amp  
 EF-2.5V-7amp

Duplicate spec for Packard Bell  
 SPEC. NO. 4788

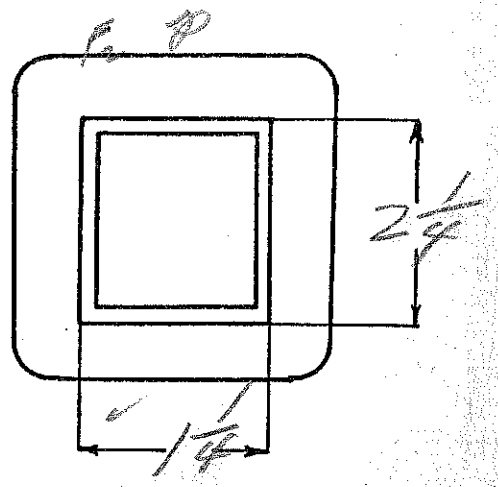
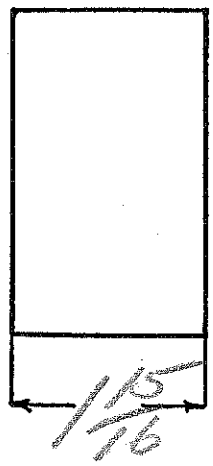
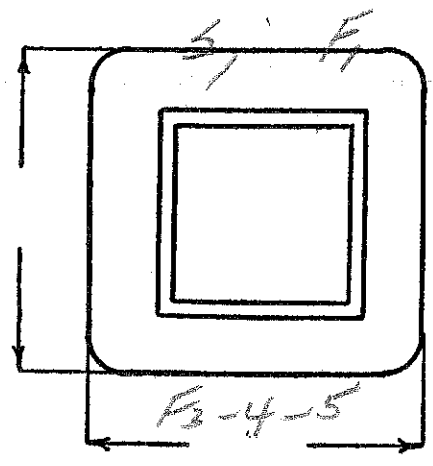
Winding	SEC	SH.	P	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	F <sub>5</sub>
Turns	2640	165	255	18	18	6	6	6
Taps	1320	-		9	9	3	3	3
Wind. Lgth.	1.75		1.75					
Wire Size	#31	#31	#20	#19	#21	#20	#15	#14
T. P. L.	166		45-6					
Finish		silk						
Type Lead	#20ga		#24ga	w.o.				
Lead Lgth.	9"		9"					
Layer Insul.	double 20#		50#					
Test Volt.								
Wrapper	21007VC	11005VC	21007GA					

TUBE 71007 + 11005VC IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING A

DO NOT USE FOR PACKARD BELL



DESIGNED BY *sw*

DATE 8/18/38

Ep-115V  
 Es-650VCT-60ma  
 Ef-6.3V-60ma  
 Ef-6.3VCT-1amp

QUALITY ELECTRIC

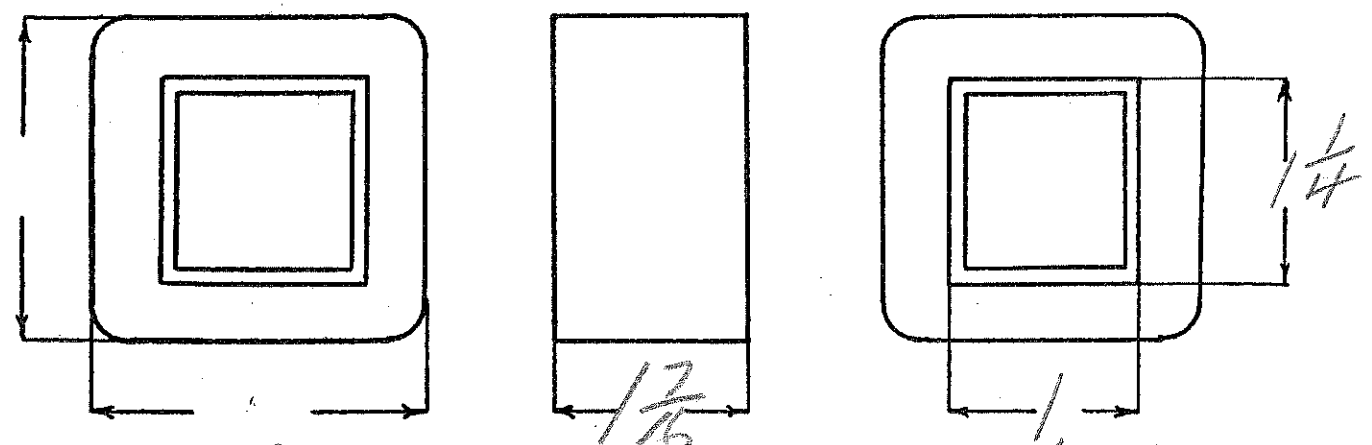
SPEC. NO. 479

Winding	SEC	SHIELD	DR1	F1	F2		
Turns	3120	66	528	31	31		
Taps	1560			-	15		
Wind. Lgth.	1.25						
Wire Size	#35	#26	#26	#23	#23		
T. P. L.	175-18		66-8				
Finish							
Type Lead	#200M		#200M	WIRED ONLY			
Lead Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 16#		40#				
Test Volt.							
Wrapper	11007HC	11005HC	21005GA	21005GA	21005GA		

TUBE 56007 IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING A



DESIGNED BY *gwo*

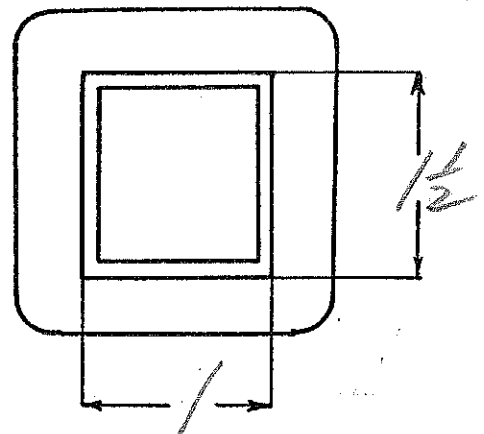
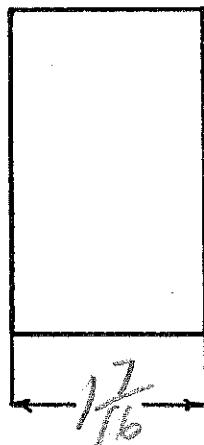
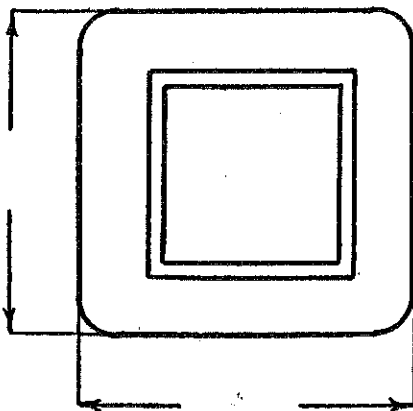
DATE 8/22/38



Same winding as 4180 except for psi + sec.

SPEC. NO. 4180-240V

Winding	SEC	SHIELD	DR 1	F <sub>1</sub>	F <sub>2</sub>			
Turns	3880		925					
Taps	1440							
Wind. Lgth.	1 9/32							
Wire Size			#28					
T. P. L.	180-16		84-11					
Finish								
Type Lead								
Lead Lgth.								
Layer Insul.								
Test Volt.								
Wrapper							Double varnish	
TUBE				IMPREGNATION				
CORE		GA.		GRADE			STACK	
MOUNTING	SA							



DESIGNED BY

*Law*

DATE

12/28/30

(PACKARD-BELL CO.)  
(Selfless)

ES-120  
ES-760V-60ma  
EF-5V-2amp  
ES-5.9V-2amp

3.9

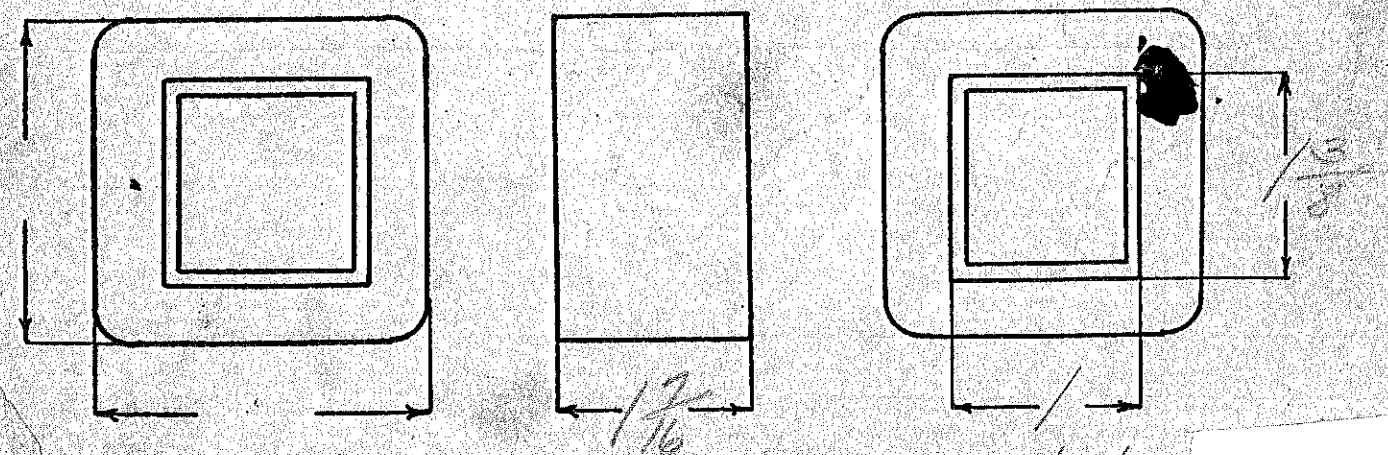
SPEC. NO. 4180

Winding	SEC	SHIELD	PRI	F <sub>1</sub> 7"	F <sub>2</sub> 7"		
Turns	2960	1	470	25	22		
Taps	1480		—	—	—		
Wind. Lgth.	1/32	6"	1				
Wire Size	#35	SHEET	#25	#20	#20		
T. P. L.	185-16	COPPER	59-8				
Finish							
Type Lead	#22		#20	wire only			
Lead Lgth.	9"	3"	9"	9"	9"	← Quarter	spaces
Layer Insul.	double #14						
Test Volt.							
Wrapper	4-007W	1L005V	2L005GA	2L005GA	2L005GA		
TUBE	6L007			IMPREGNATION	Varnish		

CORE GA. GRADE STACK

MOUNTING SA - short bolts

585  
665  
594  
Sec 385  
F-1 6.5 + Blue  
F-2 57 ga



FINED BY *[Signature]*

DATE 11/25/38

Ep - 170 V  
 Es - 600V CT (open) - 30ms

Packard Bell

815

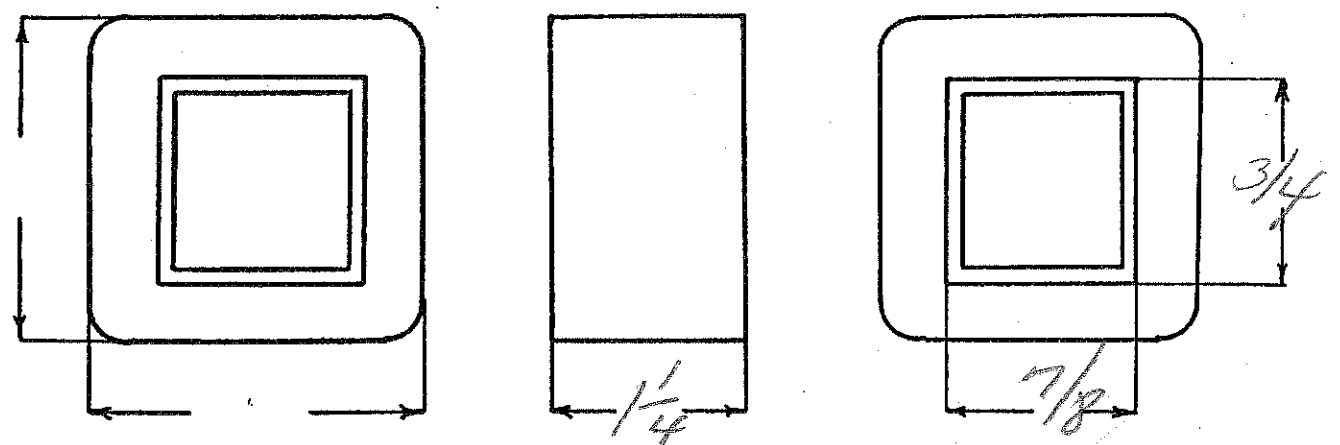
SPEC. NO. 4181

Winding	SEC	SHIELD	PRI			
Turns	5000	1	980			
Taps	2500					
Wind. Lgth.	1 1/16					
Wire Size	#38	Shun	#30			
T. P. L.	210-24		88-11			
Finish						
Type Lead	#22 cellar		#22 cellar			
Lead Lgth.	9"		9"			
Layer Insul.	double 12#		30#			
Test Volt.						
Wrapper	11005VC	11005VC	21005BA			

TUBE 5W09 IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING A



DESIGNED BY Gur

DATE 8/23/32

P-100-110-120-130

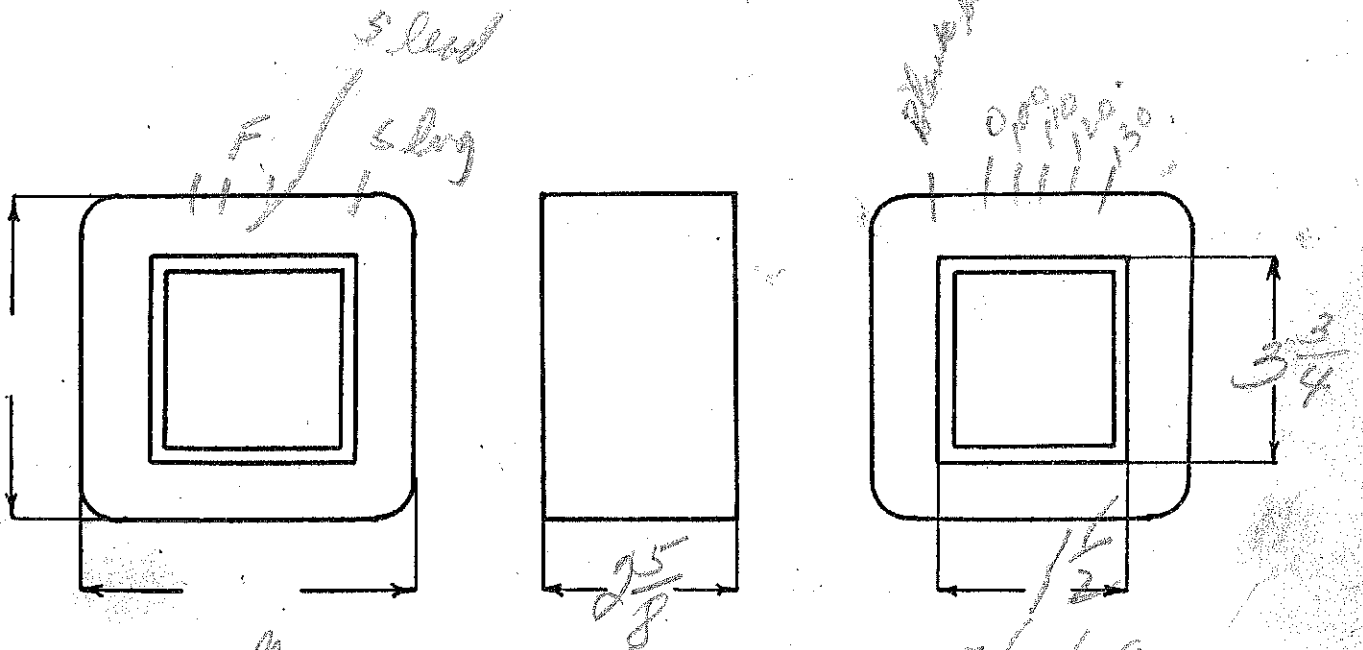
S-1725V (open) - 300 ma

F-11.8V (open) - 4 amp

N/E-118

SPEC. NO. 4182-<sup>(typical)</sup> 110-130

Winding	SFC	PR1		FIL			
Turns	2040	154		14			
Taps		142-130-119		3			
Wind. Lgth.	2 1/4						
Wire Size	#26	#14		#17			
T. P. L.	150-17	5L		1L			
Finish							
Type Lead	#20 Dulac	WIRE ONLY					
Lead Lgth.	8"	3"		3"			
Layer Insul.	double 30#	.001 KRNFT					
Test Volt.							
Wrapper	3L007VC 2L005GA	2L005GA	2L005GA			Double	
TUBE	9L007H1L007VC		IMPREGNATION		varnish		
CORE	GA.	24	GRADE	0	STACK	2x2	
MOUNTING	C - open brackets top & bottom						



DESIGNED BY *GW*

DATE 8/17/39

ES-120

ES-1725 V (open) - 300ma

EF-11.8V open - 4amp N/E = 1.27

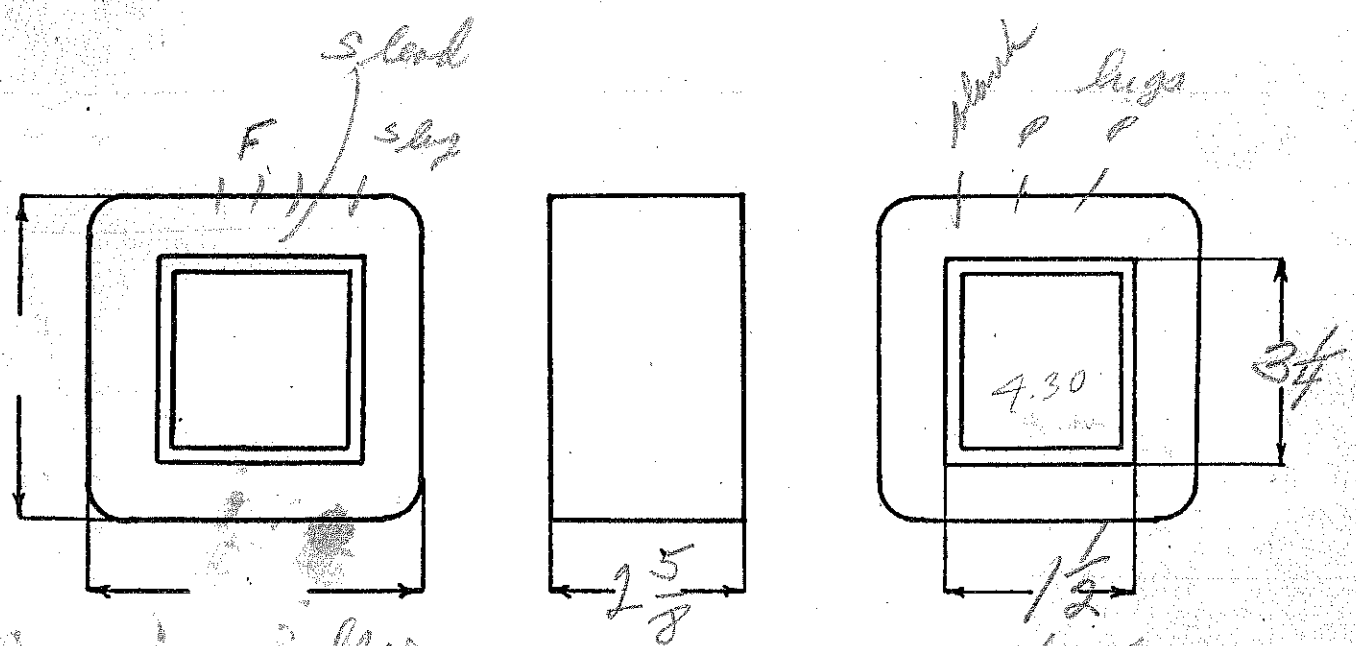
SPEC. NO. 4182

Winding	SEC	PRI	FIL			
Turns	2160	151	15			
Taps			7			
Wind. Lgth.	2 1/4					
Wire Size	#26	#15	#17			
T. P. L.	120-18	32-5	1L			
Finish						
Type Lead	Dulac	WIRE ONLY				
Lead Lgth.	8"	3"	3'			
Layer Insul.	30#	1007 Kraft				
Test Volt.						
Wrapper	31007 21005GA	21005GA	21005GA			

TUBE 9L007+11007VE IMPREGNATION Varnish

CORE GA. 24 GRADE D STACK 2x2

MOUNTING C - open brackets top + bottom



DESIGNED BY *Gar*

DATE 4/28/39

EP-115  
 ES-1600V-33ma

575

SPEC. NO. 4183

separate coils

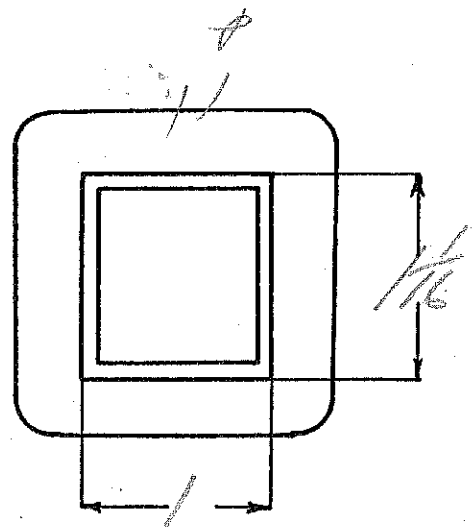
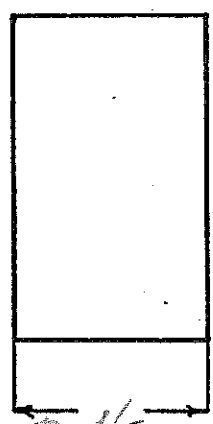
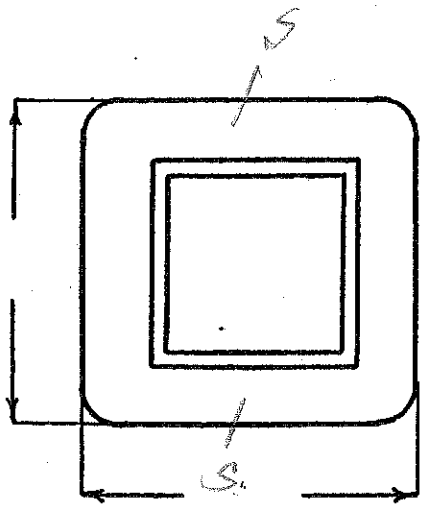
Winding	$\phi$		S			
Turns	630		9350			
Taps						
Wind. Lgth.	7/8		1"			
Wire Size	#25		#37			
T. P. L.	42-15		180-52			
Finish						
Type Lead	W.O.		Silk			
Lead Lgth.	3"		3"			
Layer Insul.	50H		double 16H			
Test Volt.						
Wrapper	2W056A		2W07VC 2W056A			

TUBE 76007+10007VC man IMPREGNATION varnish

CORE double E GA. 24 GRADE Dynam STACK Butt

MOUNTING - near bracket

180  
52  
230/60



DESIGNED BY *Law*

P-1 1/16  
 S-1 3/8

DATE 8/26/38

Ed - 115V  
Revised ES - 6V 12amps

185-155-145

$N/E = 425$

SPEC. NO. 4184

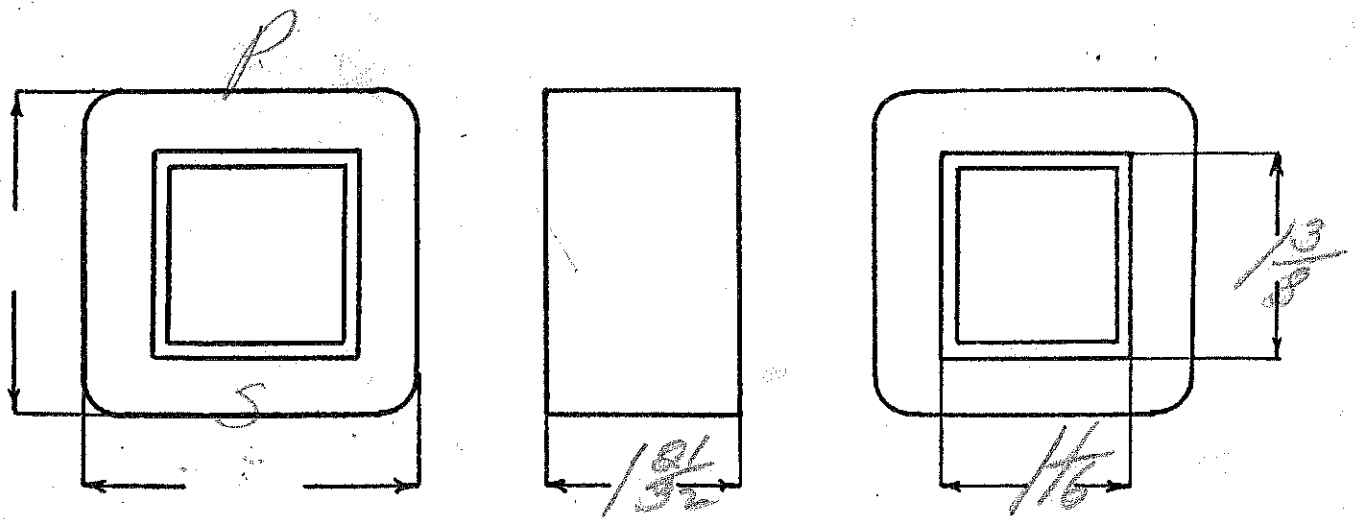
Winding	P	S				
Turns	500	27				
Taps	-	-				
Wind. Lgth.	$\frac{15}{32}$					
Wire Size	#24	#10				
T. P. L.	63-8	3L				
Finish						
Type Lead	#14 motor	#12 motor				
Lead Lgth.	10"	10"				
Layer Insul.	50#	.005				
Test Volt.						
Wrapper	2L005GA	2L005GA				

TUBE 7L007 IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING S - Special furnace control type brackets

(over)



DESIGNED BY JW

DATE 8/17/38

240/120

-100VA

3.7

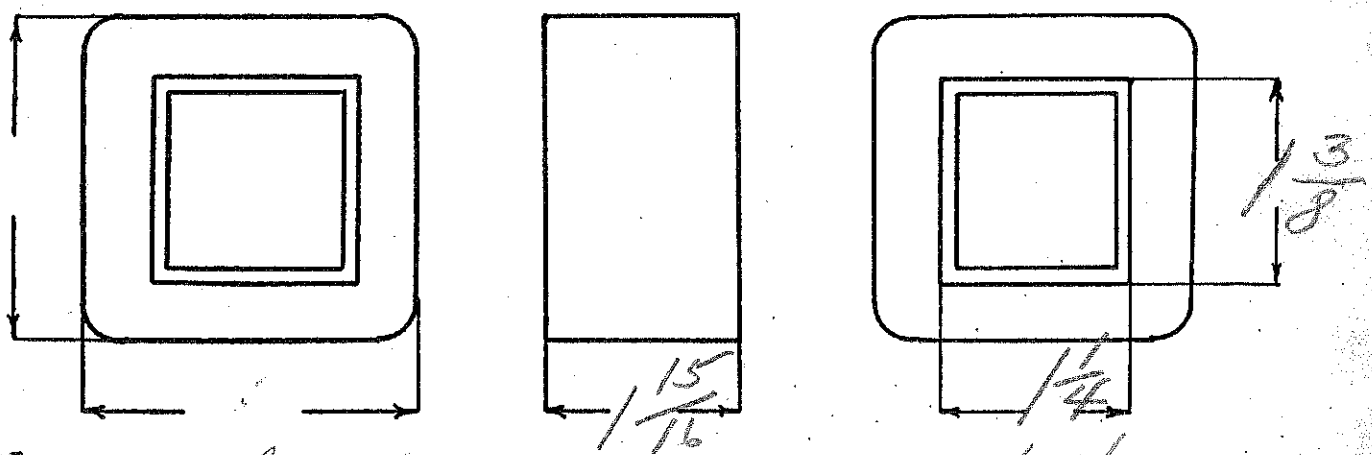
SPEC. NO. 4185

Winding	PR1	SEC				
Turns	888	476				
Taps	—	—				
Wind. Lgth.	1.75					
Wire Size	#24	#21				
T. P. L.	74-12	54-9				
Finish	WIPE ONLY					
Type Lead						
Lead Lgth.	3"	3"				
Layer Insul.	50#	50#				
Test Volt.						
Wrapper	1007VC	2007GA				

TUBE	7607	IMPREGNATION	Varnish
------	------	--------------	---------

CORE	GA.	GRADE	STACK
------	-----	-------	-------

MOUNTING *mount in sheet metal box with fuses see drawing*



DESIGNED BY *skw*

DATE 8/19/38



Ru 235 V Pri

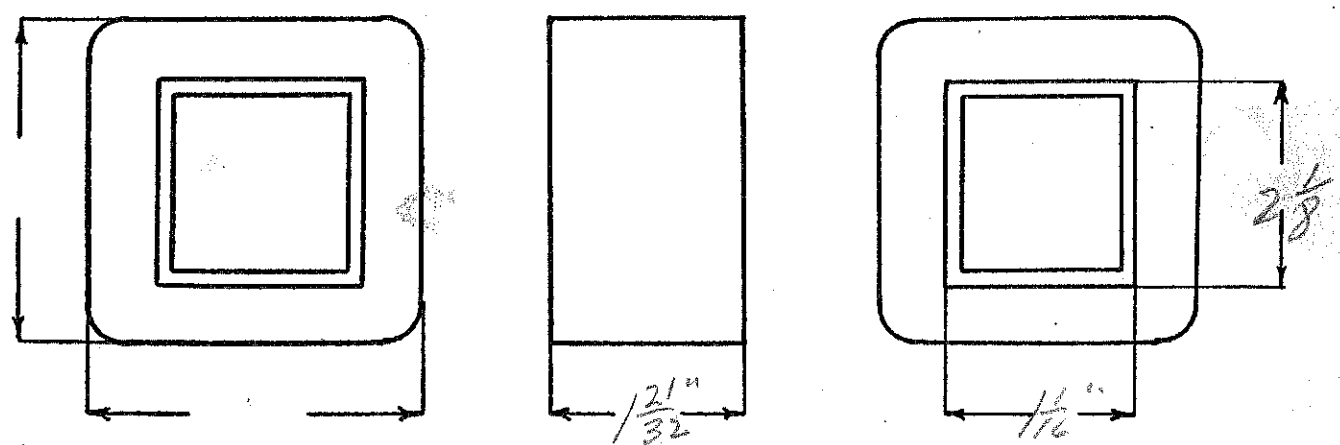
SPEC. NO. 4186-230V

Winding	Sec	Sk.	Pri	Screen F1	F2	White S-
Turns	2120	1	670	16	19 Blue	74
Taps	1060	-	-	-	17 Red	-
Wind. Lgth.	1 <sup>15</sup> / <sub>32</sub> "		1 <sup>15</sup> / <sub>32</sub> "		- Black	
Wire Size	#32	002° silv steel	#25	#20	#17	#21
T. P. L.	152-14	14	67-10L	1L	1L	2L
Finish						
Type Lead	#20 P Br	Sil Br	#20 P Br	-	Wire	-
Lead Lgth.	9	3"	9"	9	9	9
Layer Insul.	Double 16 #		50 #	-	-	-
Test Volt.						
Wrapper	2L, 005" VL	2L, 005" VL	2L, 005 GA	2L, 005 GA	2L, 005 GA	2L, 005" GA Double Varnish
TUBE	7L, 007" GK			IMPREGNATION		

CORE 1/16" x 2" GA. 24 GRADE D STACK 2 x 2

MOUNTING

6.3 Blue  
5.5 Red  
0 Black



DESIGNED BY GW  
2

DATE 7/25/39

POWER TRANSFORMER

GILFILLAN BROS., INC.

- $E_p$  - 120
- $E_s$  - 700 V.C.T. - 120 Ma.
- $E_T$  - 5 V. - 2 Amp.
- $E_{T1}$  - 6.3 V. - tap 5.5 - 4 Amp.
- $E_S$  - 24 V. - 2 Amp. (Intermittent)

2.83

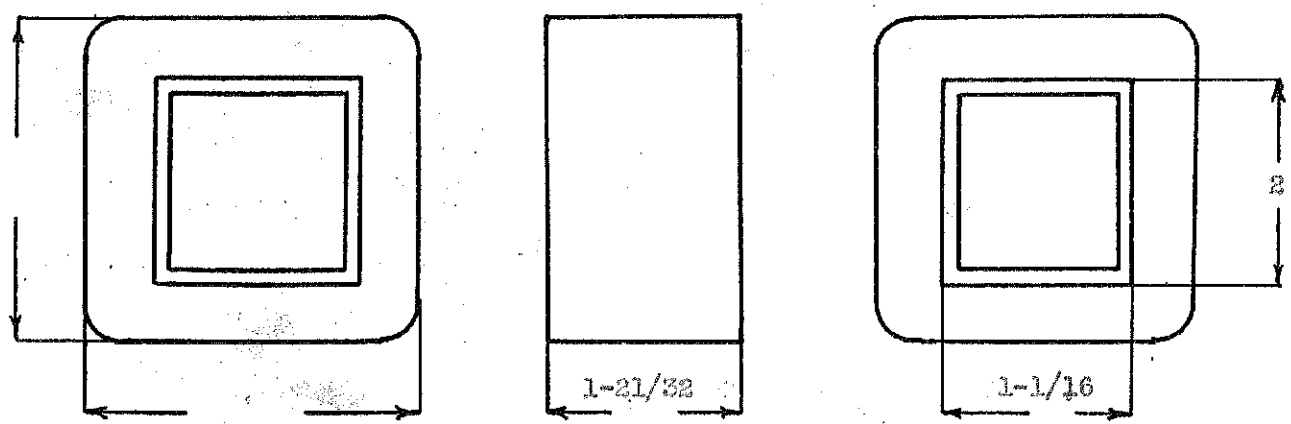
SPEC. NO. 4186

Winding	SEC	SHIELD	PKI	GREEN (2) T <sub>1</sub> 11"	(1) T <sub>2</sub>	WHITE (3) S 7"
Turns	2120	1	342	16	19	74
Taps	1060			-	-17	
Wind. Lgth.	1-15/32	7-13/16	1-15/32	-		
Wire Size	#32	Shim Stock	#22	#20	#17	#21
T. P. L.	152-14		49-7			
Finish						
Type Lead	#20 P.Br.	Sil. Br.	#20 P.Br.	W.O.	W.O.	W.O.
Lead Lgth.	9"	3"	9"	9"	9"	9"
Layer Insul.	Double 10#		50#			
Test Volt.						
Wrapper	1L.007VC	1L.005VC	2L.005GA	2L.005GA	2L.005GA	2L.005GA
TUBE	7L.007			IMPREGNATION		VARNISH

CORE GA. GRADE STACK

MOUNTING SA - Short Bolts

- 6.3 - Blue - 11"
- 5.5 - Red - 11"
- 0 - Black - 7"

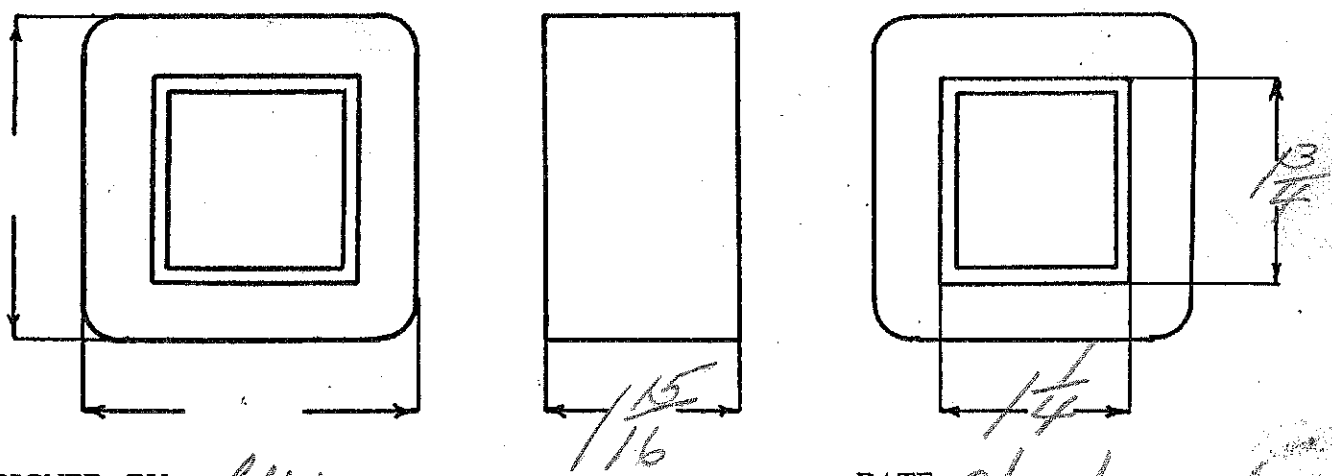


DESIGNED BY GW

DATE 8/17/38

Ep - two windings 11.6VCT for series (2V) or parallel (6V) tubulators use  
 ES - 800V.C.T. - 175 mil  
 see letter 10/5/38 - Kaar  
 255 SPEC. NO. 4187

Winding	SEC	SHIELD	R <sub>1</sub>	R <sub>2</sub>			
Turns	3450	1	30	30	Black		
Taps	1725		15	15	blue		
Wind. Lgth.	1.75		0	0	white		
Wire Size	#30	Shinn Stock	#16	#16			
T. P. L.	144.24		34				
Finish							
Type Lead	#30 PVC Br	5/8" R	WIRE ONLY				
Lead Lgth.	9"	3"	9"				
Layer Insul.	double 20#						
Test Volt.							
Wrapper	21007C	21007SA	21007EA	21007CA			
TUBE	91007				IMPREGNATION	Varnish	
CORE		GA. 24			GRADE Dynamo	STACK	
MOUNTING	A - Copper strip over lamination						



DESIGNED BY *GW*

DATE 8/26/38

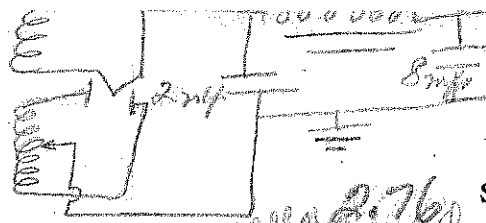
Rembler

Ep. 115

ES - 850VCT - 150ma

EF - 5V - 2amp

EF - 6.3V - CT - 4.8amp



425V 150ma

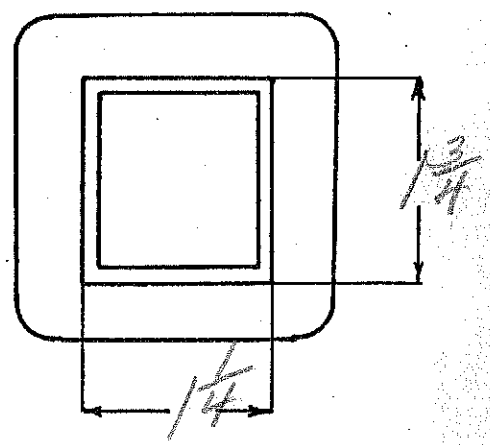
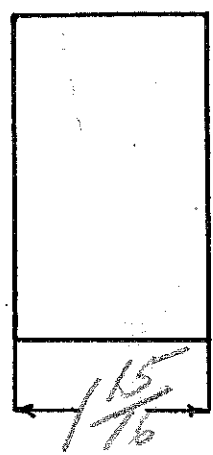
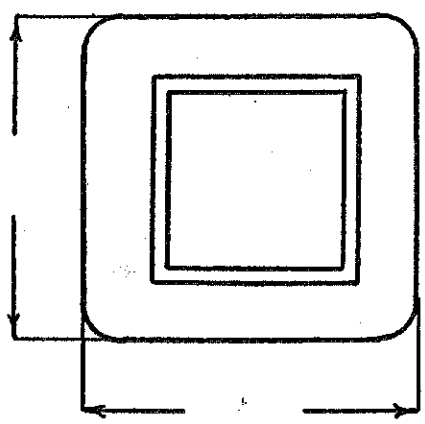
SPEC. NO. 4188

Winding	SEC	SHIELD	PRI	F <sub>1</sub>	F <sub>2</sub>		
Turns	2540	1	320	15	19		
Taps	1270				10		
Wind. Lgth.	1.75						
Wire Size	#30	SHIM	#21	#20	#16		
T. P. L.	143-18		54-6				
Finish							
Type Lead	#20 P/B	5V P/B	#20 P/B	wire only			
Lead Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 20#		50#				
Test Volt.							
Wrapper	16007VC 3L	16007VC	26007GA	26007GA	26007GA		

TUBE 7L007 IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING A



DESIGNED BY gwo

DATE 9/16/38

Ep-115V

Es - 800V - 35ma - constant current

7.25

SPEC. NO. 4189

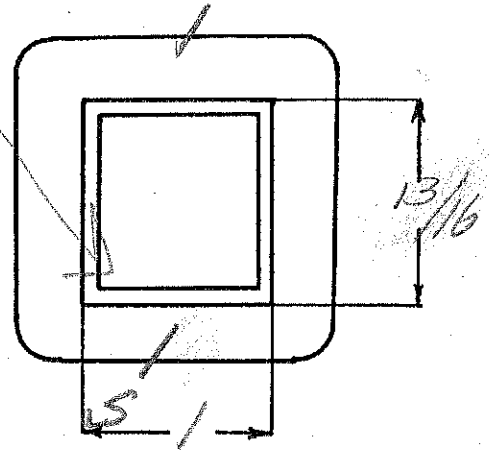
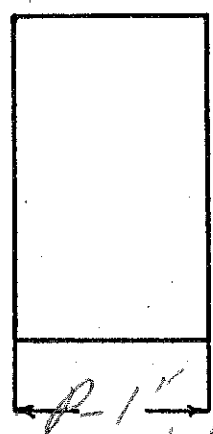
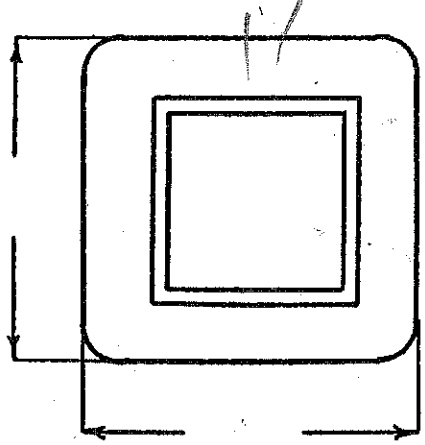
Winding	PRI	}	SEC			
Turns	840		6850			
Taps	-		-			
Wind. Lgth.	7/8		7/8			
Wire Size	#27		#36			
T. P. L.	50-17		143-48			
Finish	W.O.		Silbr			
Type Lead				to lugs		
Lead Lgth.	3"		3"			
Layer Insul.	40#		double 16#			
Test Volt.						
Wrapper	24005GA	36005GA				

TUBE 7007 A 11007UC on sec IMPREGNATION Double varnish (lemon)

CORE GA. GRADE STACK

MOUNTING uncast - new type brackets

heavy finishing use shunts 7/16 x 7/8, with .025" armit gap  
shunts are made from 7/8 eye cut off  
use .20" armit on each side of shunts  
15" shunts each side 3



DESIGNED BY GW

S-1 1/8"

DATE 8/20/35

SPEC. NO. 4190

10.9

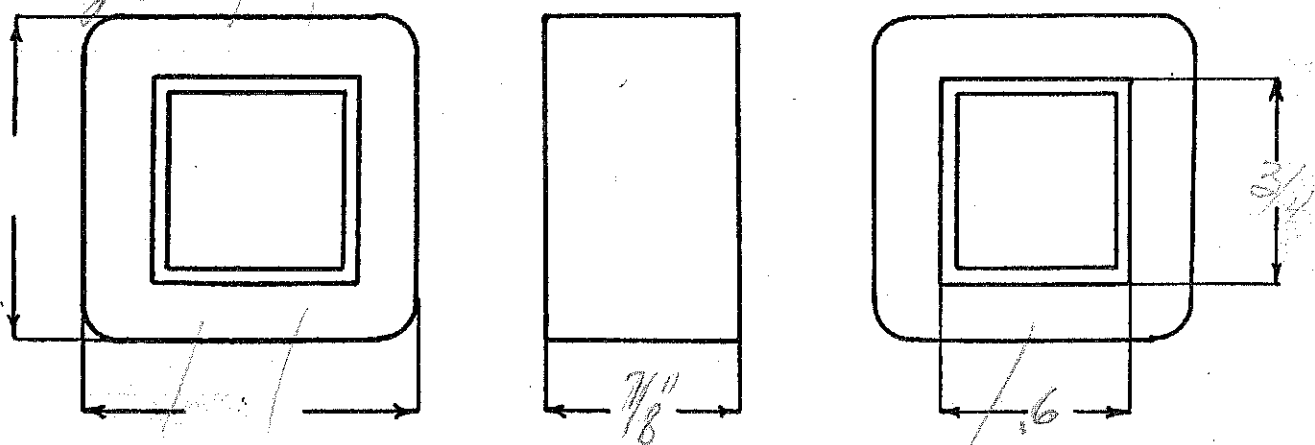
Winding	PRI	SEC				
Turns	1310	627				
Taps	-	613	Secondary			
Wind. Lgth.	3/4		Gold Code			
Wire Size	#34	#34	Start - Yellow			
T. P. L.	95-14	95-8	Tap - White			
Finish			Finish - Red			
Type Lead	#20 D.W. BW					
Lead Lgth.	4"	4"				
Layer Insul.	30#	30#				
Test Volt.						
Wrapper	11005K	21005GA				

TUBE 56007 IMPREGNATION varnish

CORE GA. 29 GRADE B STACK 2x2

MOUNTING unencased

P - black  
 500V - red 54 finish of winding  
 2V - white 56  
 50V - yellow



DESIGNED BY Copy

DATE 2/29/38

Filament Transformer  
 115V @ 60 Cy.  
 to  
 6.3V @ 10 Amp.

Moviola Company

SAME COIL AS #8248  
 #8369 = 4 cycles

SPEC. NO. 4191

Replaced by 10493

Winding	1-2 Pri.		3-4 Sec.			
Turns	495		27			
Taps	-		-			
Wind. Lgth.	<del>1-15/32"</del> 1 1/32"		1-3/8"			
Wire Size	#24		#11			
T. P. L.	62-8L		14-2L			
Finish	90% <i>Patrol</i>		94 1/2%			
Type Lead	#18 Motor Lead	(Use Panel)	#14 Motor-Lead		Do not braze sec leads Evo. Lug of #11 PE W/O.	
Lead Lgth.	cut 16" 10"		10"			
Layer Insul.	1-L 50-1b G		1-L .015" CP			
Test Volt.	2000V 1500		1250V			
Wrapper	1-L .005" WC 2-L .005" GA	1/015CP	2-L .007" GA			

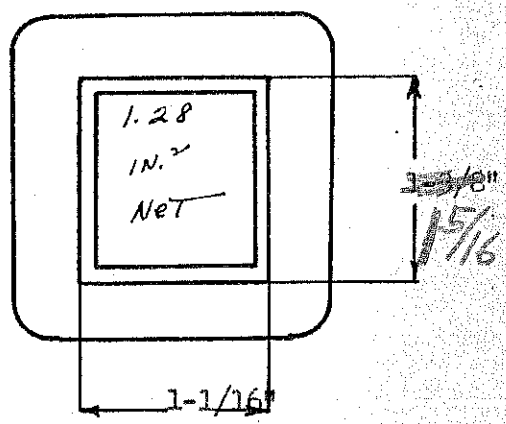
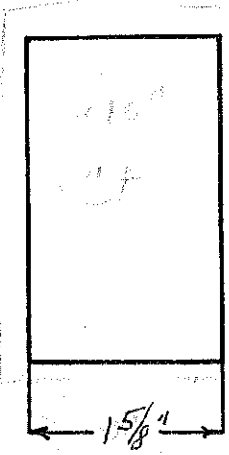
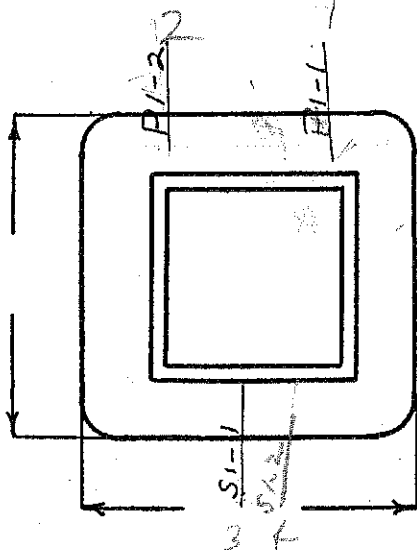
TUBE	7-L .007" GK 5-L .010	IMPREGNATION	Varnish
------	--------------------------	--------------	---------

CORE 1-1/16" x 1-3/8" GA. 24 GRADE D STACK 2" x 2"

MOUNTING "S" - Special Furnace-Control Type Mounting. - HORIZONTAL

- CU = 523.821
- Fe = 68 @ 60 Cy
- TFV = 4.30
- W N = 0.490 (.420)
- Sec. VA = 63
- Pri. VA = 85
- Pri. I = 772 MA

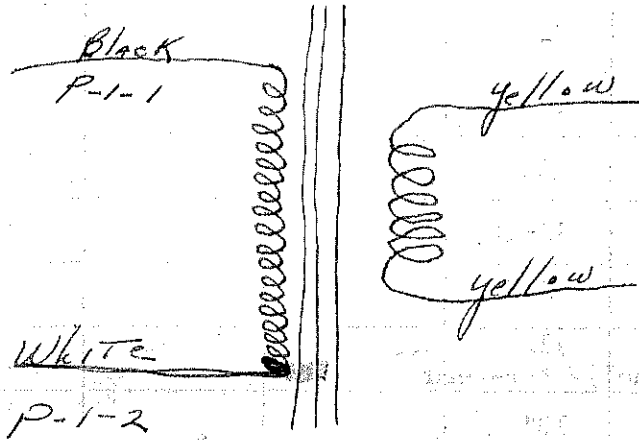
*Zinc Chromate Primer  
 Black Lacquer*



Re-DESIGNED BY HHH

DATE 12/17/42

Re Copied: 1/19/43



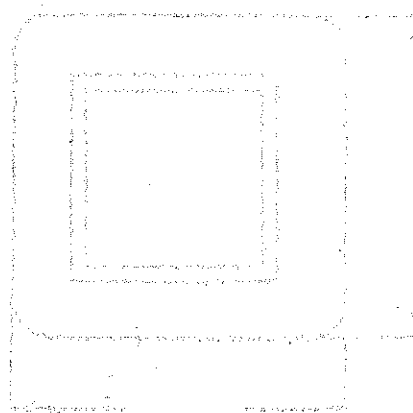
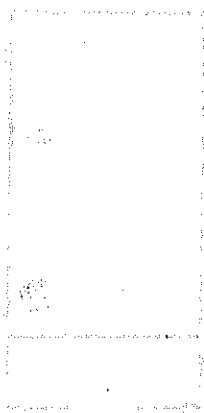
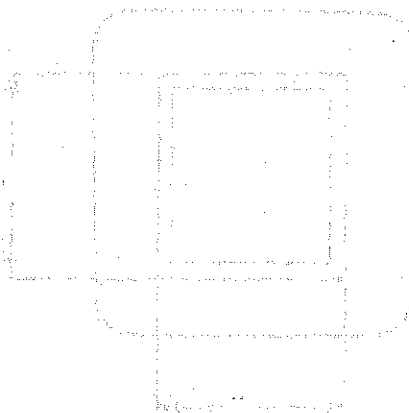
50-133 cycle

0 0

120V

0 0

6V.





Ep=110  
Es=6.4V open

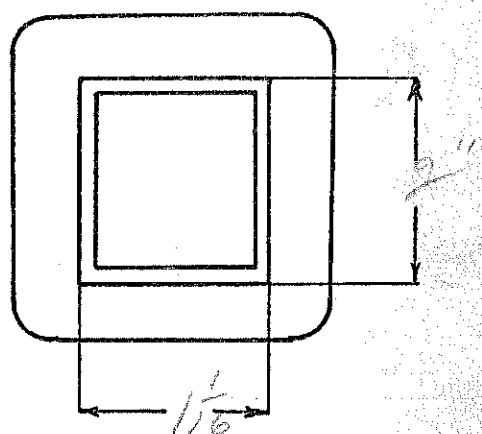
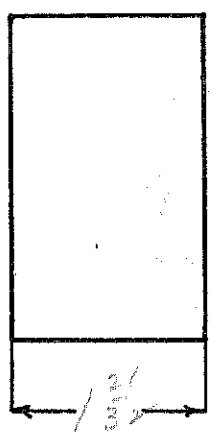
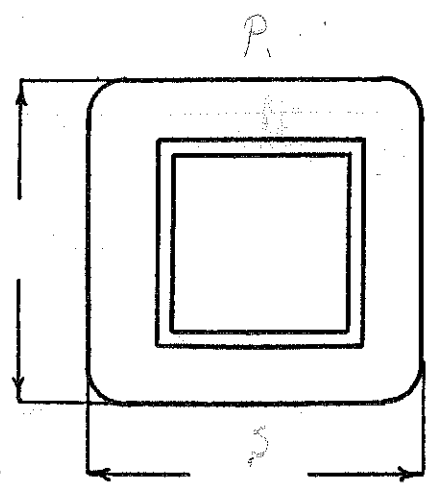
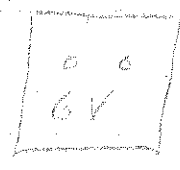
SPEC. NO. 4191-40w

Winding	P	S				
Turns	495	27				
Taps						
Wind. Lgth.	1 1/32					
Wire Size	#24	#10				
T. P. L.	62-8	13-				
Finish						
Type Lead	#14 Motor	#14 Motor				
Lead Lgth.	10"	10"				
Layer Insul.	50#	.005				
Test Volt.						
Wrapper	21.005 6H	21.005 6H				

TUBE 7h.007 IMPREGNATION

CORE 1/16 x 2 GA. 24 GRADE B STACK 2x w

MOUNTING 5 - special furnace control type bracket



DESIGNED BY from 4191  
HFD

DATE 10/20

Ep-115

EF-6.3VCT-2.5amp

ES-1600VCT-200ma

EF-5V-3amp

N/E-2142

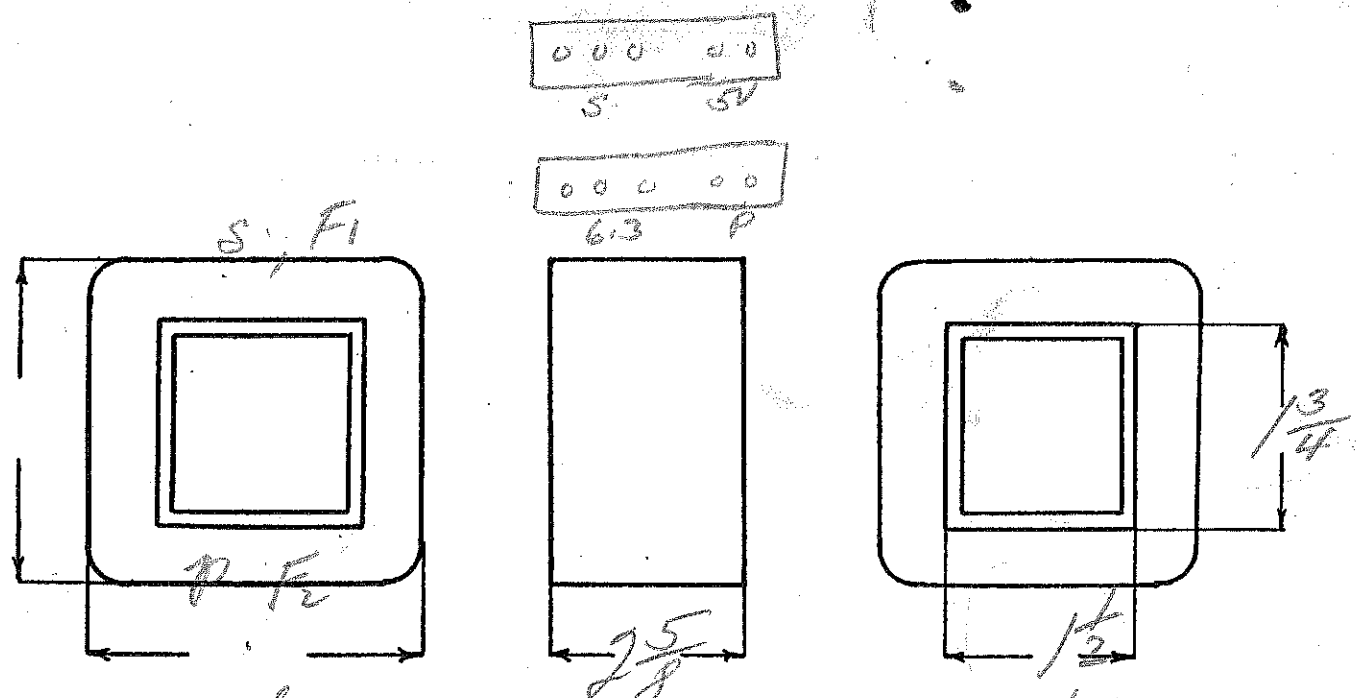
SPEC. NO. 4492

Winding	SEC	SHIELD	PR1	F1	F2		
Turns	4200	162	290	14	17		
Taps	2100				8		
Wind. Lgth.	2 <sup>3</sup> / <sub>16</sub>						
Wire Size	#29	#29	#18	#17	#17		
T. P. L.	162-26		6L				
Finish							
Type Lead	#20 0.31	SIL. PN	WIRE ONLY		WIRE ONLY		
Lead Lgth.							
Layer Insul.	double 30#		005				
Test Volt.							
Wrapper	210071C 4L 20L	310056A	310056A		310056A		

TUBE	9607	IMPREGNATION	Varnish
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CORE	GA.	GRADE	STACK
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MOUNTING L



DESIGNED BY *Gur*

DATE 9/2/38

Ep-115

Es-1600V-350ma

Ef-10VOT-7amp

1075

SPEC. NO. 4193

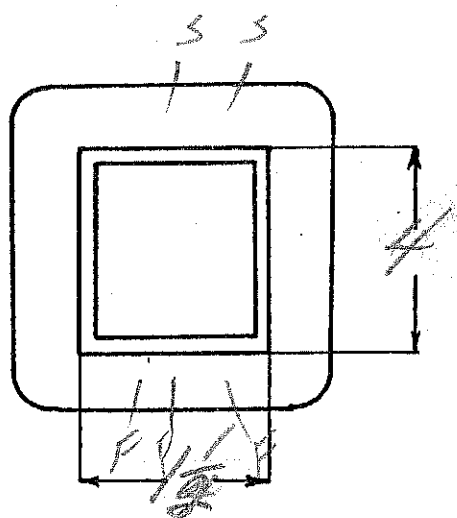
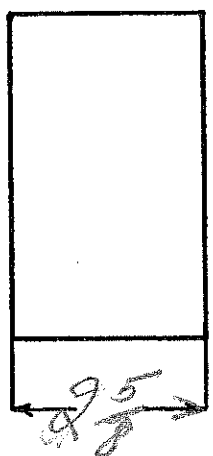
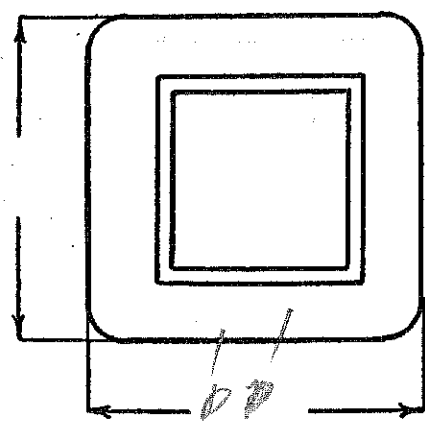
Winding	SEC	PRI	FIL			
Turns	1800	124	12			
Taps			6			
Wind. Lgth.	2 1/4					
Wire Size	#26	#14	double #17			
T. P. L.	120-15	4L!				
Finish		wire only				
Type Lead						
Lead Lgth.	3"	3"	3"			
Layer Insul.	double 40#	.007K				
Test Volt.						
Wrapper	3Lm7VC 3Lm58A					

TUBE	106007f 1007VC	IMPREGNATION	varnish
------	----------------	--------------	---------

CORE	GA.	GRADE	STACK
------	-----	-------	-------

MOUNTING *wirewound - see 3312*

*bracket with F+S to the top*



DESIGNED BY *Gweaver*

DATE *8/29/35*

Ep - 105-110-115-120

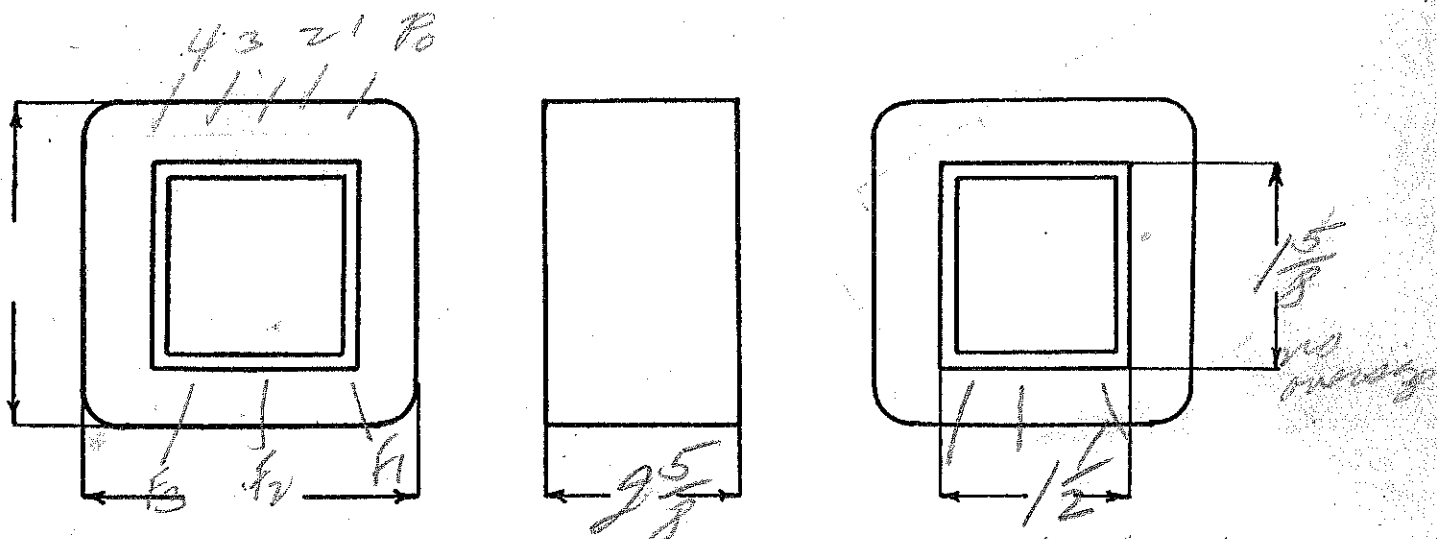
EF - 2.5V - 10 amp  
 EF - 2.5V - 10 amp } 12,000V test ins  
 EF - 2.5V - 20 amp } 2.8

SPEC. NO. 4194

Winding	P	F <sub>3</sub>	F <sub>2</sub>	F <sub>1</sub>			
Turns	336-322	8	8	8			
Taps	308-295	-	-	-			
Wind. Lgth.	2 1/4	double					
Wire Size	#20	#12	#12	#12			
T. P. L.	6L						
Finish	WIPE ONLY						
Type Lead							
Lead Lgth.	6"	6"	6"	6"	wrap 1 15/16 wide		
Layer Insul.	.005"						
Test Volt.							
Wrapper	51007VC 51005GA	51007VC 52005GA	51007VC 51005GA	51007VC 51005GA			
TUBE	10007+11007VC			IMPREGNATION		varnish	

CORE GA. GRADE STACK

MOUNTING I - insulator in bakelite



DESIGNED BY GW

DATE 8/31/20

Ep-120  
 Es-780V.C.T.-100ma

6A8-78-75-625-42-42-6U5-80

GILFILLAN BROS, INC.

Ef-5V-2amp

333

SPEC. NO.

Ef-6.3V-5.5 amp-3.6 amp

9945

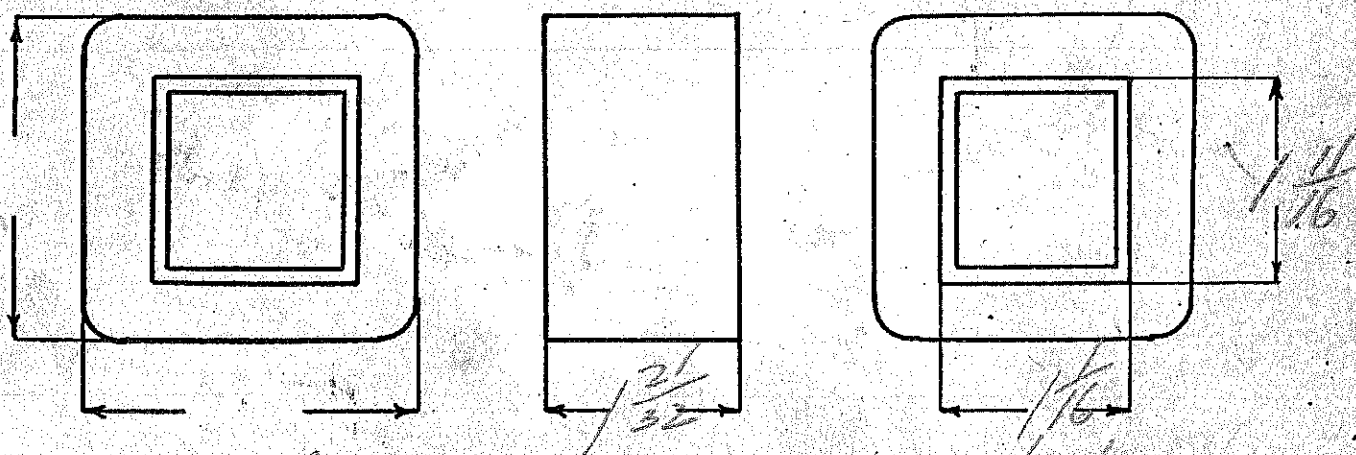
Winding	SEC	SHIELD	PRI	F1	F2		
Turns	2440	1	400	18	23	Blue	
Taps	1220				20	Red	
Wind. Lgth.	1 15/32	7 1/4			0	Black	
Wire Size	#32	SHIM STOCK	#22	#20	#17		
T. P. L.	153-16		50-8	.451	.782		
Finish							
Type Lead	#20 P.M.	Sil M.	#20 P.M.	WIRES	ONLY		
Lead Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	16#		50#				
Test Volt.							
Wrapper	14007V6	14005V6	21005GA	21005GA	21005GA		

TUBE 7607 IMPREGNATION Varnish

CORE GA. GRADE STACK

MOUNTING SA- Fibre promoter.

7.2  
 6.2  
 5.6  
 3.8V.



DESIGNED BY G.W.

DATE 8/25/38

EP-115 350 700 1150  
 E3 - (wavy line) - 40 ma  
 EF1 - 5V-2amp  
 EF2 - 5V-2amp

EF3 - 6.3V-1amp  
 EF4 - 2.5V-2.5A  
 EF5 - 2.5V-2.5amp

RAD16 "DUC"

SPEC. NO. 4196

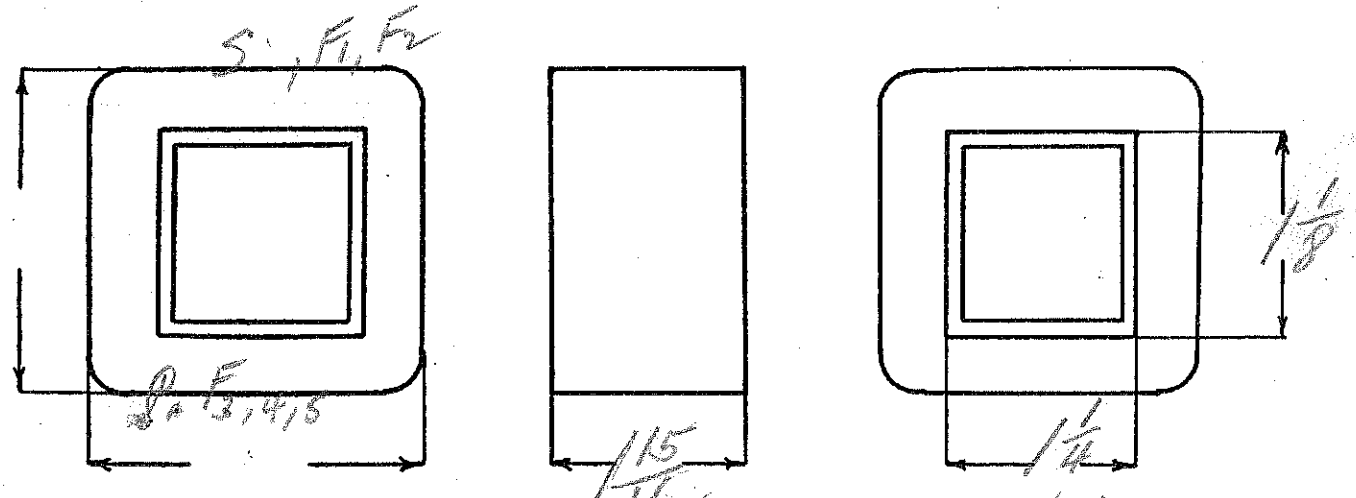
Winding	PR1	SHIELD	SEC	F1	F2	F3	F4	F5
Turns	530	1	5740	26	26	32	13	13
Taps			17203440					
Wind. Lgth.	1 3/4							
Wire Size	#23	#18 STOCK	#36	#20	#20	#22	#18	#18
T. P. L.	67-8		287-20	.6	.6	.6	.38	.38
Finish								
Type Lead	#20 1/2"	Sil B	#20 1/2"	wire only				
Lead Lgth.	9"	3"	9"	9"				
Layer Insul.	"5D#		double 20#					
Test Volt.								
Wrapper	10007NC	21007NC	10007NC 21005GA	21005GA			21005GA	

TUBE 71007 IMPREGNATION Varnish

CORE GA. 24 GRADE D STACK 2x2

MOUNTING A

Sec - 0 - Red  
 350 - Blue  
 700 - Green  
 1150 - Brown



DESIGNED BY *gww*

DATE 9/2/38

Ep-105-110-115-120

250 VA

Ep-7.5V-tap 5V-35amp

2500 V test ins

211

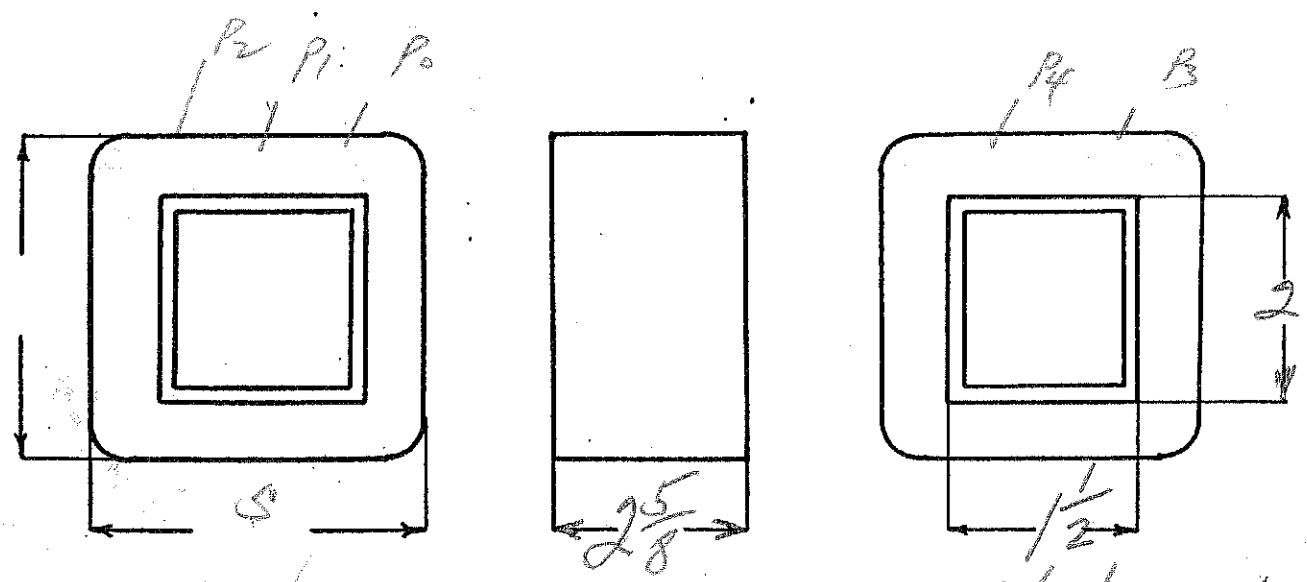
SPEC. NO. 4197

Winding	P	S				
Turns	252-242	17				
Taps	232 - 222	12				
Wind. Lgth.	2 1/4	double tap both wires				
Wire Size	#17	#10				
T. P. L.	6L	2L				
Finish						
Type Lead	WIRE ONLY					
Lead Lgth.	6"	6"				
Layer Insul.	.005GA					
Test Volt.						
Wrapper	4/005GA	4/005GA				

TUBE	106007	IMPREGNATION	varnish
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CORE	GA. 24	GRADE	STACK 2x2
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MOUNTING G



DESIGNED BY *yw*

DATE 9/2/38

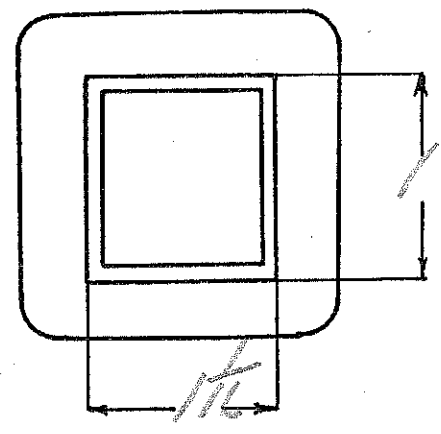
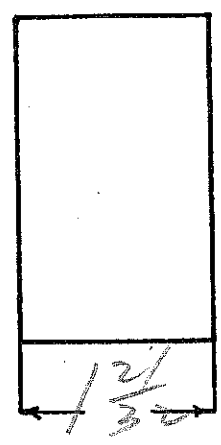
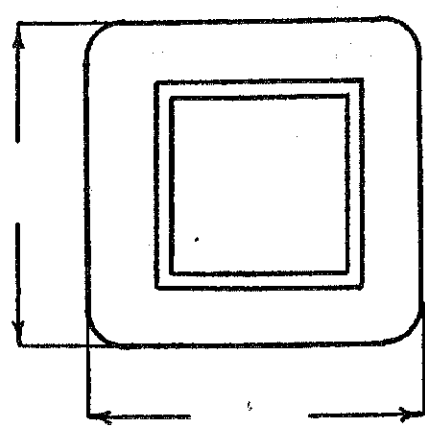
- 115V  
 5 - 220VCT .2 amp  
 5 - 5V = 4 amp

2.75

545

SPEC. NO. 4198

Winding	SEC	SHIELD	PR1	F1			
Turns	1320	111	630	31			
Taps	660						
Wind. Lgth.	1 15/32						
Wire Size	#29	#29	#25	#17			
T. P. L.	11-12		70-9				
Finish							
Type Lead	#20 Pb	50 Pb	#20 Pb	W.O.			
Lead Lgth.	9"	3"	9"	9"			
Layer Insul.	40#		40#				
Test Volt.							
Wrapper	11005VC	11005SC	26005GA	26005GA			
TUBE	71007			IMPREGNATION	Varnish		
CORE	GA.		GRADE		STACK		
MOUNTING	A						



DESIGNED BY *gaw*

DATE 9/2/32



6-115V

5-12V.C.T. 100 watts

336

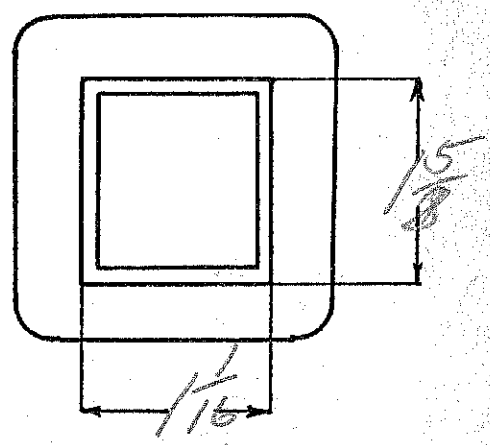
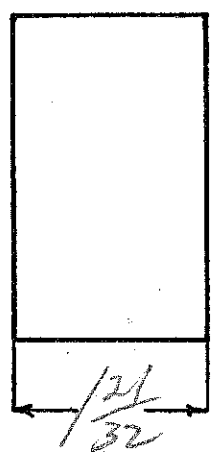
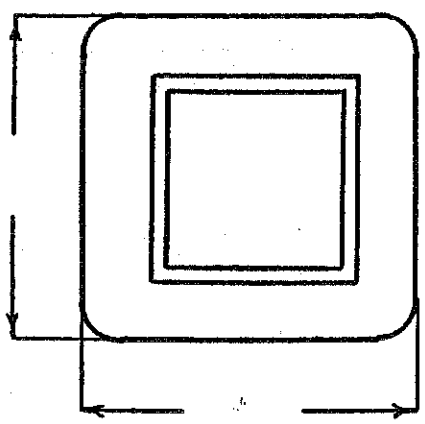
SPEC. NO. 4199

Winding	P	5 white				
Turns	395	44				
Taps		22				
Wind. Lgth.	115/32					
Wire Size	#21	double #16				
T. P. L.	45-9	46				
Finish						
Type Lead	#21	w.o. sleeving				
Lead Lgth.	9"	9"				
Layer Insul.	50A					
Test Volt.						
Wrapper	30050A	30050A				

TUBE	7607	IMPREGNATION	Varnish
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CORE	GA.	GRADE	STACK
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MOUNTING A



DESIGNED BY *Geo*

DATE 9/2/38