

Ep-110-120

Es - 3000 V - 250 Ma.

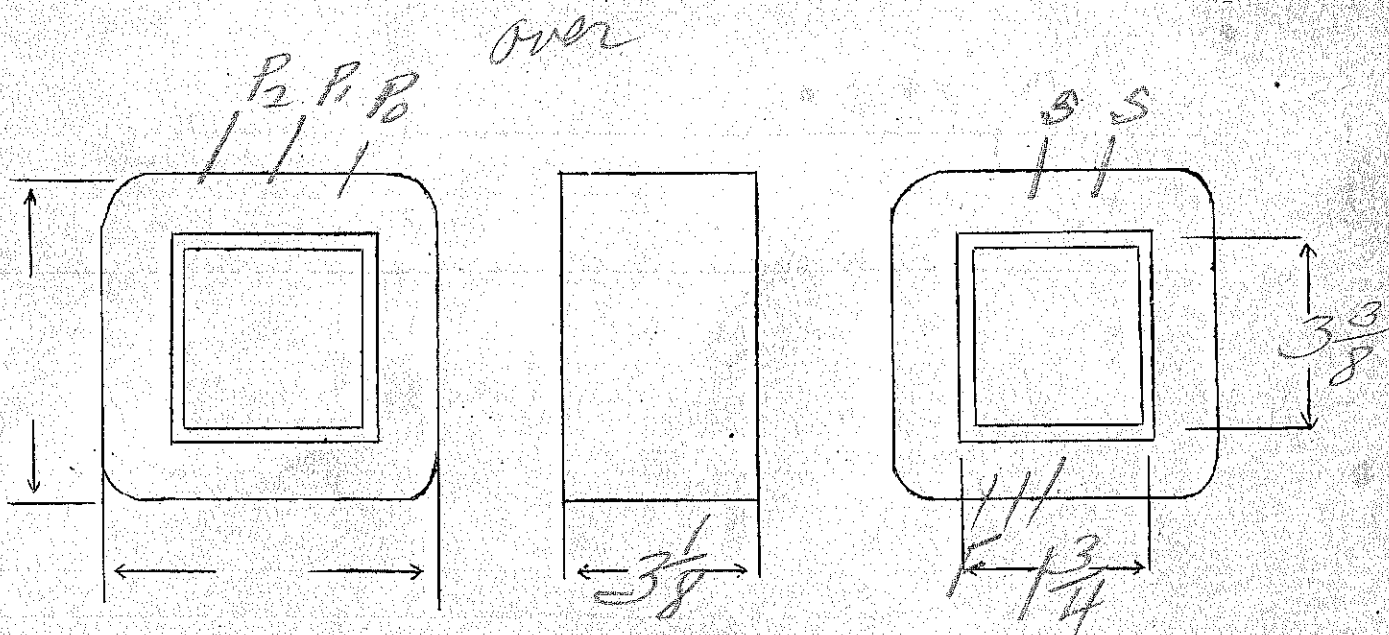
Ef - 5.2 V - 130 amp

SPEC. NO. 3301

Winding	SEC	PRI	FIL			
Turns	3460	128	6			
Taps	-	117	3	sil R. et 5 threads		
Wind. Lgth.	2 1/2	✓	✓			
Wire Size	#27	#12	#14 FLUORON			
T.P.L.	145-24	52				
Kind Term.	WIRES ONLY			start sec lead in coil		
Term. Lgth.	3"	3"	3"			
Layer Insul.	double 40#	.007K				
Test Volt.	7500	4250V				
Wrapper	3L007VC 2L005GA	3L005GA	2L005GA 1L010RP			

TUBE	10L007 + 1L007VC	IMPREGNATION	Vermash
CORE	1-3/4 x 3-3/8	PRIMARY V.A.	

MOUNTING uncoiled - two horiz. frames. Spring holder
Pri to legs, Sec to satellite strip

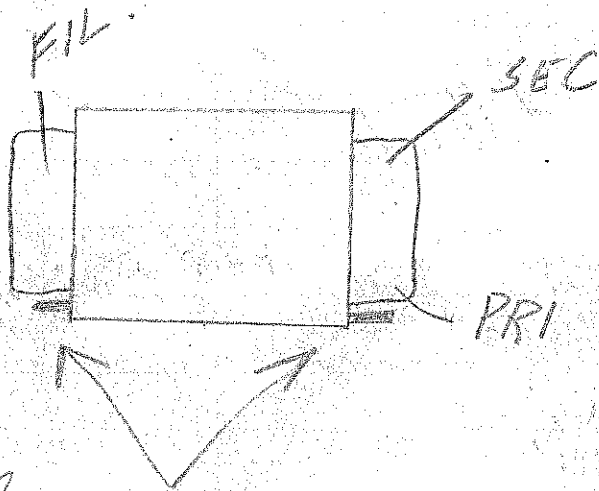


DESIGNED BY

SW

DATE

5/14/37



Lower bolts made of threaded rod
to project $\frac{3}{4}$ " past end of nut
no legs

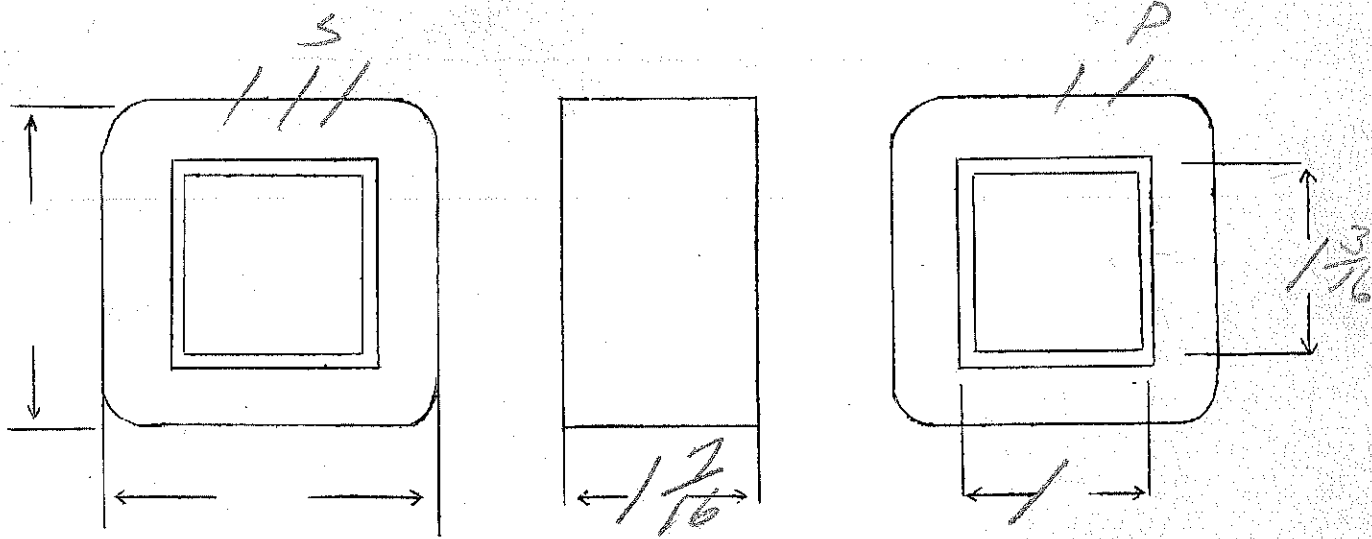
Ep-118V
 Es-680VCT. - 60 MA
 Ef-6.3V- 1amp
 E₂-5V- 2amp

VA-2.1

4.65

SPEC. NO. 3302

Winding	SEC	SHIELD	PRI	F ₁	F ₂		
Turns	3300	74	550	32	26		
Taps	1650						
Wind. Lgth.	1.25						
Wire Size	#35	#27	#27	#23	#20		
T.P.L.	184-18		74-8				
Kind Term.	#22 collar		#20 Par Br				
Term. Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 16#		40#				
Test Volt.	2500		1250				
Wrapper	1007VC	1005VC	2005GA	2005GA	2005SA		
TUBE	52007	IMPREGNATION			Varnish		
CORE	1x1 ³ / ₁₆	PRIMARY V.A.					
MOUNTING	A						



DESIGNED BY *GW*

DATE 5/17/37

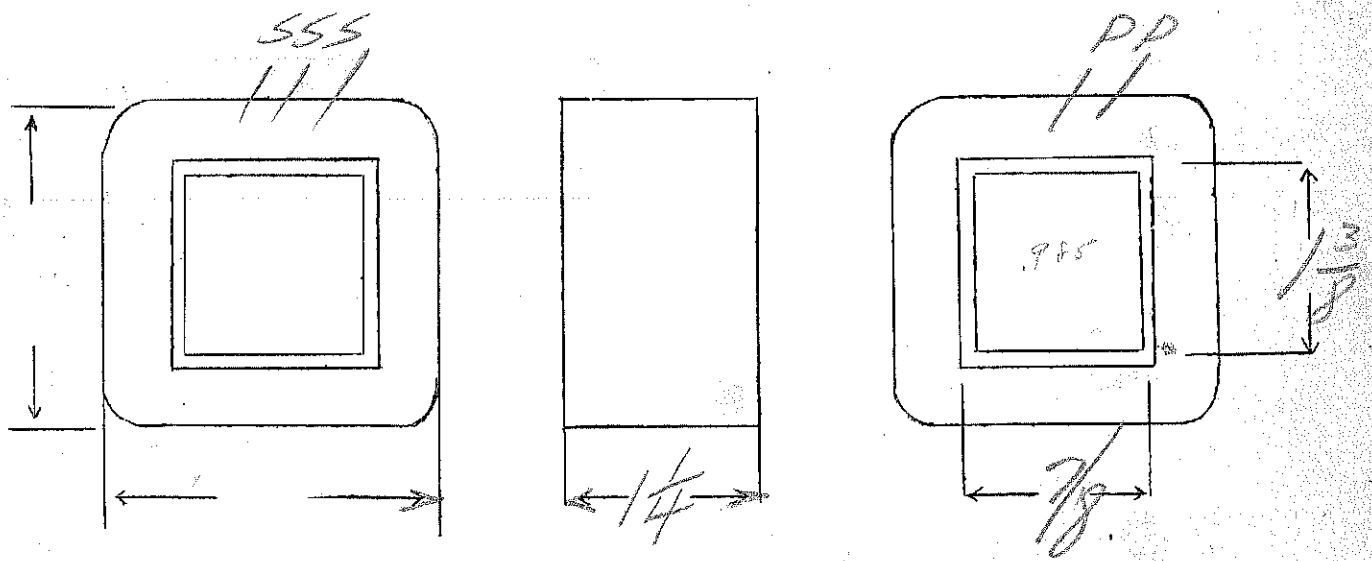
EP-118V
 ES-680VCT-60ms
 EF-6.3V-1amp

VA-27
 4.5

SPEC. NO. 3303

Winding	SEC	SHIELD	PRI	F.			
Turns	3140		535	31			
Taps	1570		—	—			
Wind. Lgth.	1 1/16	✓	✓	✓			
Wire Size	#35	#28	#28	#23			
T.P.L.	157-70		70-8				
Kind Term.	#22 Cellac	W.O.	#20 Cellac	W.O.			
Term. Lgth.	9"	3"	9"	9"			
Layer Insul.	double 14#		40#				
Test Volt.							
Wrapper	1L007VC	1L007VC	2L005GA	2L005GA			
TUBE	5L007	IMPREGNATION		Varnish			
CORE	1/8 x 1 3/8	PRIMARY V.A.					
MOUNTING	A						

CU. 525 - 500.5
 F₂ 12.7



DESIGNED BY *GW*

DATE 5/17/37

Ep - 115 - 130 - 147 - 168 - 190

E_s - 2800 VCT. - 350 M9

144

SPEC. NO. 3304

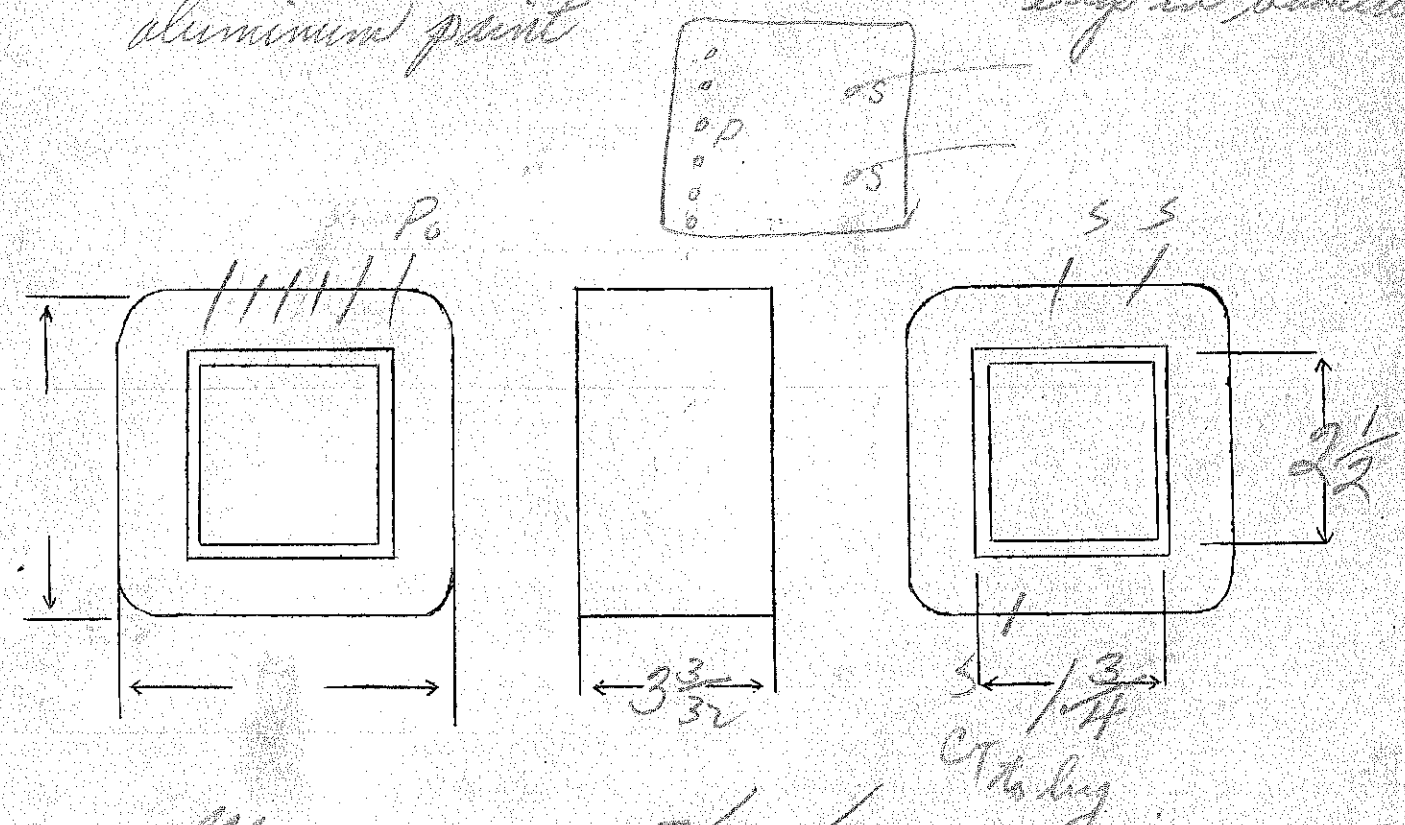
Continuous

Winding	SEC	PR1				
Turns	4300	166	45	62		
Taps	2150		21	30		
Wind. Lgth.	2 9/16	2 5/8				
Wire Size	#27	#14	#17	#19		
T.P.L.	54-28	4.5L	.9L	1L		
Kind Term.	WIRE ONLY					
Term. Lgth.	3"	4"	4"	4"		
Layer Insul.	double 40#	.007	KRAFT		6" #14 motor lead out panel	
Test Volt.	5000					
Wrapper	2400 VCT 3100 SGA					

TUBE | 191007 + 11007VC | IMPREGNATION | VARNISH

CORE | 1 3/4 x 2 1/2 | PRIMARY V.A. |

MOUNTING *Aluminum shell - bakelite top - aluminum paint*



DESIGNED BY *Shee*

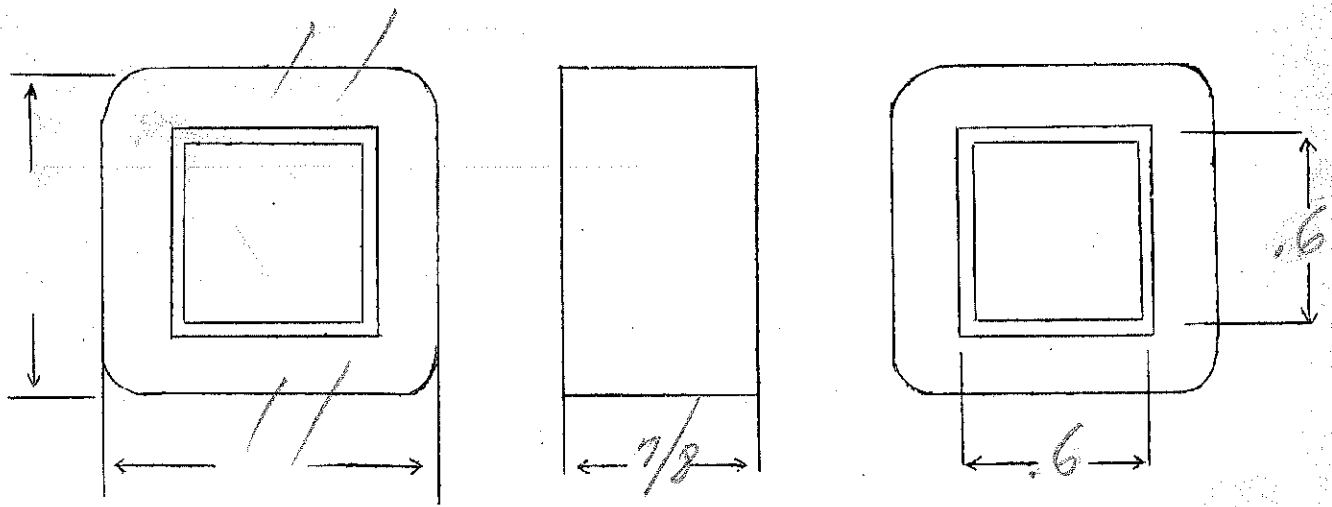
DATE *5/17/37*

word
 Ep - 95V - 12.5 MA.
 Es - 6.3V - 150 MA

SPEC. NO. 3305

Winding	P	S				
Turns	2300	255				
Taps	—	—				
Wind. Lgth.	3/4"	✓				
Wire Size	#39	#28				
T.P.L.	180-13	51-5				
Kind Term.	oil	Brand				
Term. Lgth.	3"	3"				
Layer Insul.	16 #	30 #				
Test Volt.						
Wrapper	2L005GA	2L005GA				

TUBE	7L007	IMPREGNATION	VARNISH
CORE	6x6 - 2x2 stick	PRIMARY V.A.	
MOUNTING	D - Panel on bottom		



DESIGNED BY *SW*

DATE *5/20/37*

E_p - 210-220-230-240

E_{f1} - 2.5VCT - 10Amp

10000V Ins.

E_{f2} & E_{f3} ea. 2.5VCT - 5Amp

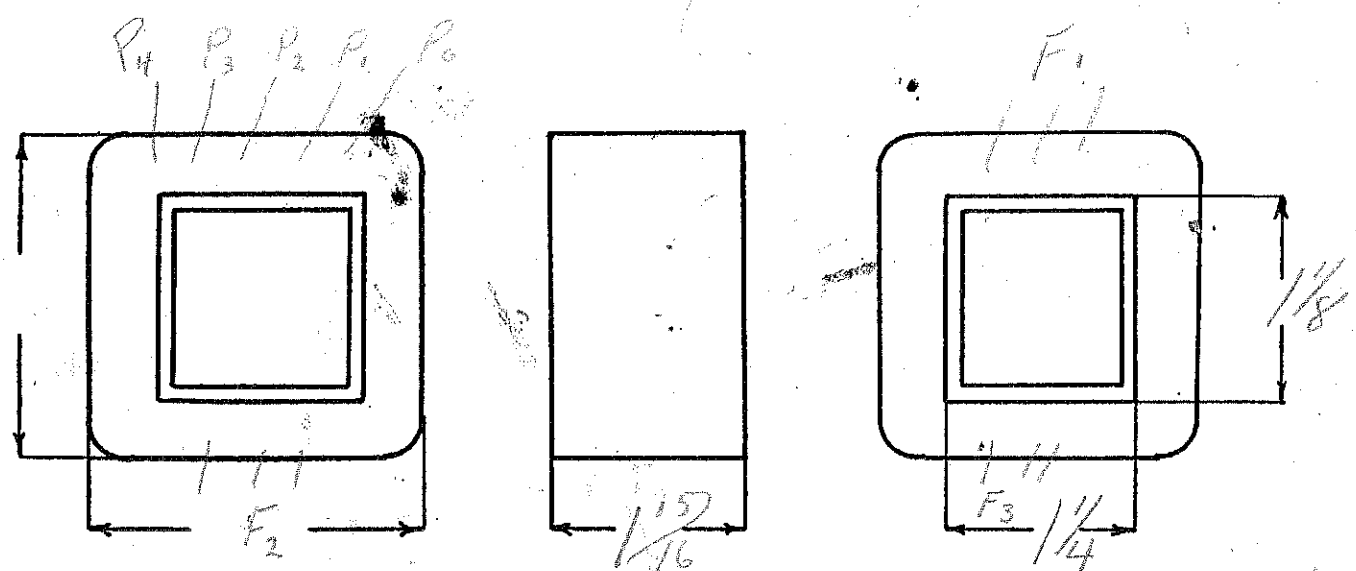
SPEC. NO. F3306-230V

Winding	P_1	F_1	F_2	F_3		
Turns	1020 980	12	12	12		
Taps	940 900	6	6	6		
Wind. Lgth.	1 3/4	Center	Center	Center		
Wire Size	#26	#13	#16	#16		
T. P. L.	90-13					
Finish						
Type Lead	Wire Only					
Lead Lgth.	4"	4"	4"	4"		
Layer Insul.	50#		007K			
Test Volt.	1250V		10000			
Wrapper	3L007VC 2L007GA	3L007VC 2L007GA	3L007VC 2L005GA	3L007VC 2L005GA		

TUBE 9L0076K IMPREGNATION Vacuum

CORE 1/4 x 1/8 GA. 24 GRADE D STACK 2x2

MOUNTING J



DESIGNED BY JCY

DATE 4-12-39

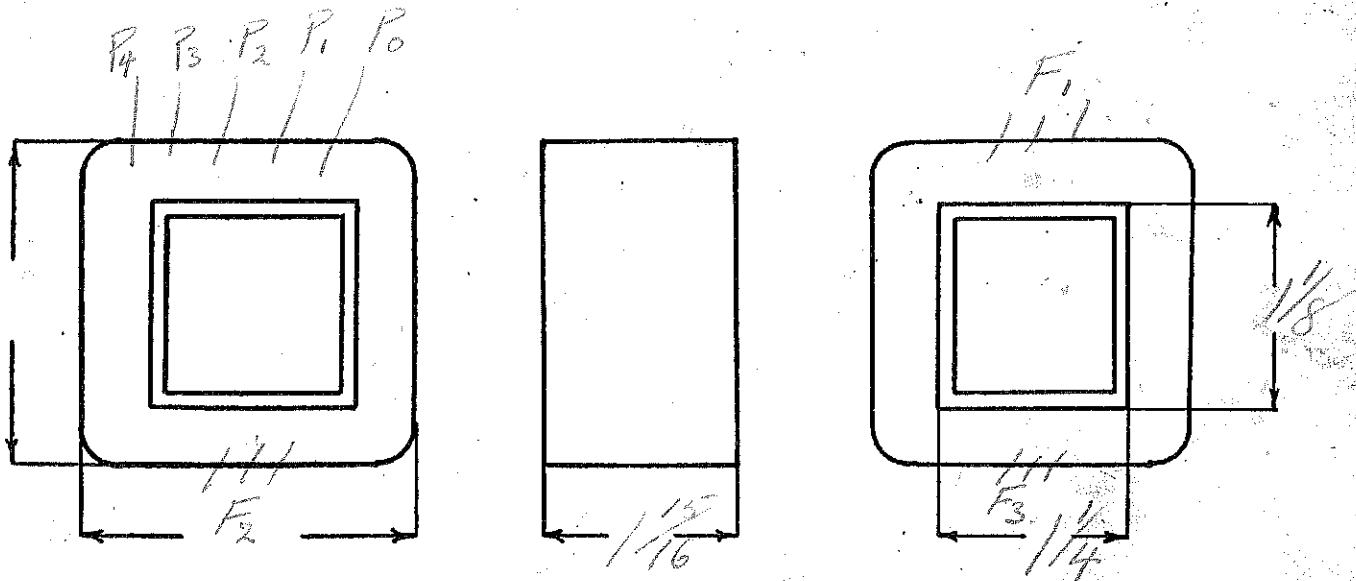
$E_p - 105, 110, 115, 120$
 $E_{F1} - 2.5VCT - 10Amp$ $E_{F2} - 2.5VCT - 5Amp$ OLD
 $E_{F3} - 2.5VCT - 5Amp$ $10,000V/ms.$
 FILAMENT TRANSFORMER $N/E = 4.25$ SPEC. NO. F 3306

Winding	Pri	F ₁	F ₂	F ₃			
Turns	510 490	12	12	12			
Taps	470 450	6	6	6			
Wind. Lgth.	134	Center Winding					
Wire Size	#23	#13	#16	#16			
T. P. L.	67						
Finish							
Type Lead	Tinsel Bunch						
Lead Lgth.	4"	4"	4"				
Layer Insul.	50#						
Test Volt.	2500		70000				
Wrapper	4L007VC 2L005GA	4L007VC 2L007GA	4L007VC 2L007GA	4L007VC 2L007GA			

TUBE 9L007GK IMPREGNATION Varnish

CORE 1/4 x 1/8 GA. 24 GRADE D STACK 2X

MOUNTING J - Stand off insulators



DESIGNED BY G. W.

DATE

EP-10-120V

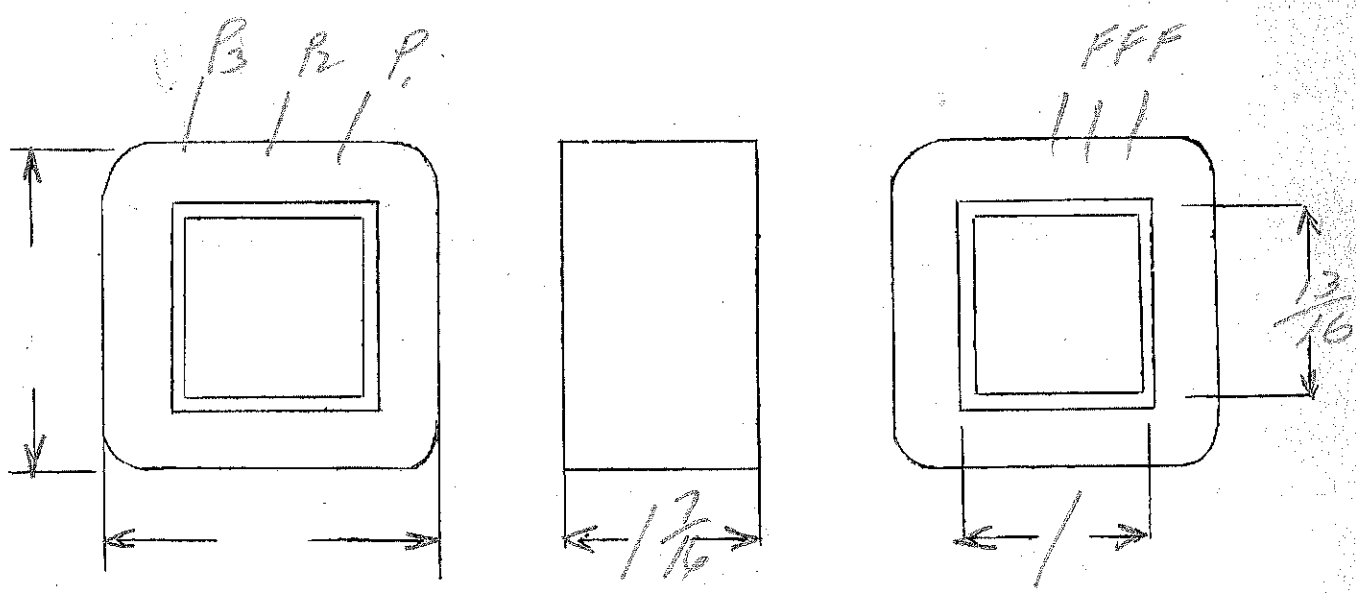
E_F - 5V-4 amps - 2500V Ins.

N_{1/2} = 70

SPEC. NO. 3307

Winding	PRI	SEC				
Turns	840	40				
Taps	770	20				
Wind. Lgth.	1.25	1.25				
Wire Size	#28	#16				
T.P.L.	82-11	2L				
Kind Term.	Sil Pa	wire only				
Term. Lgth.	3"	3"				
Layer Insul.	40#					
Test Volt.	1250	2500				
Wrapper	1200 PVC 2100 SGA	1100 PVC 2100 SGA				

TUBE	76007	IMPREGNATION	VARNISH
CORE	1 x 13/16	PRIMARY V.A.	
MOUNTING	B		



DESIGNED BY gw

DATE 6/4/37

Ep-105-110-115V

Es-5V, 30 amp - 10000V. Ins

VA = 150

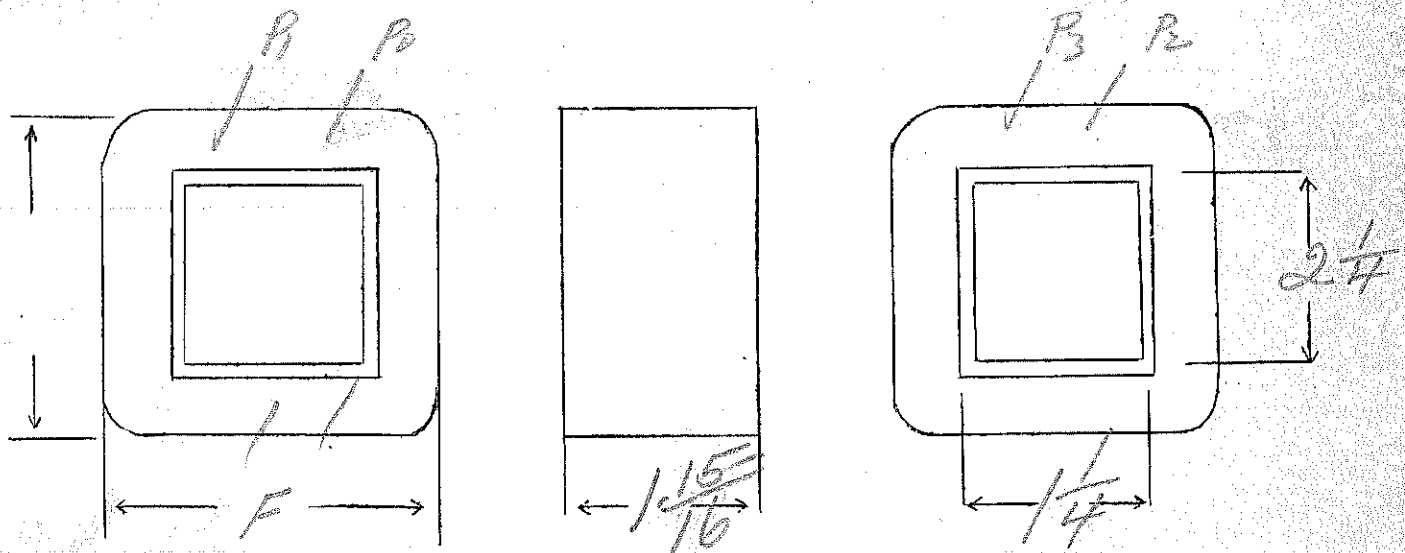
2.2

SPEC. NO.

3308

Winding	PRI	SEC				
Turns	253	12				
Taps	242-232	-				
Wind. Lgth.	1.75					
Wire Size	#20	double #10				
T.P.L.	6L	2L				
Kind Term.	WIRES ONLY					
Term. Lgth.	3"	3"				
Layer Insul.	50#	.009K				
Test Volt.	4000V	4000V	10000V			
Wrapper	20076A	20076A				
TUBE	76007		IMPREGNATION	VARNISH		
CORE	1 1/4 x 2 1/4		PRIMARY V.A.			
MOUNTING	B					

Pri wrapper should be 2" wide to lap over spec.



DESIGNED BY

Gar

DATE

6/4/37

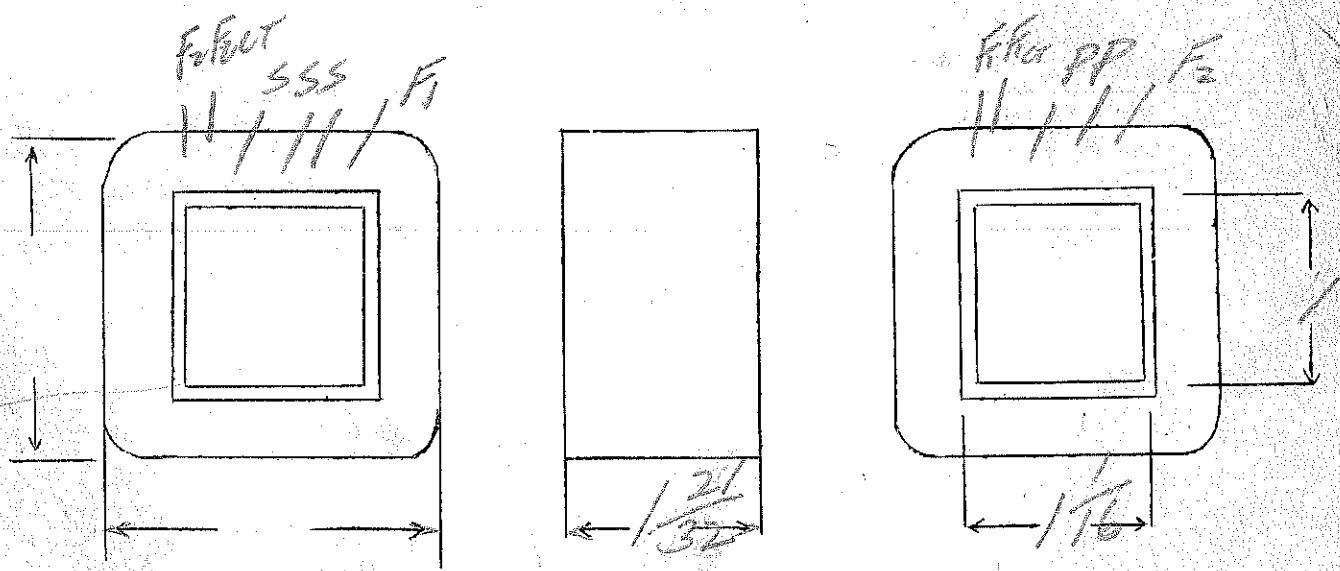
ED-120V
 ES-700VCT-70ma
 EF1-5V-3amp CT
 EF2-1.2V-1.5amp CT

52

SPEC. NO. 3309

Winding	SEC	SHIELD	PRI	F1	F2		
Turns	3880	70	623	29	36		
Taps	1940			14	18		
Wind. Lgth.	$1\frac{15}{32}$	$1\frac{15}{32}$	$1\frac{15}{32}$				
Wire Size	#34	#25	#25	#18	#21		
T.P.L.	194-20		70-9				
Kind Term.	sil Br	WIPE	PNLY				
Term. Lgth.	3"	3"	3"				
Layer Insul.	double 16 #		40#				
Test Volt.							
Wrapper	1L007C	1L007C	2L005GA	2L005GA	2L005GA		

TUBE 7L007 IMPREGNATION VARNISH
 CORE $1\frac{1}{16} \times 1$ PRIMARY V.A.
 MOUNTING \odot



DESIGNED BY *D. Sawyer*

DATE 6/1/29

Ep-230V

Es-1800V-10ma

SPEC. NO. 3310-230V

Winding	PRI	SEC			
Turns	1580	13,000			
Taps					
Wind. Lgth.	1/2	7/8			
Wire Size	#32	#41			
T. P. L.	52-31	260			
Finish	W.O				
Type Lead		SIL BR			
Lead Lgth.	3'	3"			
Layer Insul.	30 H	double 14 H			
Test Volt.					
Wrapper	21005GA	3 L007V 11005GA			

TUBE 7L007H 1000 Wc over sec IMPREGNATION *Double Premium*

CORE 1 x 3/4 ^{on core} GA. ^{1.5-2"} 24x GRADE STACK *Double*

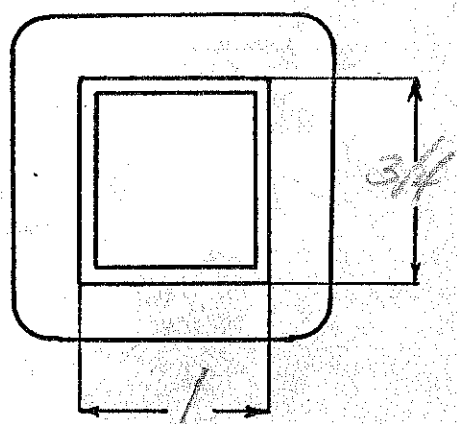
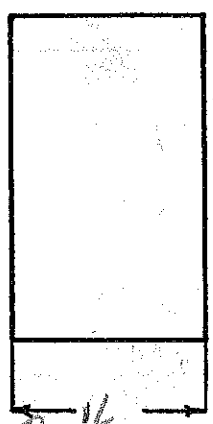
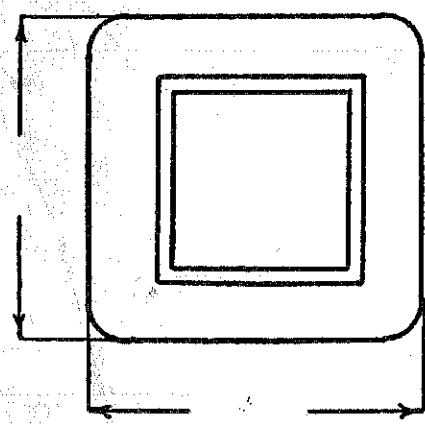
MOUNTING *Uniced neon type*

$\frac{E}{V} = 6.866$

sec + pri to legs

use 12,020" mica under sec panel

shunts 1" x 0.40"
.005" shim stock
34 pins 24 gauge
each side



DESIGNED BY *gww*

P. #16
5-13/32

DATE *9/27/38*

$E_p - 110V$
 $E_{s1} - 1800V @ 10ma$

DO NOT DUPLICATE Difficult to start
 see reverse side
 see spec 8565
 E.J. Rose

$E_{s2} - 6V @ 1.5a$ Pilot Light

Separate Tube

SPEC. NO. 3310-U

Winding	Primary	Fil.	Secondary
Turns	728	41	12,500
Taps	-	-	-
Wind. Lgth.	1/2"	1/2"	7/8"
Wire Size	29 PE	#22	41 PE
T. P. L.	41-15L	17-2L	288-44L
Finish			
Type Lead	W.O.	W.O.	Sil. Br.
Lead Lgth.	3"	3"	3"
Layer Insul.	#30-1L	1L-.005GA	Double #14
Test Volt.	1500V		5000V
Wrapper	2L 1005 GA	2L .005 GA	3L-.007 VC 1L-.005 GA

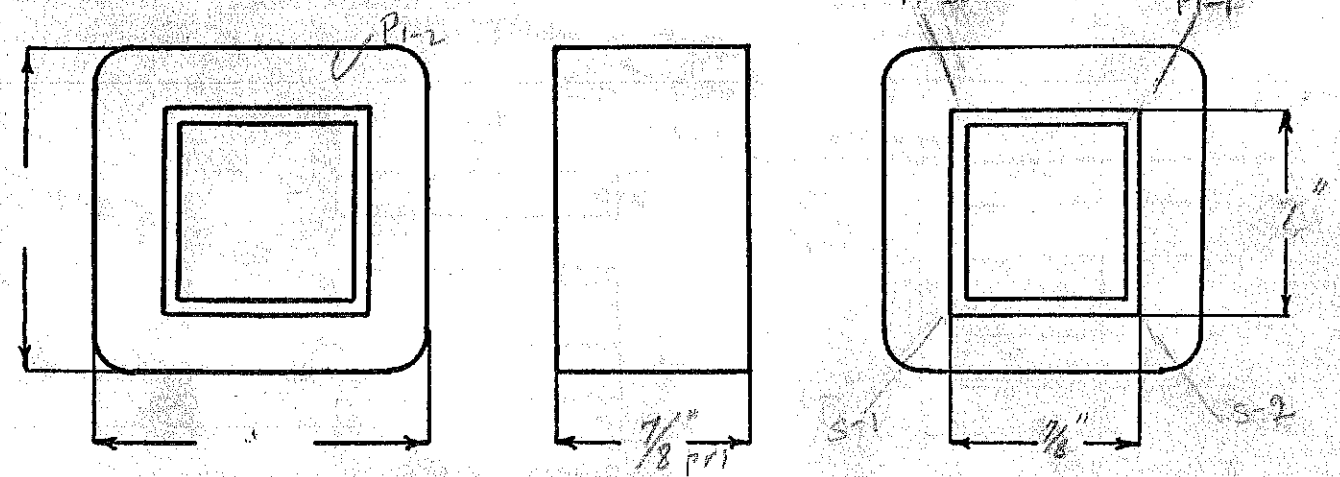
TUBE 8L-.0066K + 1L-.007VC on sec. tube IMPREGNATION Double Varnish

CORE 1/8" x 1" GA. 29 GRADE STACK (See order)

MOUNTING uncased Neon type Leg brackets

$T_v = 6.62$

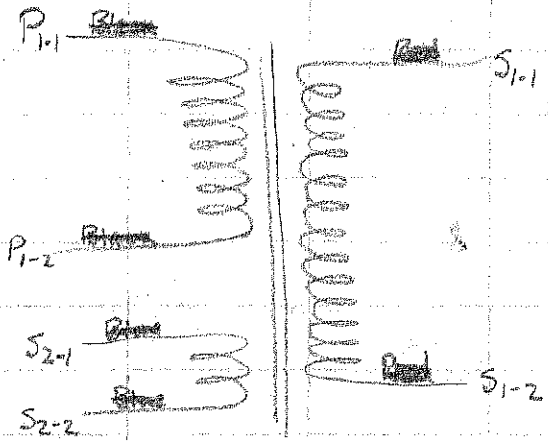
Sec'd Pri to Lugs
 Use 1L - .020" mica under Sec Panel
 Shunts 1 1/2 x .418" .29 gage



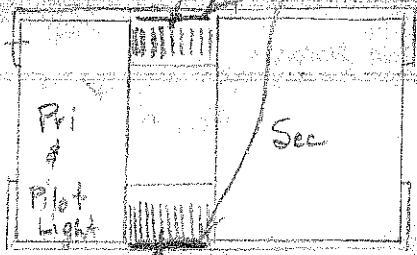
DESIGNED BY CEX

1 1/8" sec

DATE 12/17/45

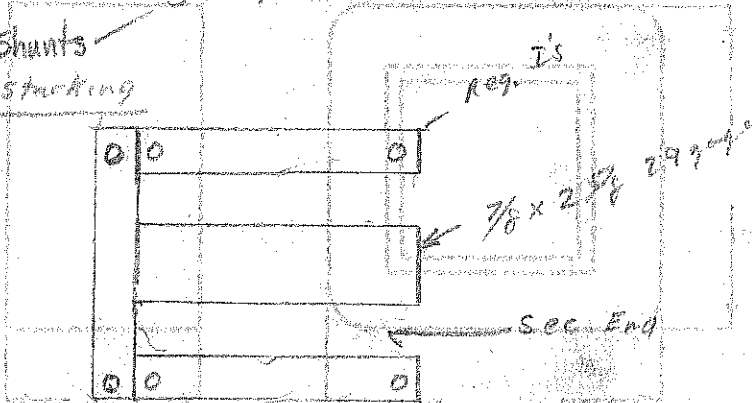
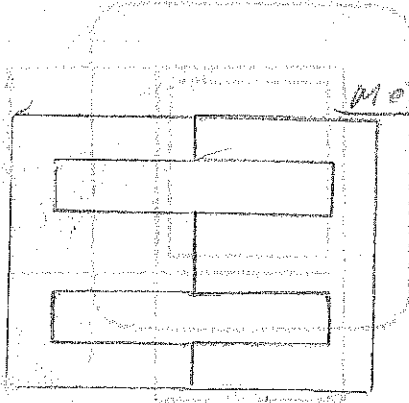


Shunts .003 copper



34 sq.

Method of stacking



1 layer of ES

3 layers of I's

E_p - 120 V.

E₃ - 1800 V. - 10 Ms. - 20 V.A. (Actual 8 Ms. ss)

26.53

6154 ohms

SPEC. NO. 3310

Winding	FRI		SW				Prin + See Form
Turns	695		14,000				Changed 10/10/38
Taps	-		-				
Wind. Lgth.	$\frac{1}{8}$		$\frac{7}{8}$ "				11/27/40
Wire Size	#20		#41				OK by Rose
T. P. L.	57-22		R60				Doc. Brewster
Finish							
Type Lead	W.O.		911. Br.				
Lead Lgth.	3"		3"				
Layer Insul.	40%		2L #14 or eq.				
Test Volt.							
Wrapper	2L.0050A		2L.007VC				
TUBE	2L.007 + 1L.007VC on sec		IMPREGNATION		Double Varnish - Dip lamination on second bake		

DO NOT USE
 SEE 7497

CORE 1 x $\frac{3}{4}$ one long E - 2" GA. one short E - 1.5"

GRADE

STACK 2 x 2

MOUNTING Special uncase

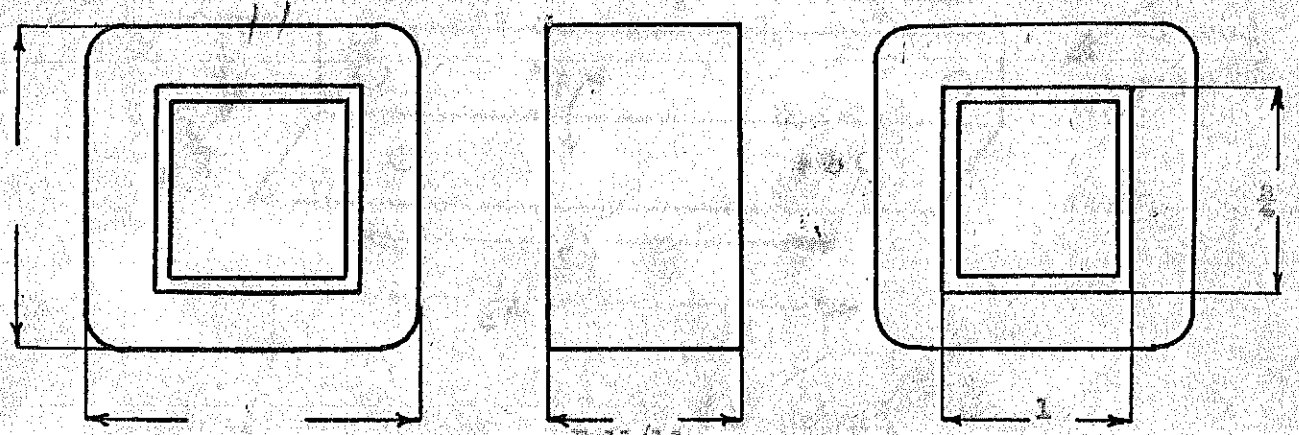
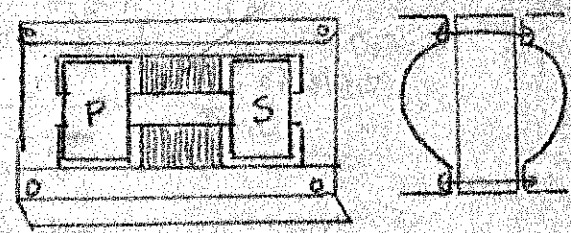
MAGNETIC GAP

34 pcs 29ga. each side

SHUNTS .47. use .003 shim stock.

SEC 4 PPI TO LUGS.

USE 1L 000" mica under sec panel.



P-11/16
S-1-3/32

DESIGNED BY OW

DATE 6/4/37

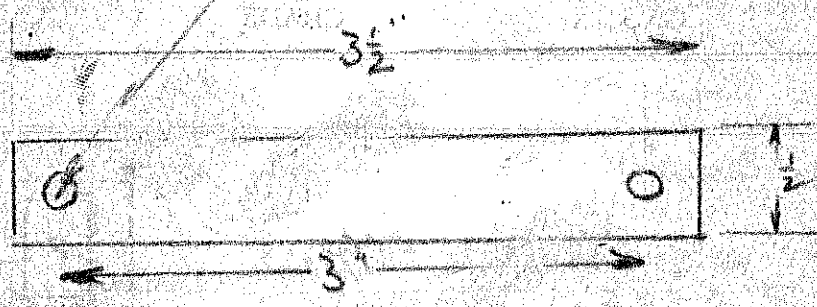
020 "Mild Steel" 1' x 1 1/4"

SPECIAL BRACKETS

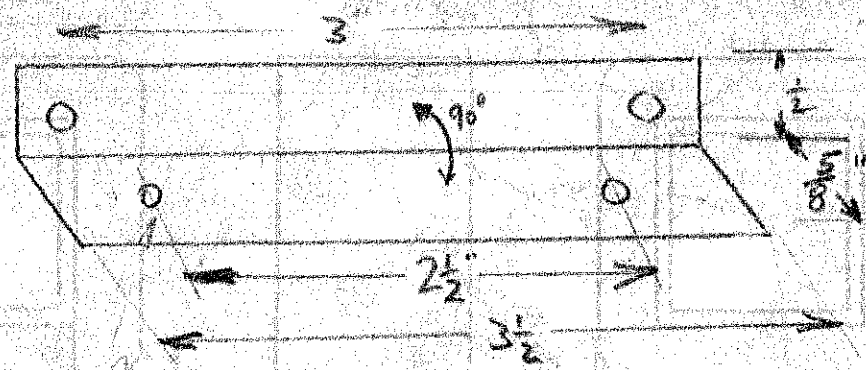
(#12 screw)

2 Holes #12 (2)

TOP BRACKET (a)



LOWER BRACKET (b)



2 Holes #8 (2)

Ep - 110V - 12.5 ma

special current transformer

Es - 6.3V - 150MA

285

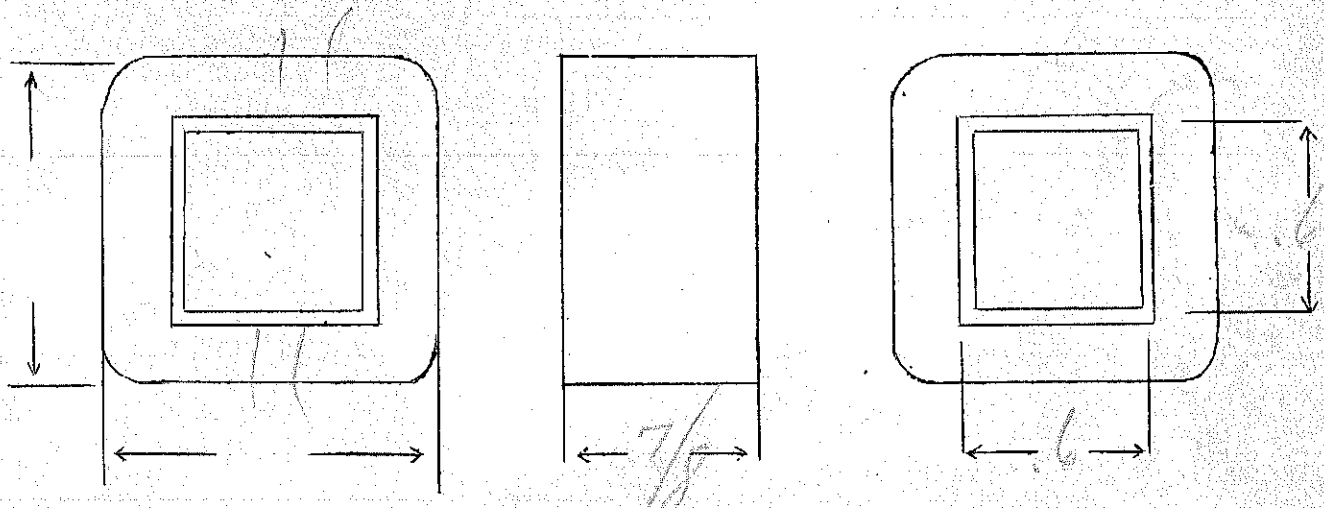
(75000 in to be used)

SPEC. NO.

3311

Winding	PR1	SEC				
Turns	3100	230				
Taps						
Wind. Lgth.	3/4	3/4				
Wire Size	#39	#28				
T.P.L.	173-18	50-5				
Kind Term.	sil. braid					
Term. Lgth.	3"	3"				
Layer Insul.	16#	30#				
Test Volt.						
Wrapper	240058A	240058A				

TUBE	76007	IMPREGNATION	VARNISH
CORE	6 x 6 - 2 1/2" stand	PRIMARY V.A.	
MOUNTING	D - Band in bottom		



DESIGNED BY *SW*

DATE 6/2/37

E_p - 110-115-120 V.
 E_s - 2500 V. - 160 Ma.
 E_T - 10.25 V.C.T. @ 4 Ampr.

$N/E = 1.2$

Diathermy

SPEC. NO. 5312

Winding	SEC	PRI	FIL			
Turns	3200	144	15			
Taps	-	130 132	0 1/2			
Wind. Lgth.	2-1/8	2 1/2				
Wire Size	#29	#14	Double #19			
T. P. L.	160-20	30-5A				
Finish						
Type Lead	W I R E O N L Y					
Lead Lgth.	3"	3"	3"			
Layer Insul.	Double 40	.007				
Test Volt.	7500					
Wrapper	3L.007VC 2L.005GA	2L.005GA	2L.005GA			

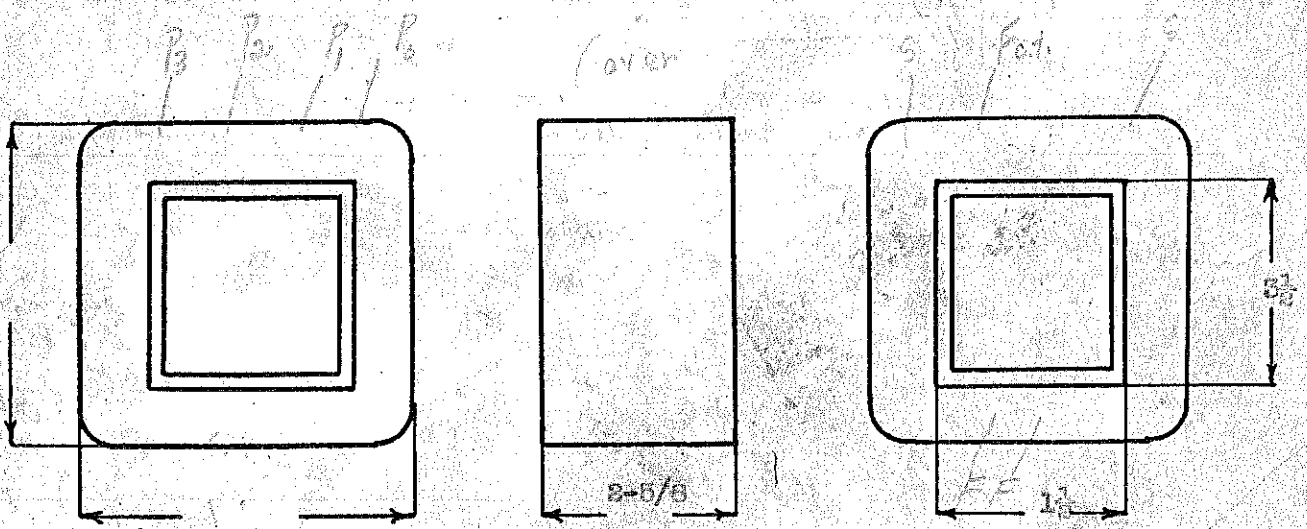
TUBE 10L.007 + 1L.007VC IMPREGNATION VARNISH

CORE 1 1/2 x 3 1/2 GA. GRADE STACK

MOUNTING Unoused

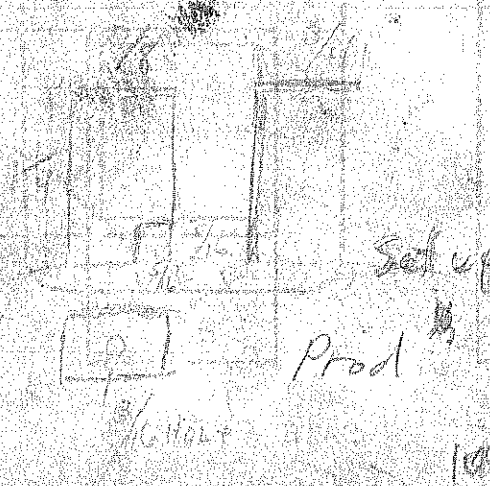
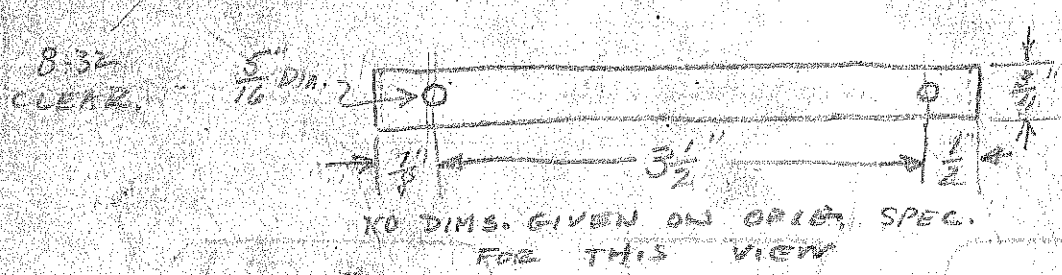
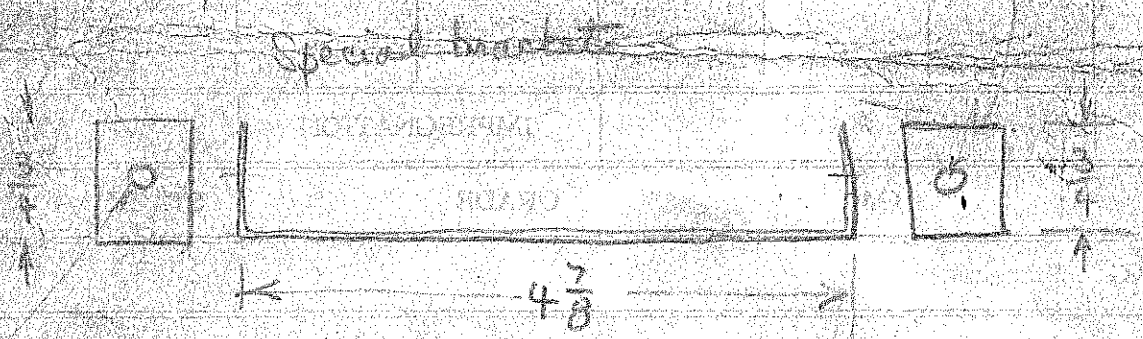
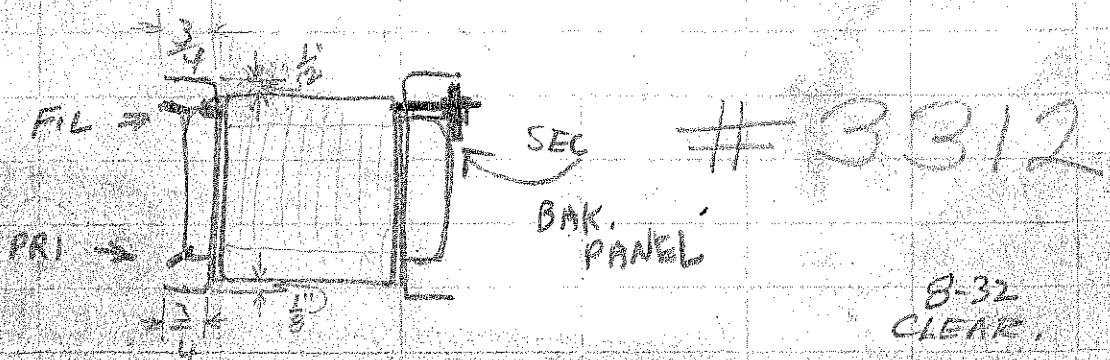
lead in coil

Fil & Pri to lugs, sec to bakelite strip



DESIGNED BY GW

DATE 6/2/37



SHEAR SIZE = $\frac{3}{8} \times \frac{1}{64}$

M. 1003
 L. 0030
 D. 11 .015
 104

1.80
 1.10
 5.00

Cost @ .9
 9 .10 ea
 100 100

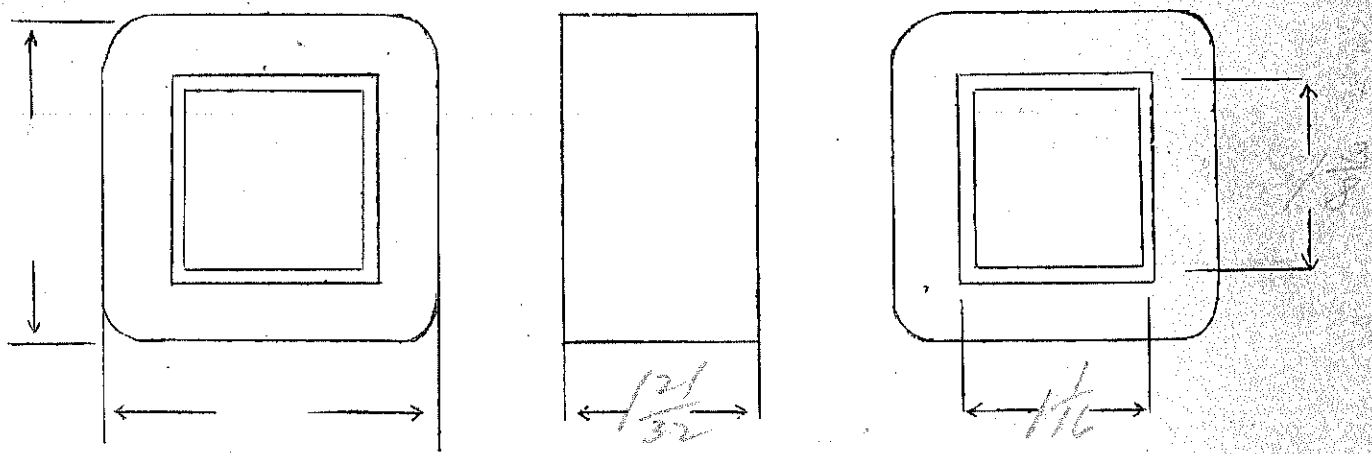
150
 133
 100 300 .03

Serial No. 2387 with cap

SPEC. NO. 3313

Winding		SHIELD					
Turns		1					
Taps							
Wind. Lgth.		1 1/2 0.2					
Wire Size		54/41 STOCK					
T.P.L.							
Kind Term.		Sil Br					
Term. Lgth.		3"					
Layer Insul.							
Test Volt.							
Wrapper							

TUBE		IMPREGNATION
CORE		PRIMARY V.A.
MOUNTING	A	



DESIGNED BY *GW*

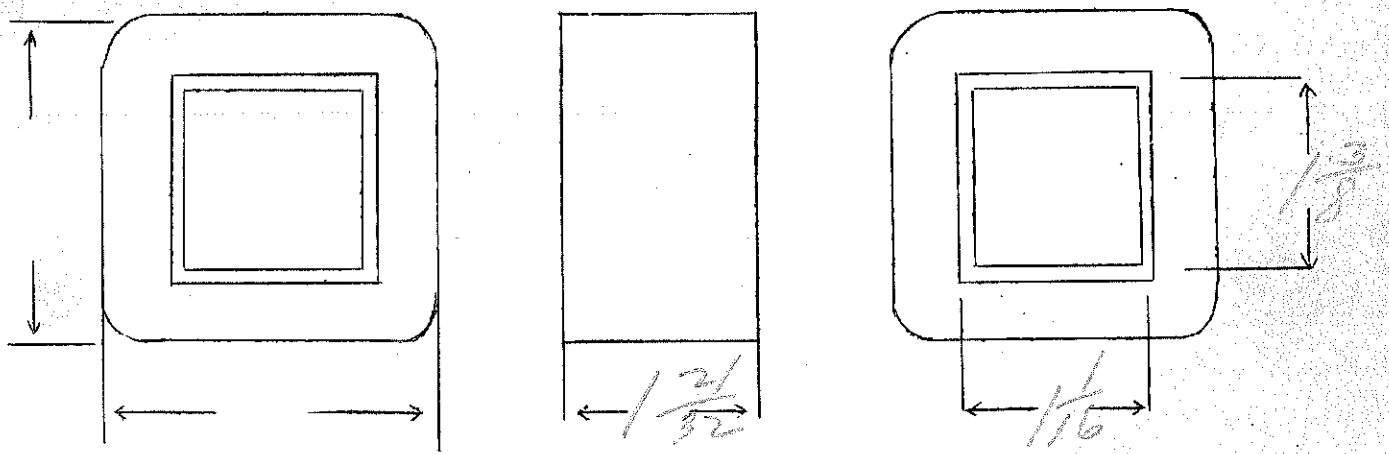
DATE *6/1/37*

Adme as 2378 except for shield

SPEC. NO. 3314

Winding		SHIELD					
Turns		163					
Taps							
Wind. Lgth.		$1\frac{15}{32}$					
Wire Size		#33					
T.P.L.							
Kind Term.		sil Bi					
Term. Lgth.							
Layer Insul.							
Test Volt.							
Wrapper		21458A					

TUBE		IMPREGNATION
CORE		PRIMARY V.A.
MOUNTING	A	



DESIGNED BY *[Signature]*

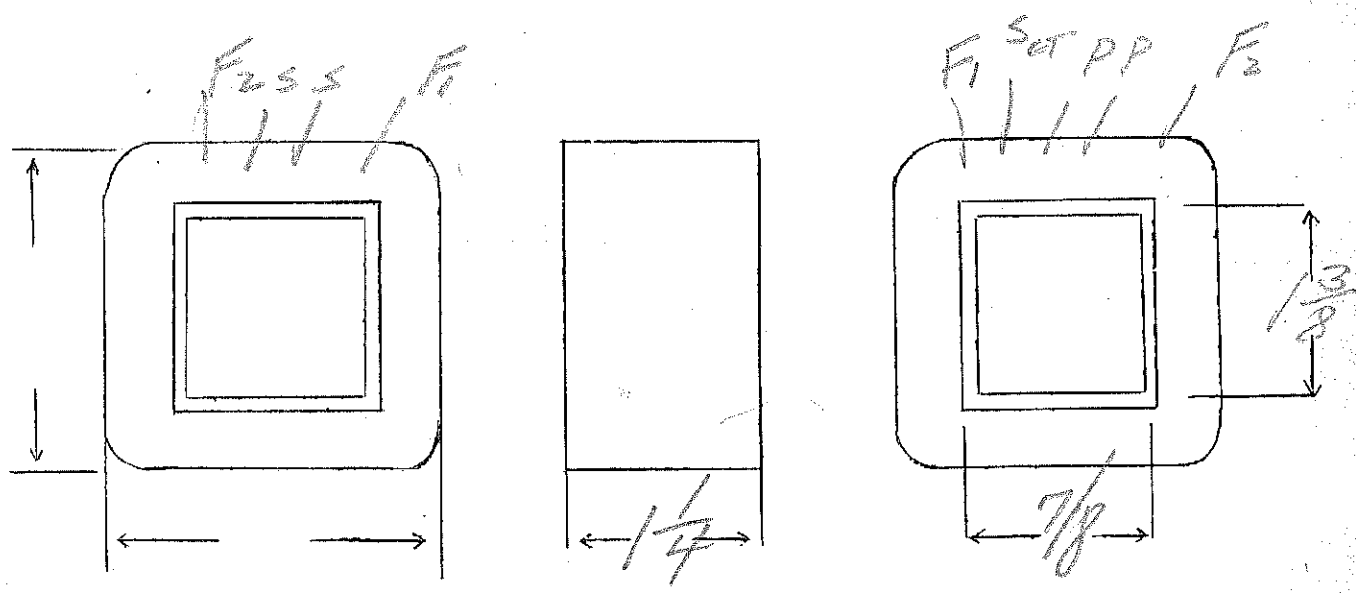
DATE *6/1/37*

$E_1 - 118V$
 $E_2 - 650VCT. - 50MA$
 $E_3 - 5V - 2amp$

$E_{F_1} - 6.3V - lamp$ $V_A =$

SPEC. NO. 3315

Winding	SEC	SHIELD	PRI	^{QUAN} F ₁	^{QUAN} F ₂		
Turns	2740	64	512	24	30		
Taps	1370						
Wind. Lgth.	1 1/16	1 1/16	1 1/16				
Wire Size	#37	#27	#27	#21	#23		
T.P.L.	196-14	64	64-8				
Kind Term.	#20 Pn/B	NO.	#20 Pn/B	WIRE ONLY			
Term. Lgth.	9"	3"	9"	9"	9"		
Layer Insul.	double 16#		40#				
Test Volt.							
Wrapper	1L007VC	1L007VC	2L005BA	2L005BA	2L005BA		
TUBE	52007	IMPREGNATION		VARNISH			
CORE	7/8 x 1 3/8	PRIMARY V.A.					
MOUNTING	A						



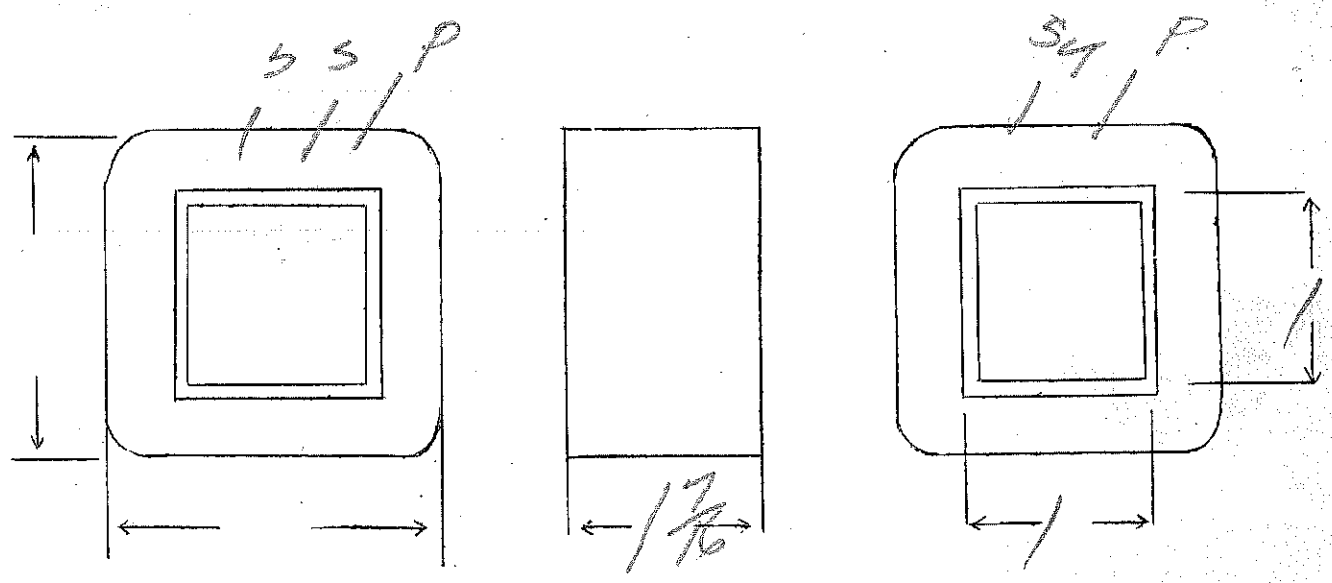
DESIGNED BY *EW*

DATE 6/4/37

Ep-118V EF1-5V-2A
 E3-650VOT-50MA EF2-6.3V-1A

SPEC. NO. 3316

Winding	SEC. SHIELD	PRI	F ₁	F ₂		
Turns	3700	74	655	30	38	
Taps	1850			-	-	
Wind. Lgth.	1.25	1.25	1.25			
Wire Size	#36	#27	#27	#21	#23	
T.P.L.	206-18		74-9			
Kind Term.	#20 P10 P11		#20 P10 P11	WIRE ONLY		
Term. Lgth.	9"	3"	9"	9"	9"	
Layer Insul.	double 16#		40#			
Test Volt.						
Wrapper	1007VC	1007VC	21005GA	21005GA	21005GA	
TUBE	61007			IMPREGNATION	VARNISH	
CORE	1x1			PRIMARY V.A.		
MOUNTING	A					



DESIGNED BY *SW*

DATE *6/4/37*

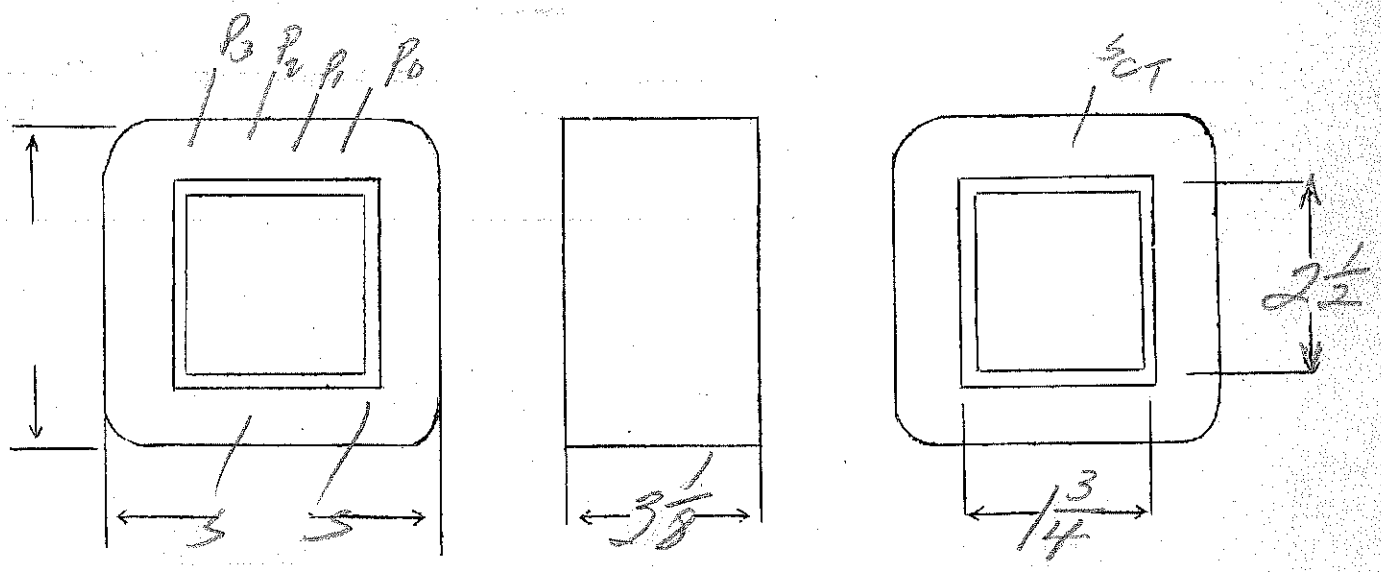
Ep - 120 - 137 - 160V - 60W

Es - 3000 V.C.T. @ 160ms cont (300 peak) for 2-311

SPEC. NO. 3316

		<i>Continuous</i> ¹⁹²					
Winding	SEC	PR1					
Turns	4600	170	24	33			
Taps	2300						
Wind. Lgth.	2½	2½					
Wire Size	#28	#16	#18	#19			
T.P.L.	166						
Kind Term.	0	WIRE ONLY					
Term. Lgth.	3"	3"					
Layer Insul.	double 40#	007 Kraft					
Test Volt.	7500						
Wrapper	3L007VC 2L0059A		2L0059A 1L010RR				
TUBE	10L007+1L007VC			IMPREGNATION	VARNISH		
CORE	1¾ x 3½			PRIMARY V.A.			
MOUNTING	C - stamped steel case -						

sec leads out top of shell cover - 6"
 sec C.T. to lug below
 Pri - to lug



DESIGNED BY *Duncan*

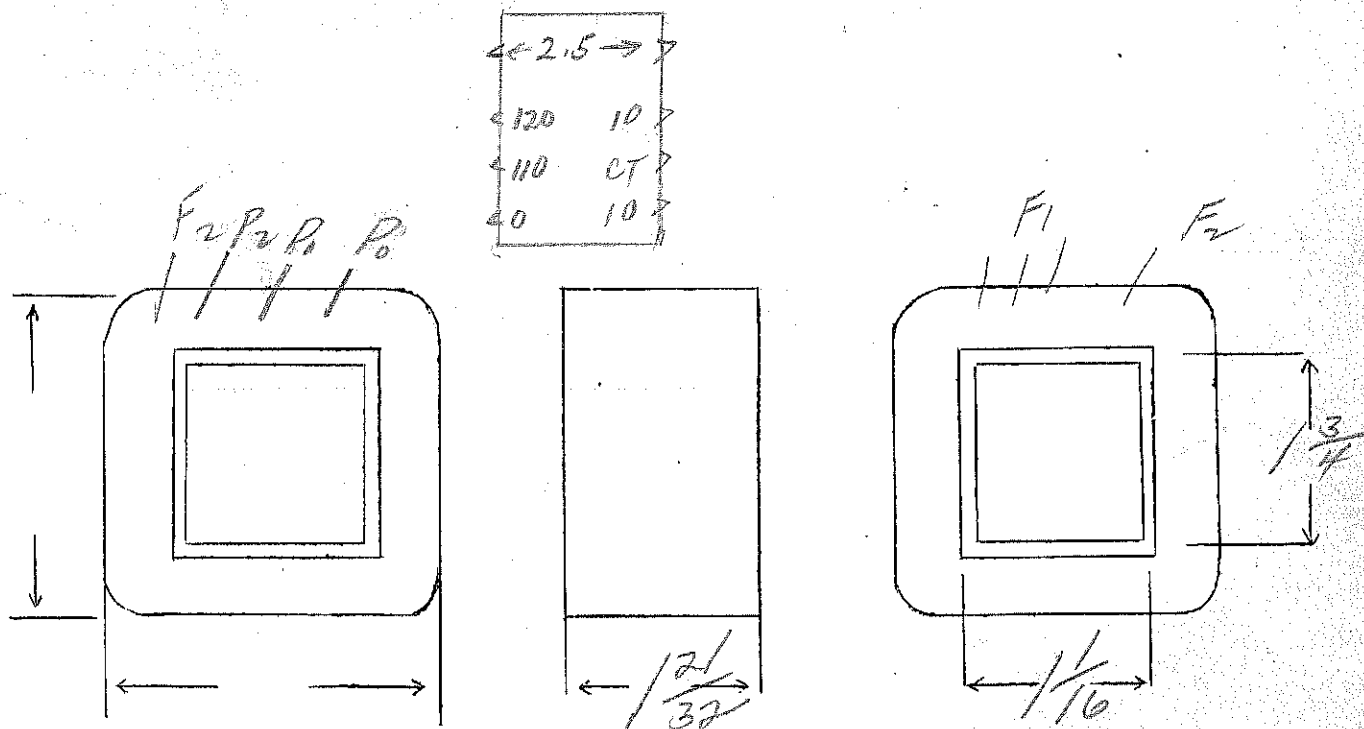
DATE *6/2/37*

Ep-110-120
 EF-10VCT.-8amp
 EF-2.5V@10amp

3.28

SPEC. NO. 3317

Winding	D	F ₁	F ₂			
Turns	394	36	9			
Taps	362	18				
Wind. Lgth.	1 ¹⁵ / ₃₂					
Wire Size	#22	#13	#12			
T.P.L.	51-8					
Kind Term.	WIRES ONLY					
Term. Lgth.	3"	3"	3"			
Layer Insul.	40H					
Test Volt.						
Wrapper	21005GA	21007VC	21007VC			
TUBE	76007	IMPREGNATION		VARNISH		
CORE	176 x 13/4	PRIMARY V.A.				
MOUNTING	C					



DESIGNED BY G. Weaver DATE 2/18/37

Ep - 110-120V

Es - 90-1100-1300-1500V - 300 watts

Ef - 7.5 V.C.T. - 6.5 amps 17

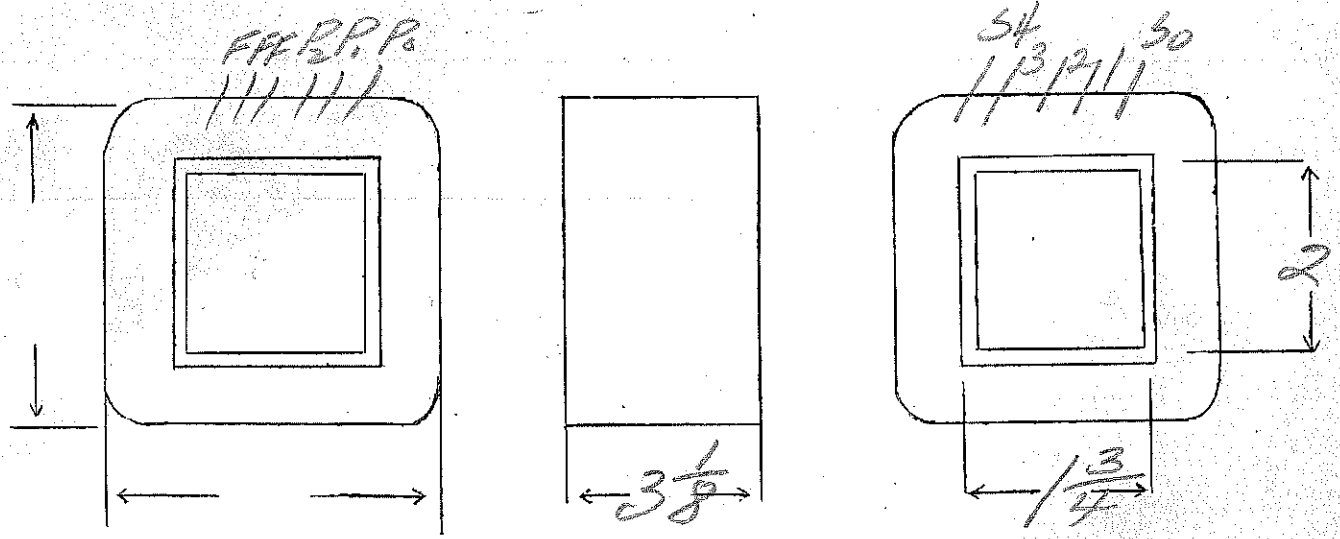
SPEC. NO. 3318

Winding	SEC		PRI	F ₁			
Turns	2700		204	14			
Taps	2380 2030	1650	187	7			
Wind. Lgth.	2 5/8						
Wire Size	#27		#14	#14			
T.P.L.	150						
Kind Term.	0		WIRE ONLY				
Term. Lgth.	3 1/2		3"	3"			
Layer Insul.	double 40#		007 Kraft				
Test Volt.	5000						
Wrapper	2100 TV 21005GA		21005GA	21005BA			

TUBE	106007+16007VC	IMPREGNATION	VARNISH
CORE	1 3/4 x 2	PRIMARY V.A.	

MOUNTING C - (open type)

start sec lead #20 Dulac
sec taps to lugs
silv & pri to lugs



DESIGNED BY *Drewner* DATE 6/8/37

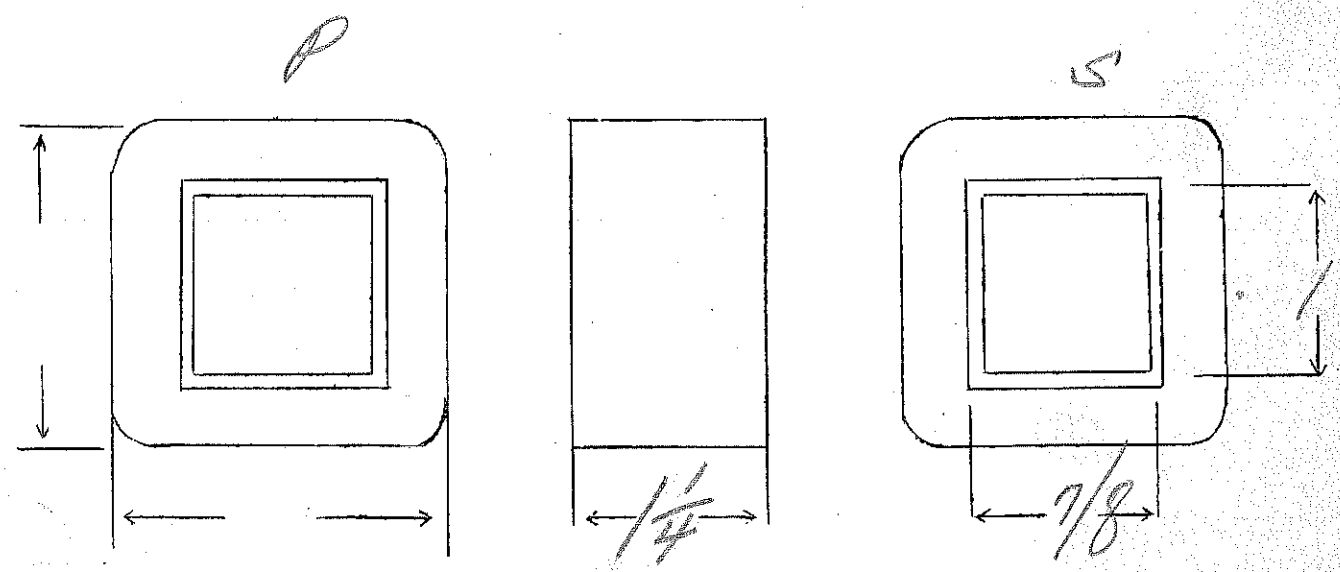
EP-120V-110V
 EP-52V-4amp CT.

$\frac{N}{E}$

SPEC. NO. 3319

Winding	PRI	FIL				
Turns	760	37				
Taps	700	18				
Wind. Lgth.	1/16	✓				
Wire Size	#28	#17				
T.P.L.	70-11	22				
Kind Term.	#20 Par. Br	WIRE ONLY				
Term. Lgth.	9"	9"				
Layer Insul.	40#	✓				
Test Volt.		2500				
Wrapper	2005GA	2005GA				

TUBE	5607	IMPREGNATION	VARNISH
CORE	7/8 x 1	PRIMARY V.A.	
MOUNTING	A		



DESIGNED BY *SW*

DATE 6/9/37

Primary - 105/110/115/120V - 60 Cycle
 Filament 1 - 2.5V CT @ 10A
 Filament 2 - 2.5V CT @ 5A
 Filament 3 - 2.5V CT @ 5A

See 8507

SPEC. NO. P-3320

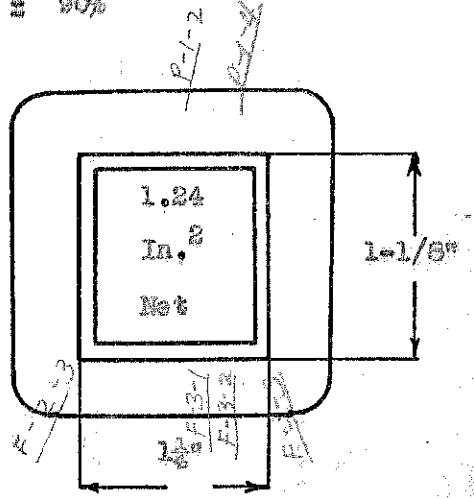
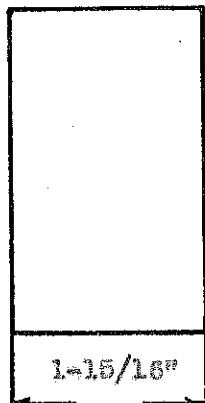
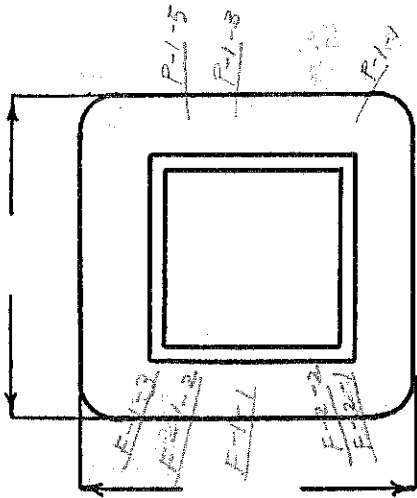
Winding	Pri.		Fil. 1		Fil. 2		Fil. 3
Turns	528 506 - 44		12		12		12
Taps	434 422 - 70		6		6		6
Wind. Lgth.	1-5/4"		1"		3/4"		3/4"
Wire Size	#24	CENTER WINDING NOTE WINDING LENGTHS	#15	CENTER WINDING NOTE WINDING LENGTHS	#16	CENTER WINDING NOTE WINDING LENGTHS	#16
T. P. L.	70 - 10L		12 - 1L		12 - 1L		12 - 1L
Finish Pitch	85%		89%		91.5%		91.5%
Type Lead	W. O.		W. O.		W. O.		W. O.
Lead Lgth.	3"		3"		3"		3"
Layer Insul.	50#		-		-		-
Test Volt.	1250		6000 5000		6000 5000		6000 5000
Wrapper	2L-007 VC 2L-005 GA		2L 007 VC 2L 005 GA		2L 007 VC 2L 005 GA		2L 007 VC 2L 005 GA
TUBE	7L - .007" OK		IMPREGNATION		VARNISH		

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

MOUNTING BB - Lugs *Note: Multi-Wind Prim. Single - ✓ See.*

Cu # 635 - 518 - 518 - 518
 Fe # 60 @ 60 Cycle
 TPV # 4.4
 Wire Net # .417" (.471")

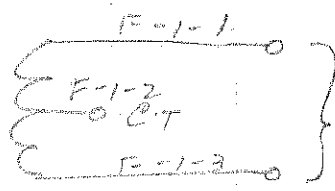
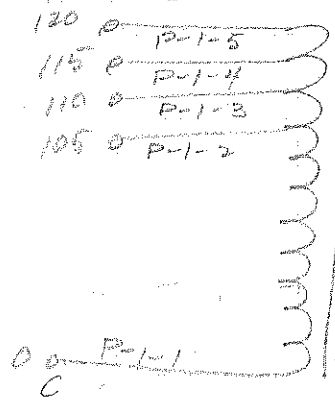
Sec. VA = 50
 Pri. VA = 67
 Pri. I = .697
 Efficiency = 83%
 COS θ = 90%



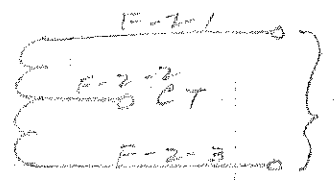
Re-DESIGNED BY H. E. S., Jr.

DATE 7 - 28 - 41

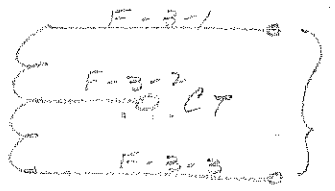
Pu1



2.5V @ 10 Amps

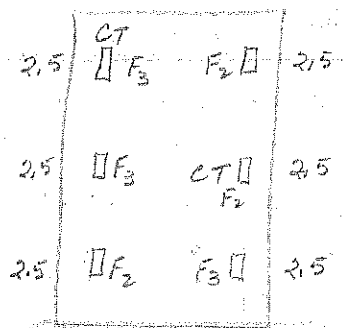
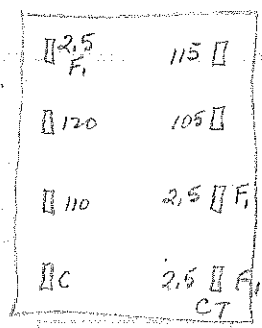


2.5V @ 5 Amps



2.5V @ 5 Amps

"B" Panels



Pri - 105/110/115/120V - 60~
 Sec - 2.5V @ 30amp.

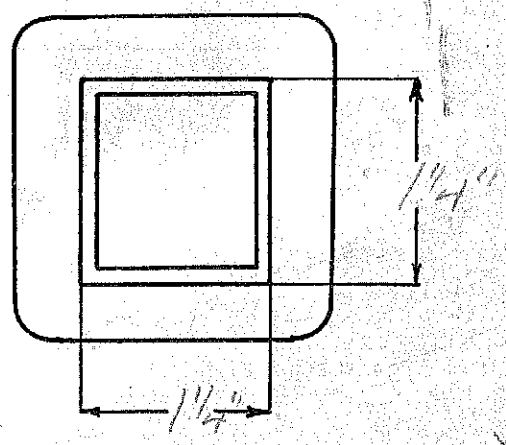
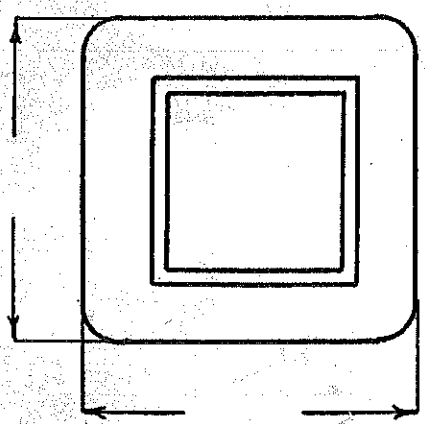
SPEC. NO. F-3320 Special

Winding		Pri			Fila	
Turns		528			12	
Taps		506-484-462			-	
Wind. Lgth.		1 3/4			1 3/4	
Wire Size		#24			2-#10E	
T. P. L.		70-10L			6-2L	
Finish	PKK				80%	
Type Lead					W.O.	
Lead Lgth.					8"	
Layer Insul.		1L 50#G			7L 010A	
Test Volt.		1250				
Wrapper		2L 0056A			2L 0056A	

TUBE 7L-007.6K IMPREGNATION

CORE GA. 24 GRADE D STACK

MOUNTING



DESIGNED BY *HEK*

DATE 3-19-42

$E_p - 210-220-230-240$

$E_{f1} - 2.5VCT-10Amp$ $E_{f2} - 2.5VCT-5Amp$
 $E_{f2} - 2.5VCT-5Amp$ 5000V Ins.
 4128

SPEC. NO. *F 3320-230V*

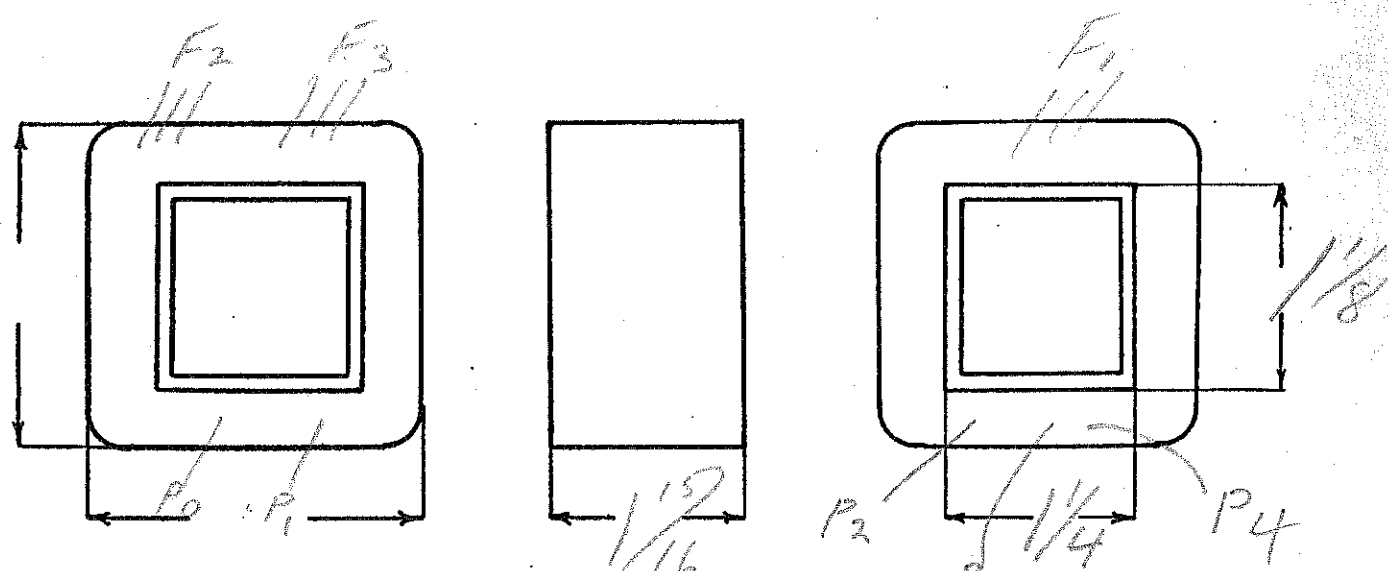
Winding	Pri	F ₁	F ₂	F ₃			
Turns	1026 984	12	12	12			
Taps	942 900	6	6	6			
Wind. Lgth.	1.75						
Wire Size	#27	#13	#16	#16			
T. P. L.	100-12						
Finish							
Type Lead	<i>Wire Only</i>						
Lead Lgth.	3"	3"	3"	3"			
Layer Insul.	50 [#]						
Test Volt.	2500	5000					
Wrapper	3L007VC 3L0056A	3L007VC 3L0076A	3L007VC 3L0076A	3L007VC 3L0076A			

TUBE 7L007GR IMPREGNATION *Karnish*

CORE 1/4 x 1/8 GA. 24 GRADE D STACK 2x2

MOUNTING BB

heavy saddle under panel



DESIGNED BY *gcb*

DATE *2-24-39*

FILAMENT

STOCK

107-115-122 volts @ 50/60 cycles
 2.5V CT @ 10A, 2.5V CT @ 5A,
 2.5V CT @ 5 Amps

SPEC. NO. F3320

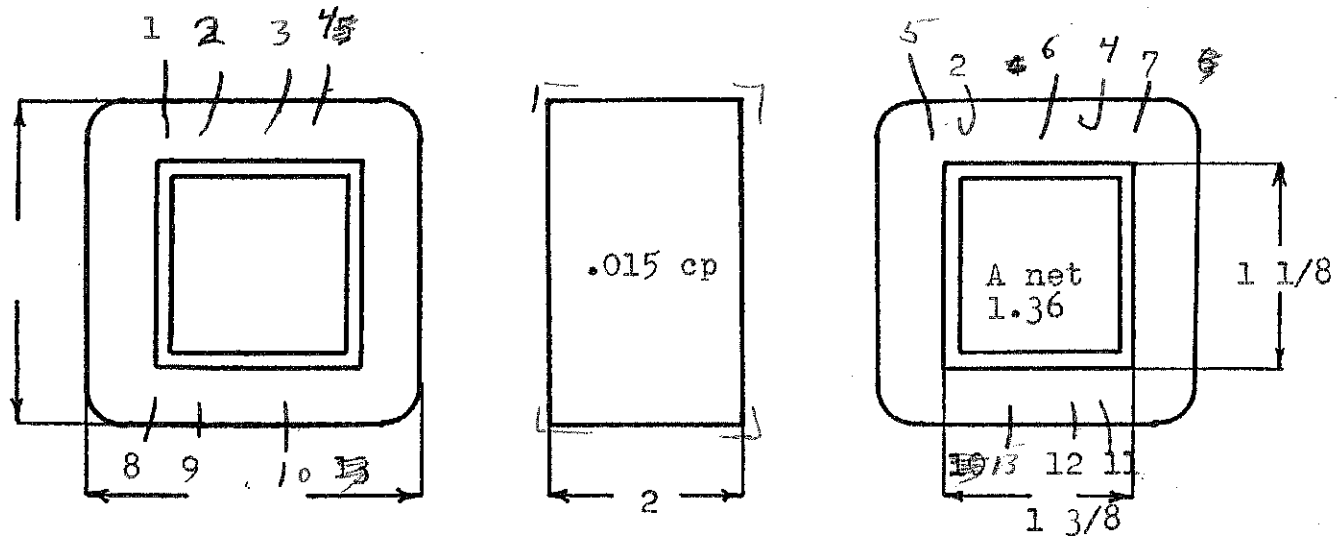
Winding	1-2-3-4 Pri.	5-6-7 Fil #1	8-9-10 Fil #2	11-12-13 Fil #3
Turns	514	12	12	12
Taps	450-484	6	6	6
Wind. Lgth.	1 5/8"	1" center	3/4" center	3/4" center
Wire Size	#24	#13	#16	#16
T. P. L.	65-9L	12-1L	12-1L	12-1L
Finish	85%	89%	91.5%	91.5%
Type Lead	W.O. to lug	W.O. to lug	W.O. to lug	W.O. to lug
Lead Lgth.	3"	3"	3"	3"
Layer Insul.	50#	--	--	--
Test Volt.	1250	6000	6000	6000
Wrapper	2L007VC 2L007GA	2L007VC 2L007GA	2L007VC 2L007GA	2L007VC 2L007GA

TUBE 7L007GK-E IMPREGNATION

CORE 1 3/8 x 1 1/8 GA. 25 GRADE STACK

MOUNTING BB ~~lugs~~ *Leads primary lugs to Right*

T. P. V. - 4.2
 Window - $.566/688 = 81\%$
 Use Super Lugs on Fil #1
 Taps on Fil #2, #3
 Note: Lugs of adjacent filament windings to be spaced at least 3/4"



DESIGNED BY S. W. B.

DATE 5-3-47

DESIGN AND TEST DATA

Rating:

Sec VA = 50

Pri VA = 67

Pri I = 627 Ma.

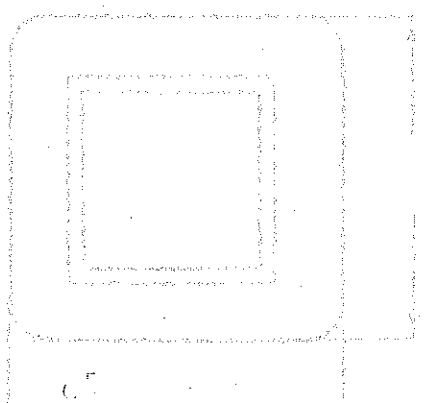
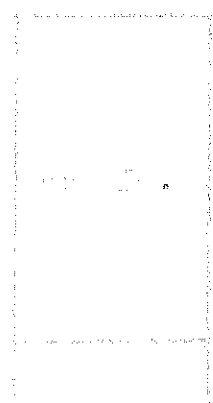
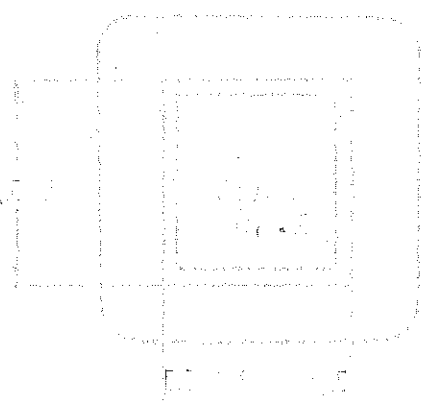
Winding	Pri.		F11 #1		F11 #2		F11 #3
Mean Turn	6.16		7.56		8.24		8.84
Resistance 25° c	6.90		.0176		.0402		.0406
Pounds Copper	.337		.136		.074		.078
Copper Density	645 max.		518		517		517
Ratio Volts	107-115 122	--	2.57	--	2.54		2.52
Test to Ground	1250		6000		6000		6000

Iron Induction 12.2 kg @ _____ Cycles

Exciting Current 113 milli amperes @ 115 volts 60 cycles on 1-3

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

Remarks:



EP-105-115-125

VA=60

E_{s1} - 75VCT- 4A

E_{s2} - 7.5VCT- 4A

52

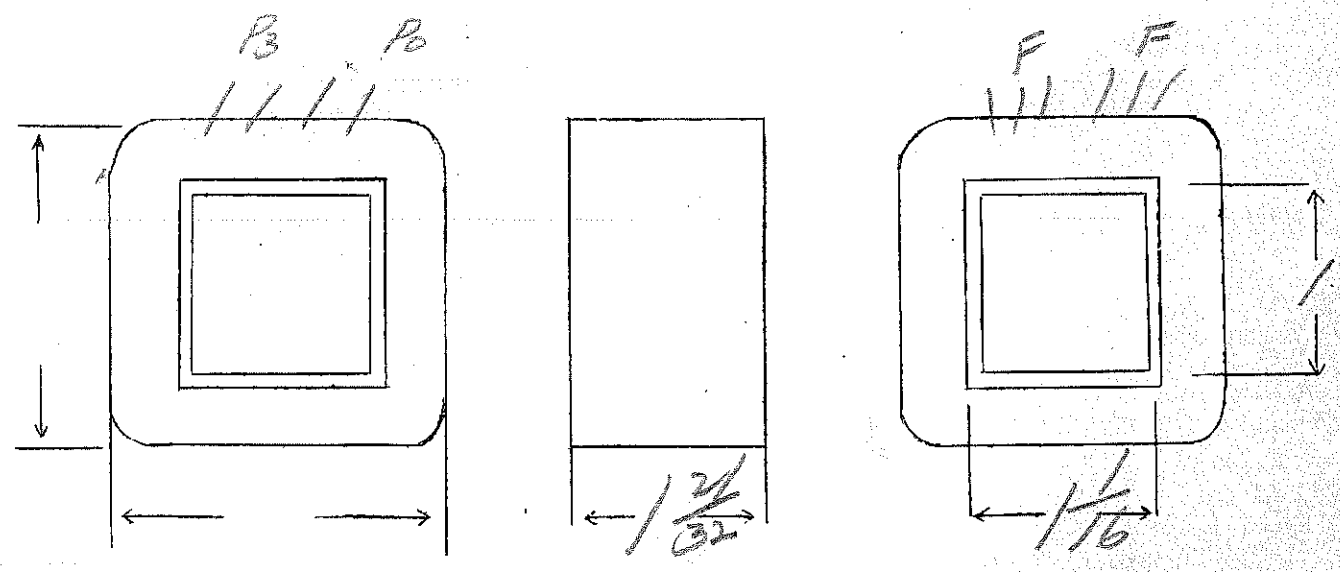
SPEC. NO. 3321

Winding	PR1	F1	F2				
Turns	650 597	43	43				
Taps	545	22	22				
Wind. Lgth.	1 ¹⁵ / ₃₂	✓	✓				
Wire Size	#24	#17	#17				
T.P.L.	63-11						
Kind Term.	WIRE ONLY						
Term. Lgth.	3"	3"	3"				
Layer Insul.	50#						
Test Volt.	2500	✓	✓				
Wrapper	360056A	360056A	360056A				

TUBE 76007 IMPREGNATION VARNISH

CORE 1¹/₁₆ x 1 PRIMARY V.A.

MOUNTING B



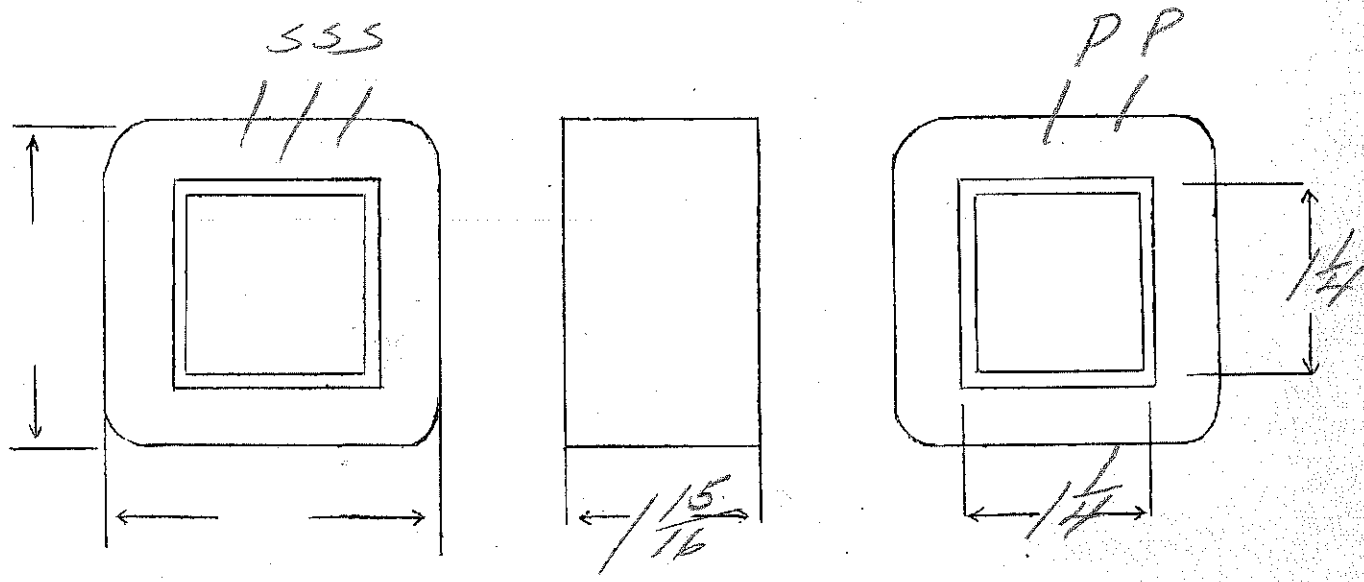
DESIGNED BY *[Signature]*

DATE 6/12/37

Ep-120
Es-1100VCT-150Ma.

SPEC. NO. 3322

Winding	SEC	SHIELD	PRI				
Turns	4270	164	427				
Taps	2135	-	-				
Wind. Lgth.	1.75	1.75	1.75				
Wire Size	#31	#31	#22				
T.P.L.	164-26		60				
Kind Term.	Sil Br	Sil Br	W.D.				
Term. Lgth.	3"	3'	3"				
Layer Insul.	double 16#		50#				
Test Volt.	2500		1250				
Wrapper	21007VC	11007VC	210076A				
TUBE	71007+11007VC			IMPREGNATION	VARNISH		
CORE	1/4" x 1/4"			PRIMARY V.A.			
MOUNTING	B						



DESIGNED BY *Sw*

DATE 6/12/37

Ep - 120V
 Es - 2800VCT - 300Ma

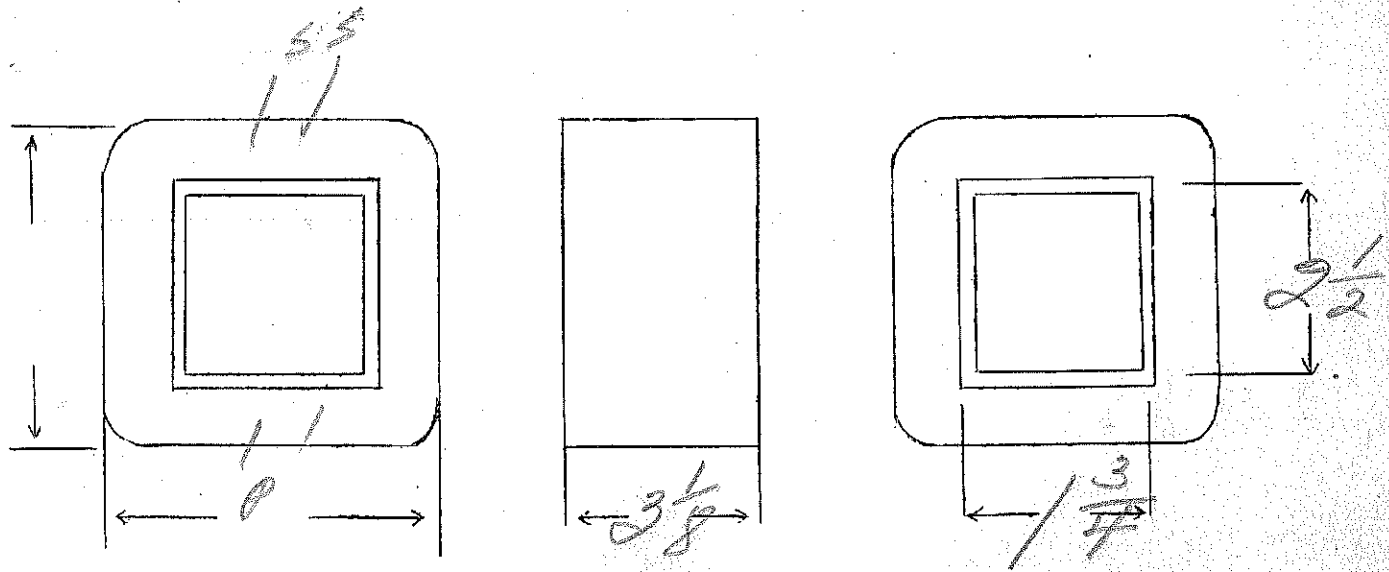
144

SPEC. NO. 3323

Winding	SEC	PRI				
Turns	4350	172				
Taps	2175	-				
Wind. Lgth.	2 1/2	✓				
Wire Size	#27	#14				
T.P.L.	147-30	5L				
Kind Term.	WIRE ONLY					
Term. Lgth.	4"	4"				
Layer Insul.	rough 40#	-				
Test Volt.	3100VC	2005GA				
Wrapper	21005GA	11010RK				

TUBE 101007H/1007VC IMPREGNATION VARNISH
 CORE 1 3/4 x 2 1/2 PRIMARY V.A.
 MOUNTING uncald - sec to bakelite strip

ground sec. ct



DESIGNED BY *GW*

DATE 6/19/37

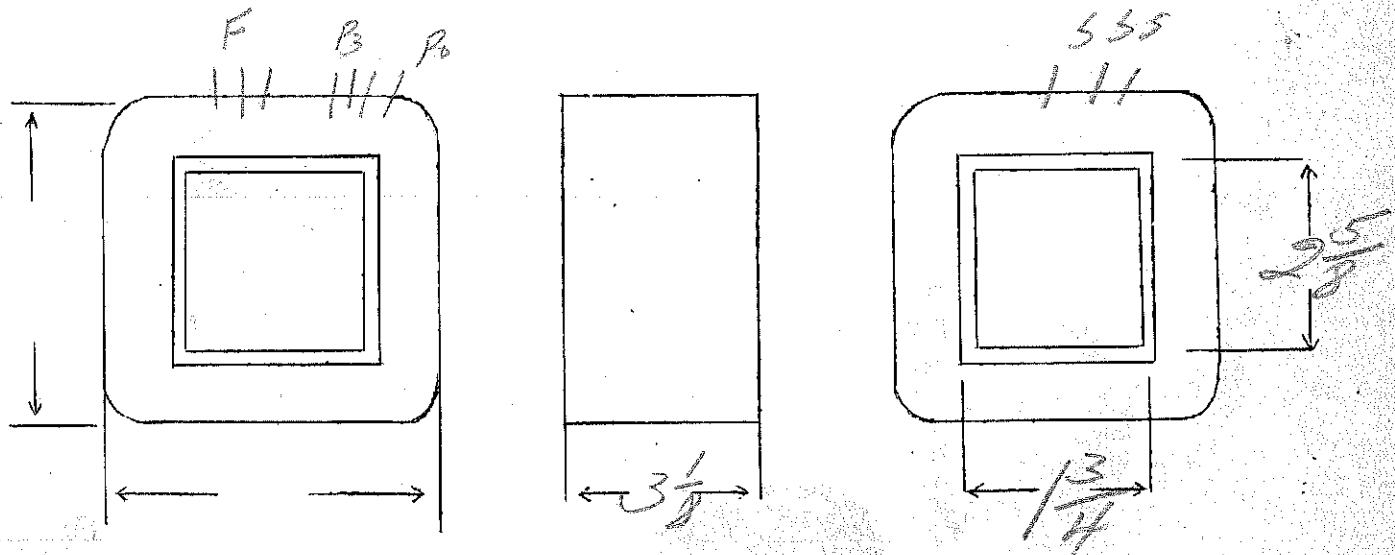
EP-110-115-120
 E_s - 3000, 2500V - 150MA

Ep - 5.2V - 8 Amps

SPEC. NO. 3324

Winding	SEC	PRI	FIL				
Turns	4500	168	2				
Taps	3750	154	4				
Wind. Lgth.	2 1/2	2 1/2					
Wire Size	#29	#13	#13				
T.P.L.	188	6L					
Kind Term.	WIRE ONLY						
Term. Lgth.	3"	3"	3'				
Layer Insul.	double 40#	007K					
Test Volt.	7500						
Wrapper	3L007VC 3L005GA	3L005GA	3L005GA				
TUBE	10L007+1000 7VC		IMPREGNATION	VARNISH			
CORE	1 3/4 x 2 5/8		PRIMARY V.A.				
MOUNTING	removed - see SW about special mounting						

all connections to be on coil



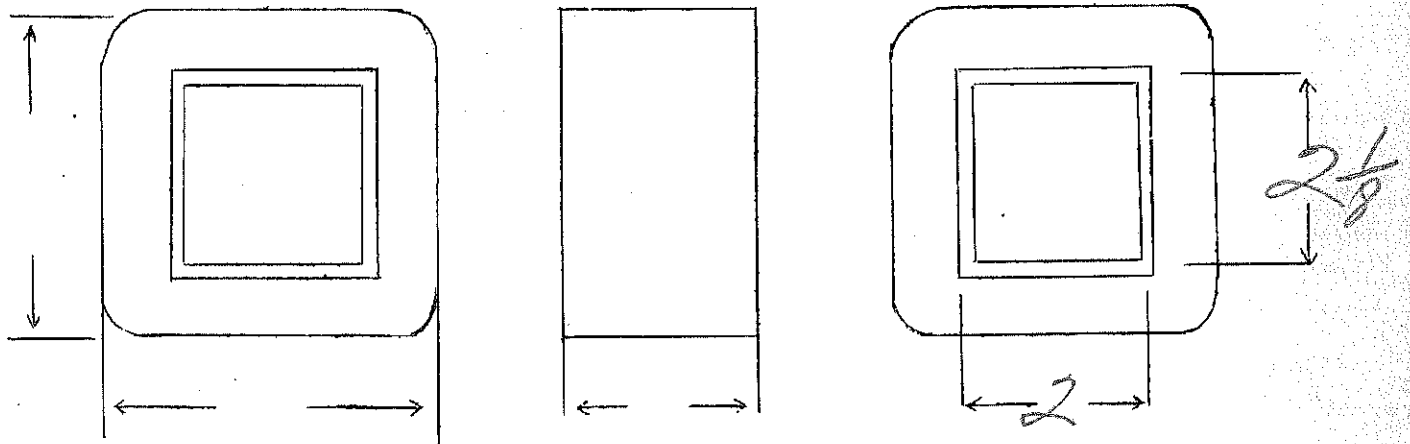
DESIGNED BY Gweaver DATE 6/22/37

Cont.

SPEC. NO. 3325

Winding	PRI				SEC		
Turns	154	88	78		2		
Taps							
Wind. Lgth.							
Wire Size	#16	#17	#18		6 Layers thick of ribbon - .025" x .2"		
T.P.L.							
Kind Term.							
Term. Lgth.							
Layer Insul.							
Test Volt.							
Wrapper							

TUBE		IMPREGNATION	
CORE		PRIMARY V.A.	
MOUNTING			



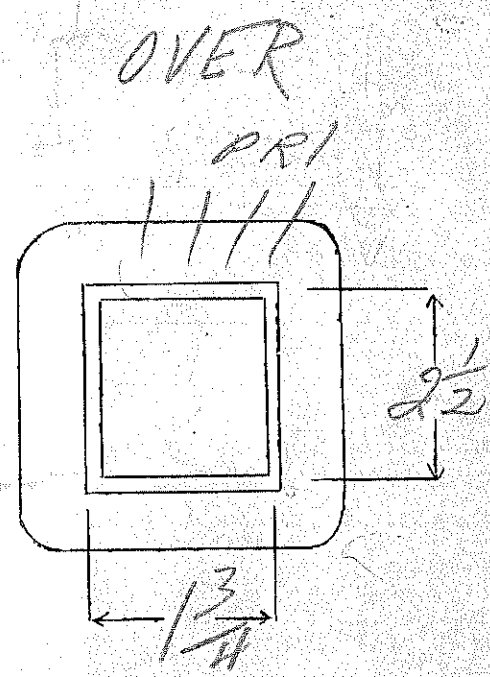
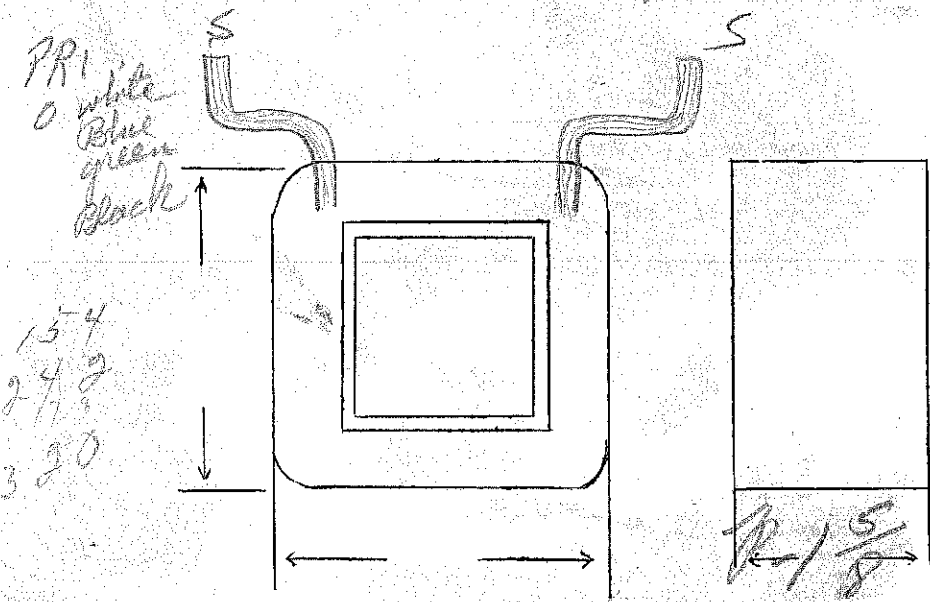
DESIGNED BY *[Signature]*

DATE 6/23/37

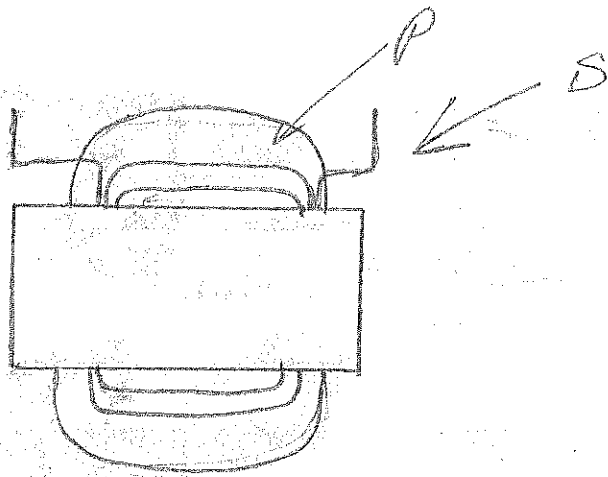
SPEC. NO. 3326

Winding	<i>Cont -</i> PRI			SEC		
Turns	154	88	78	2		
Taps						
Wind. Lgth.	$1\frac{3}{8}$					
Wire Size	#16	#17	#18	6 layers of rubber		040 x 1.25
T.P.L.	7L	4L	3L			
Kind Term.	WIPE ONLY SLEEVING			W.D.	Special Copper Strips	
Term. Lgth.	9"	9"	9"	6"		
Layer Insul.	.007 GA.					
Test Volt.						
Wrapper			3405 GA			
TUBE	91007			IMPREGNATION	Pri - varnish	
CORE	$1\frac{3}{4} \times 2\frac{1}{2}$			PRIMARY V.A.		
MOUNTING	C - open type - use sheet metal brackets					

Pri & sec. are separate coils



DESIGNED BY *Drewner* DATE *6/23/37*



Ep - 120
Es - 150V

E₁ - 2.5V
E₂ - 6.3V

SPEC. NO. 3327

51

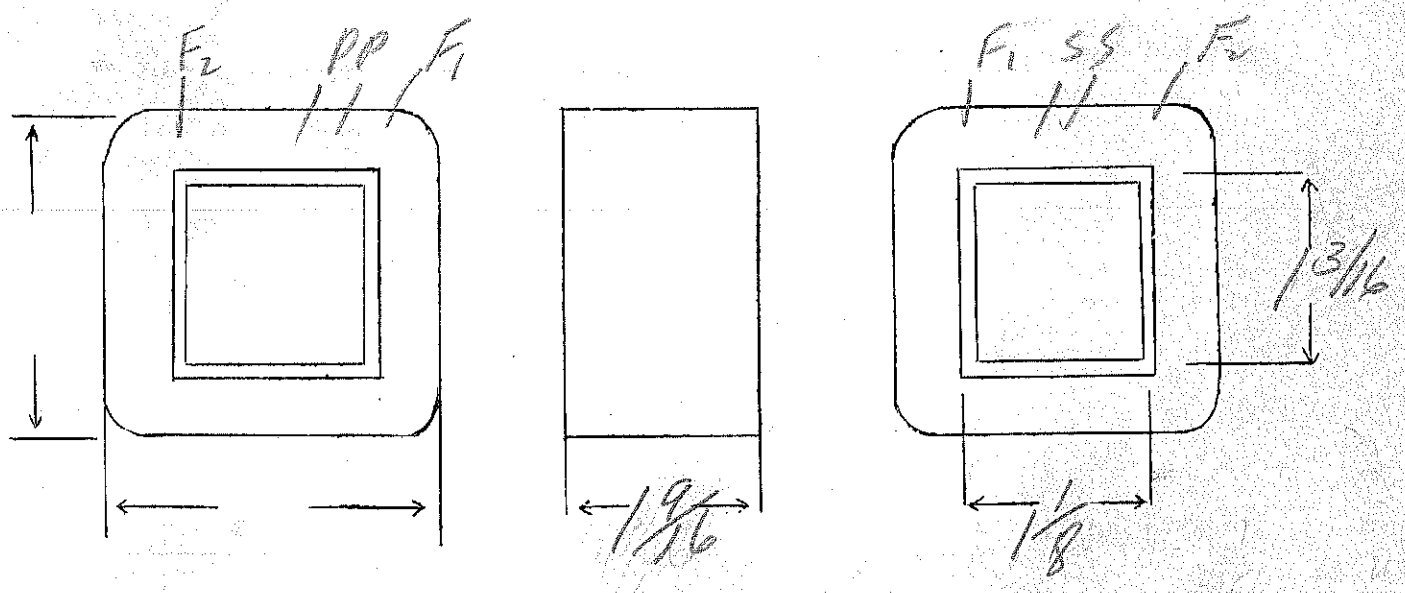
Winding							
Turns	4000	36	shim shield	shim shield	610	shim shield	14
Taps	✓						
Wind. Lgth.	1 3/8				1/4		
Wire Size	#39	#20	shim	shim	#29	shim	double #20
T.P.L.	315	37					
Kind Term.	sil Br	W.O. VC	sil Braid VC Tube green	sil Braid VC Tube Red	Para Braid 5-9 green F-Black	sil Braid VC Tube green	no ver tube yellow stick black finish
Term. Lgth.	12"	S - 3" black F - 6" green	12"	12"	6"	3"	3"
Layer Insul.	double 16 #				40 #		
Test Volt.	operat. prot blast layer					11005VE	
Wrapper	2L005FA	2L005FA	2L005FA	2L005FA	2L005FA	2L005FA	2L005FA

TUBE 7007 IMPREGNATION Varnish

CORE 1/8 x 1 3/16 PRIMARY V.A.

MOUNTING unanch

Pr^o - Black
Sec - Sil. Braid
6.3 Fil. - Blue
2.5 Fil. - White Sleevings



DESIGNED BY

DATE

6/29/37

Ep - 120V
 Es - 300V - 500V - 15 ma
 Ef - 5V - 1/4 amp

H.T. BUCKEY

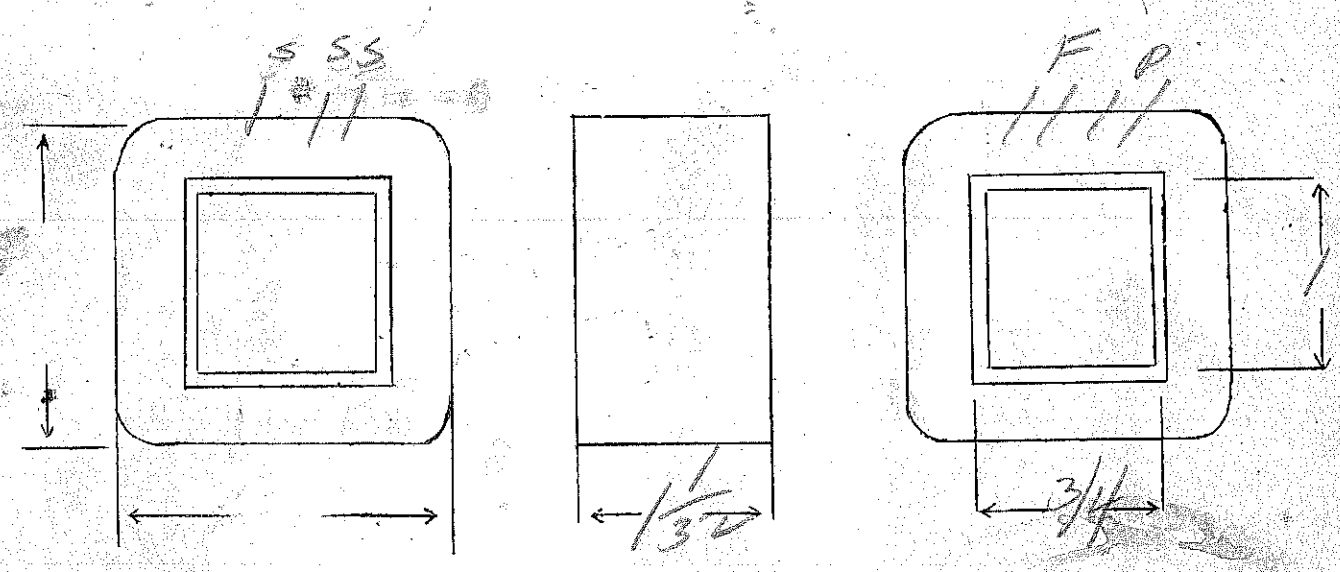
SPEC. NO. 3328

74

Winding	SEC	PRI	FIL				
Turns	4000	890	42				
Taps	2400	-	-				
Wind. Lgth.	7/8	-	-				
Wire Size	#39	#31	#26				
T.P.L.	20-20	81-11					
Kind Term.	Sil Br	Sil Br	W.O.				
Term. Lgth.	3"	3"	3"				
Layer Insul.	double 16 #	30 #					
Test Volt.							
Wrapper	1007VC	21056A	21056A				

TUBE 5007 IMPREGNATION VARNISH
 CORE 3/4 x 1 - 24 80 2 x 2 PRIMARY V.A.
 MOUNTING D

Pri 12
 Sec 323-0-217
 Fil 1# 5.5



DESIGNED BY *SW*

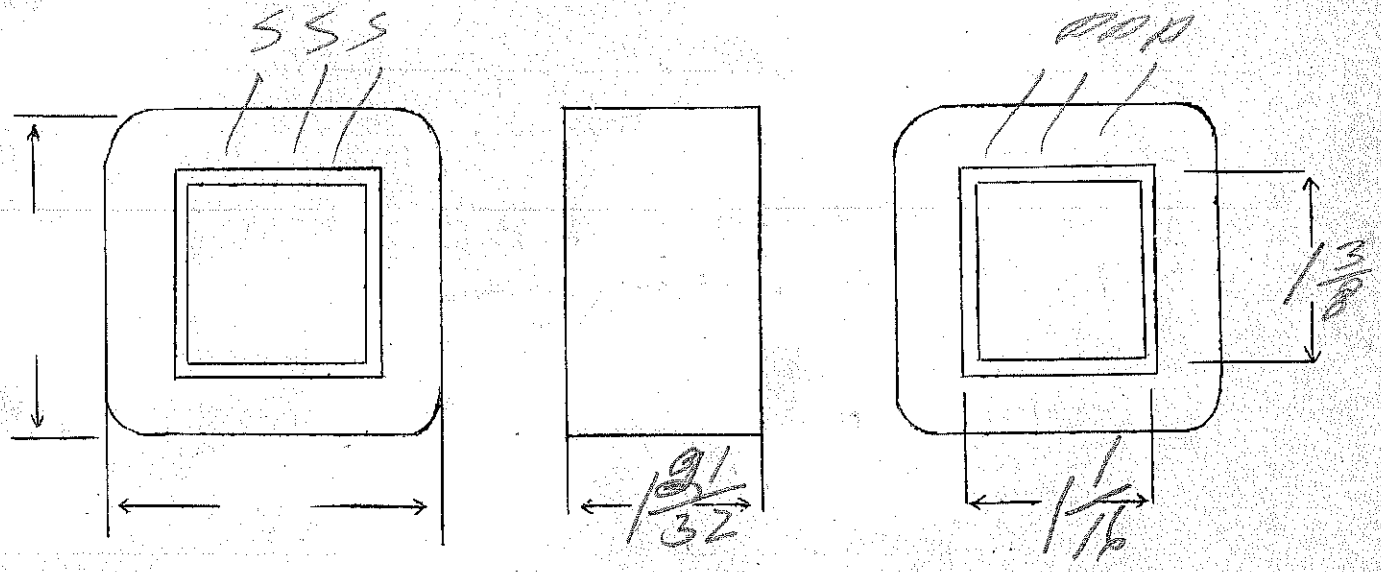
DATE 6/29/37

Ep. - 12VOT for vibrator
 Ec - 800VOT 125ms

433 SPEC. NO. 3329

Winding	SEC	SHIELD	DR1			
Turns	4000	1	52			
Taps	2000		26			
Wind. Lgth.	$\frac{1\frac{15}{32}}$		$\frac{1\frac{15}{32}}$			
Wire Size	#32	SHIM STOCK	#17 double			
T.P.L.	154.26		$\frac{1}{2}$			
Kind Term.	Sil Br	Sil Br	WIPE ONLY			
Term. Lgth.	3" double	3"	3"			
Layer Insul.	16#		007K			
Test Volt.	2500		1250			
Wrapper	21007VC	210056A	210056A			
TUBE	71007		IMPREGNATION	VARNISH		
CORE	$\frac{1}{16} \times \frac{3}{8}$	- 2x2	PRIMARY V.A.			
MOUNTING	C -					

Heavy finishing



DESIGNED BY *Geo* DATE *7/2/37*

Ep-110, 120V

Es-3000V-400ma

half wave

SPEC. NO.

3330

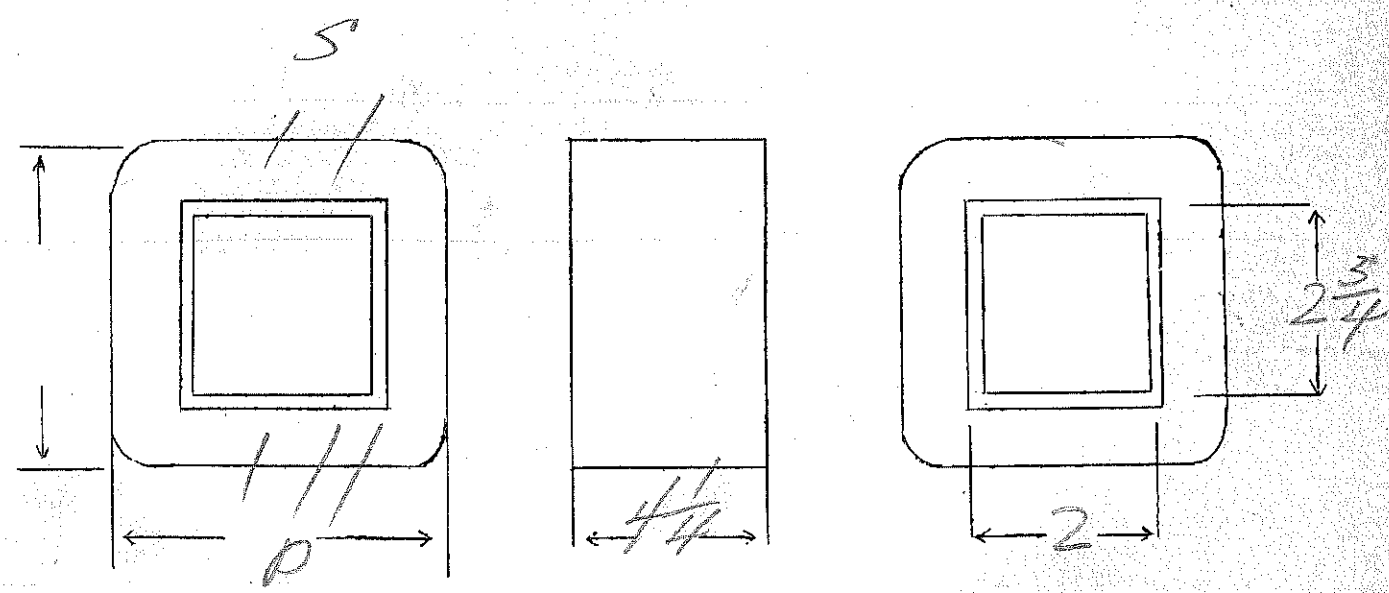
Winding	SEC	PRI				
Turns	3120	124				
Taps	—	112				
Wind. Lgth.	3 1/2					
Wire Size	#25	#10 HPE				
T.P.L.	166-19	5L	- careful winding necessary			
Kind Term.	WIRES ONLY					
Term. Lgth.	6"	6"				
Layer Insul.	double 50#	007 Kraft				
Test Volt.	2500V					
Wrapper	4007VC 21005GA	21005GA				

TUBE	4007VC 21005GA	IMPREGNATION	VARNISHED
------	----------------	--------------	-----------

CORE	2x2 3/4	PRIMARY V.A.	
------	---------	--------------	--

MOUNTING *unencased - Sec to bakelite strip*

Pri to lug on coil



DESIGNED BY

GW

DATE

2/2/37

Ep - 120

Ef - 105VCT - 4 Amps

SPEC. NO.

3331

FILAMENT

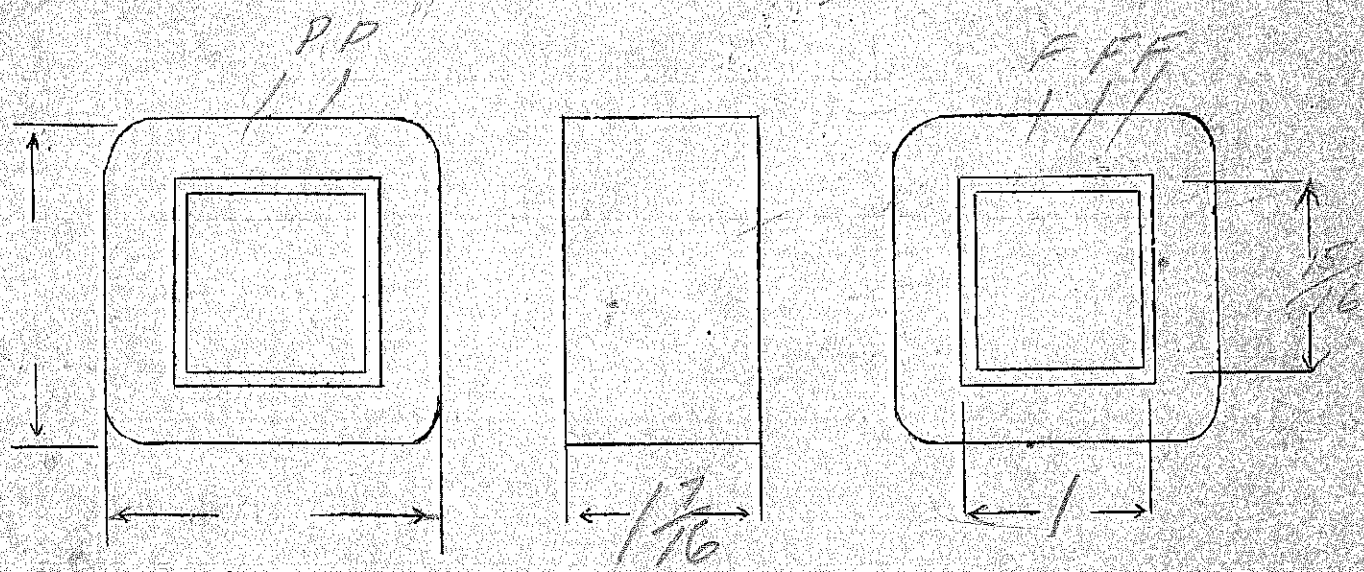
6.0

Winding	PR1	FIL				
Turns	720	74				
Taps	-	391				
Wind. Lgth.	1.25	1.25				
Wire Size	#27	#17				
T.P.L.	74-10	3L				
Kind Term.	WIRE	ONLT				
Term. Lgth.	3"	3"				
Layer Insul.	40					
Test Volt.						
Wrapper	2100560	2100560				

TUBE	52007	IMPREGNATION	VARNISH
CORE	1 X 7/16	PRIMARY V.A.	

MOUNTING C. - cadmium - Aluminum Jammer
 or BBL Black

Ep - 120
 Ef - 105 CT



DESIGNED BY

Gulman

DATE

7/6/37

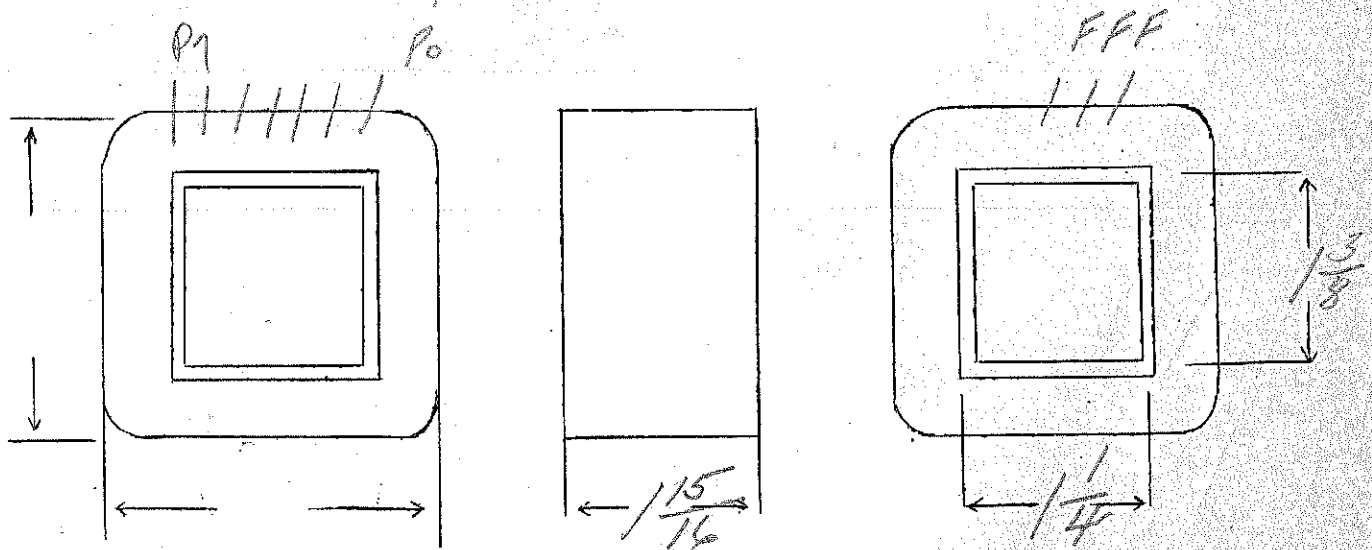
Ed-120 - 108-98-88-81-75 for Control Co # 3333

EF-10.5VCT-4amp

335 SPEC. NO. 3332

Winding	Continuance						
Turns	PR1				F16		
Taps	250	43	67	40	39		
Wind. Lgth.	1.75						
Wire Size	#21	#17	#16	#15	#16		
T.P.L.	53-5						
Kind Term.	WIRED ONLY						
Term. Lgth.	3"						
Layer Insul.	50#	007	Kraft				
Test Volt.							
Wrapper				210076A	210076A		

TUBE	96007	IMPREGNATION	VARNISH
CORE	1 1/4 x 1 3/8	PRIMARY V.A.	
MOUNTING	C		



DESIGNED BY *gfw*

DATE 7/6/37

Ep - 120-137-153-160-192
 Es - 1500 V. - 300 Ma.

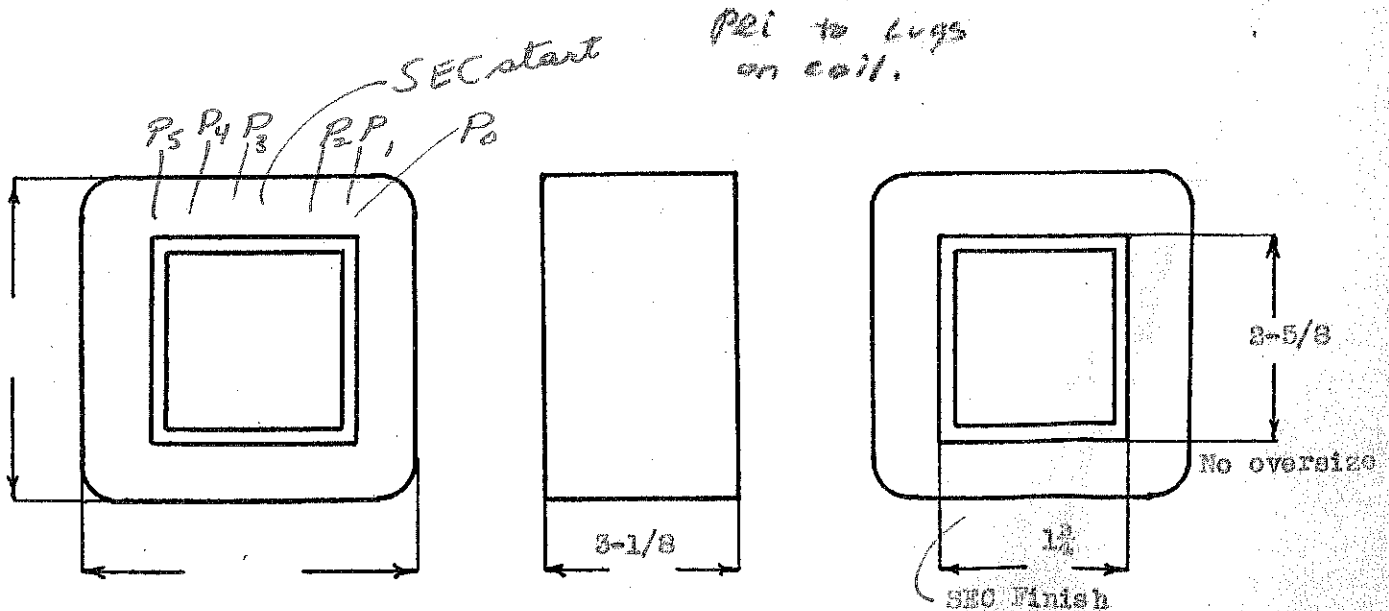
Rose

SPEC. NO. 3334

	Blue	Blue	133			
Winding	SEC	Continuous				
Turns	2070	160	40	50		
Taps	-		19	27		
Wind. Lgth.	2-5/8	2-5/8				
Wire Size	#26	#13	#15	#18		
T. P. L.	130-15	5 L	1 L	1 L		
Finish						
Type Lead	#20 Varnac	W.O.	W.O.	W.O.		
Lead Lgth.	9"	3"	3"	3"		
Layer Insul.	Double 40	.007 Kraft				
Test Volt.	5000					
Wrapper	2L.007VC 2L.005GA			2L.005GA 1L.010RR		
TUBE	9L.007 + 1L.007VC		IMPREGNATION		VARNISH	

CORE $1\frac{1}{2}$ x 2-5/8 GA. GRADE STACK
 MOUNTING C - Open type - Sheet metal brackets - Cadmium

or closed type, (Lamination Black)
 no brackets



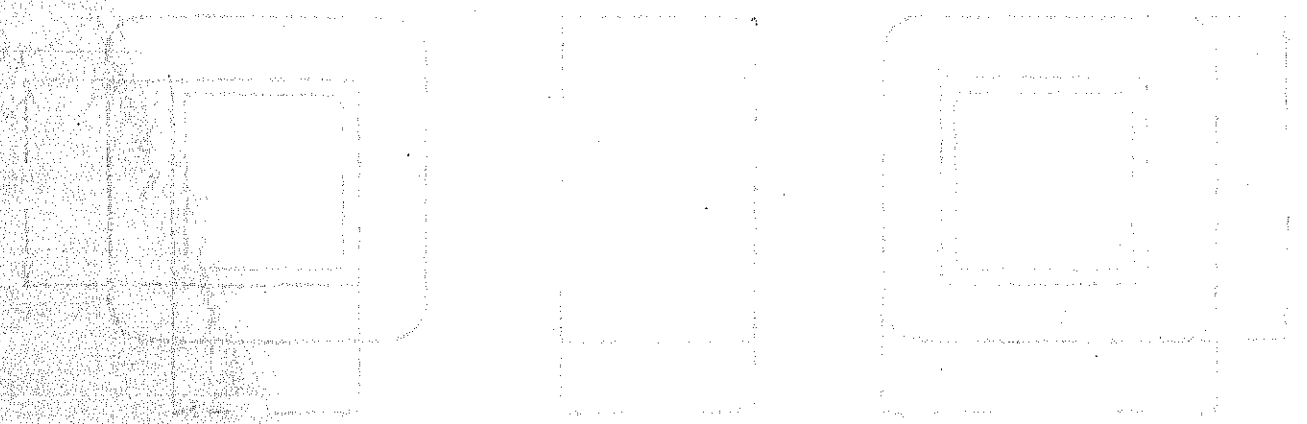
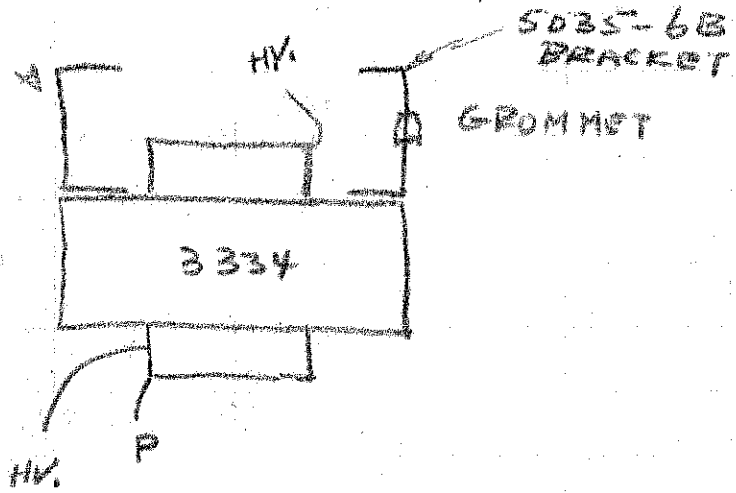
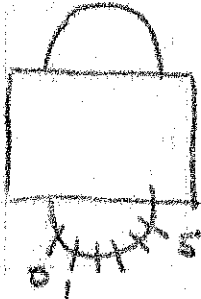
DESIGNED BY CW

DATE 7/8/37

\$6.00

CLOSED BRACKET:

5035-6A BRACKET



Ep - 120V
 Es - 1500V - 300ma

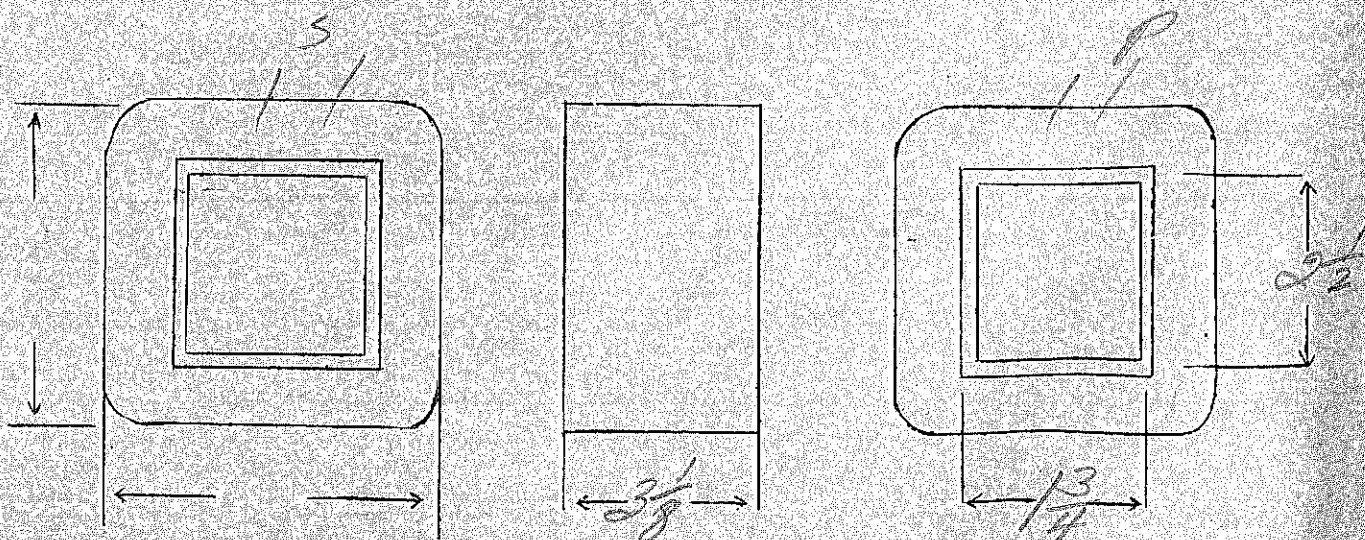
139

SPEC. NO.

3335

Winding	SEC	PRI				
Turns	2120	167				
Taps						
Wind. Lgth.	2 5/8					
Wire Size	#26	#13				
T.P.L.	141-15	6 layers				
Kind Term.	#20 PAPER	WIRE ONLY				
Term. Lgth.	9"	3"				
Layer Insul.	40 H	107K				
Test Volt.						
Wrapper	21007VC 21055A	31055A				

TUBE	9007+1007VC	IMPREGNATION	VARNISH
CORE	1 3/4 x 2 1/2	PRIMARY V.A.	
MOUNTING	C - open - sheet metal brackets		



DESIGNED BY

GWV

DATE

7/6/37