1-45 to Class B -

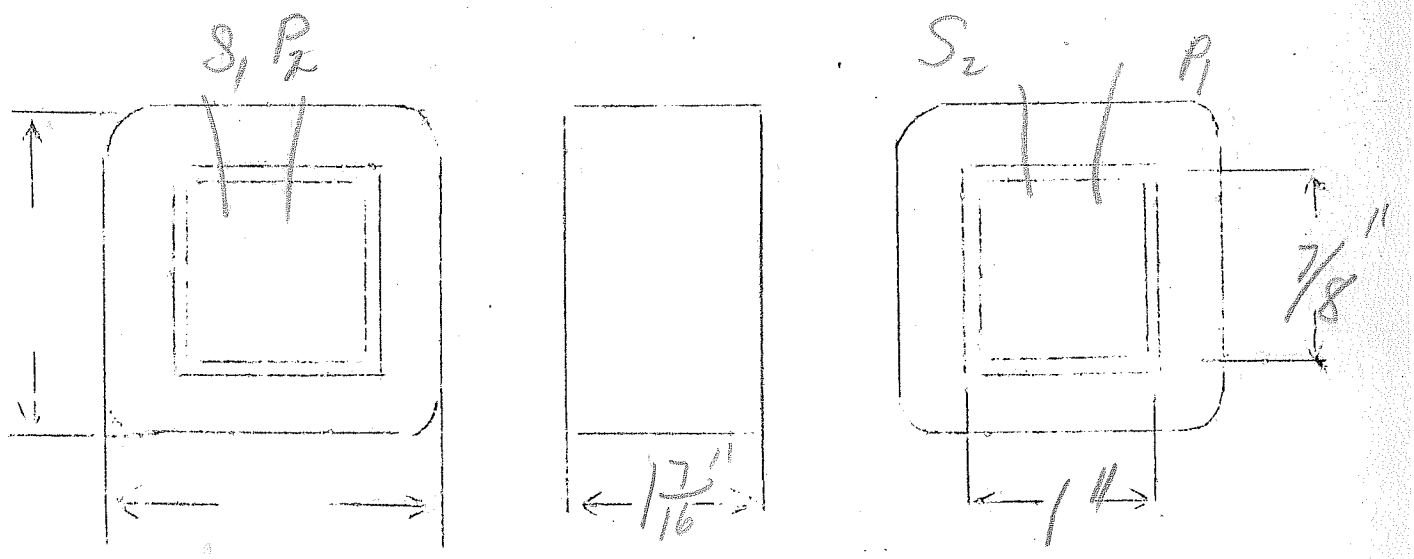
RATIO 1-1

List ~~2.80~~ 3.00

SPEC. NO. 506

Winding	PRI	SEC					
Turns	3600	3600					
Taps	NONE	NONE					
Wind. Lgth.	1/4	1/4					
Wire Size	37	37					
T.P.L.	225-16	225-16					
Kind Term.	NO 20 PBR	NO 20 PBR					
Term. Lgth.	9"	9"					
Layer Insul.	20# GP	20# GP					
Wrapper	2L005VA	2L005VA					

TUBE	4L007	IMPREGNATION	WAX
CURE	1X 7/8 NW		



POWER:
117V @ 50/60 ~ to:
730 V C.T. @ 300 m.a.
5V @ 2 amps 5V @ 6 amps
12.6V C.T @ 5 amps

NEW STOCK

SPEC. NO. T 506

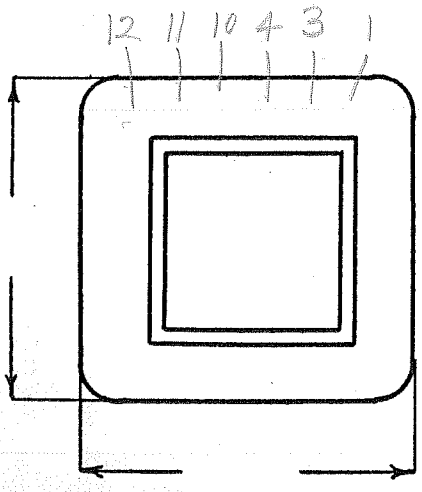
Winding	1-2-3 SEC	SHIELD	4-5 PRIM.	6-7 FIL. #1	8-9 FIL. #2	10-11-12 FIL. #3	
Turns	1140	1	175	8	8	20	
Taps	570	—	—	—	—	10	
Wind. Lgth.	1 7/8	1 7/8	1 7/8	15/16	15/16	1 7/8	
Wire Size	#27	0.002 Cu	#17	#20	#15	#16	
T. P. L.	114-10L	—	35-5L	8-½L	8-½L	20-1L	
~~Finish~~ Pitch	93.5%	—	87.5%	25%	44%	56%	
Type Lead	#22 DuLac	Lil Br.	W. O. Sleeve	W. O. Sleeve	W. O. Sleeve	W. O. Sleeve	
Lead Lgth.	Cut 14"	3"	Cut 14"	Cut 14"	Cut 14"	Cut 14"	
Layer Insul.	30#	—	1L005GA	—	—	—	
Test Volt.	2500	—	1500	2500	2500	2500	
Wrapper	2L005VC	1L005VC	2L007GA	2L007GA	—	2L005GA	

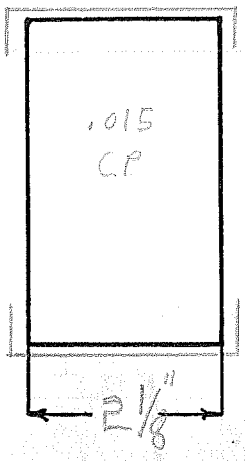
TUBE 6L010GK + 1L005VC IMPREGNATION Varnish

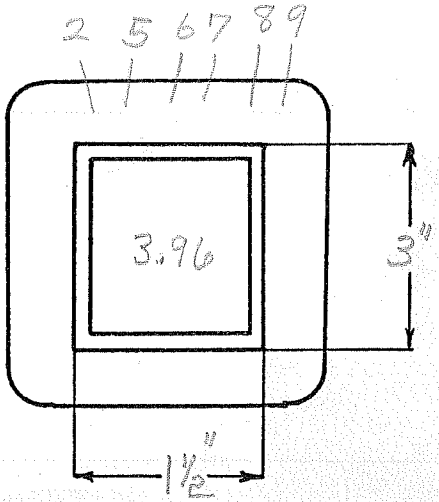
CORE 1½ X 3 GA. 24 GRADE D EASTERN STANDARD STACK 2 X 2

MOUNTING A, N

W_a = 88%







DESIGNED BY AL SHASKY DATE 26-7-49

DESIGN AND TEST DATA

Rating: $I_s = .9 \times 300 = 270$ m.a.

Sec V.A. = 258
Pri. V.A. = 322
I_p = 2.75 amps

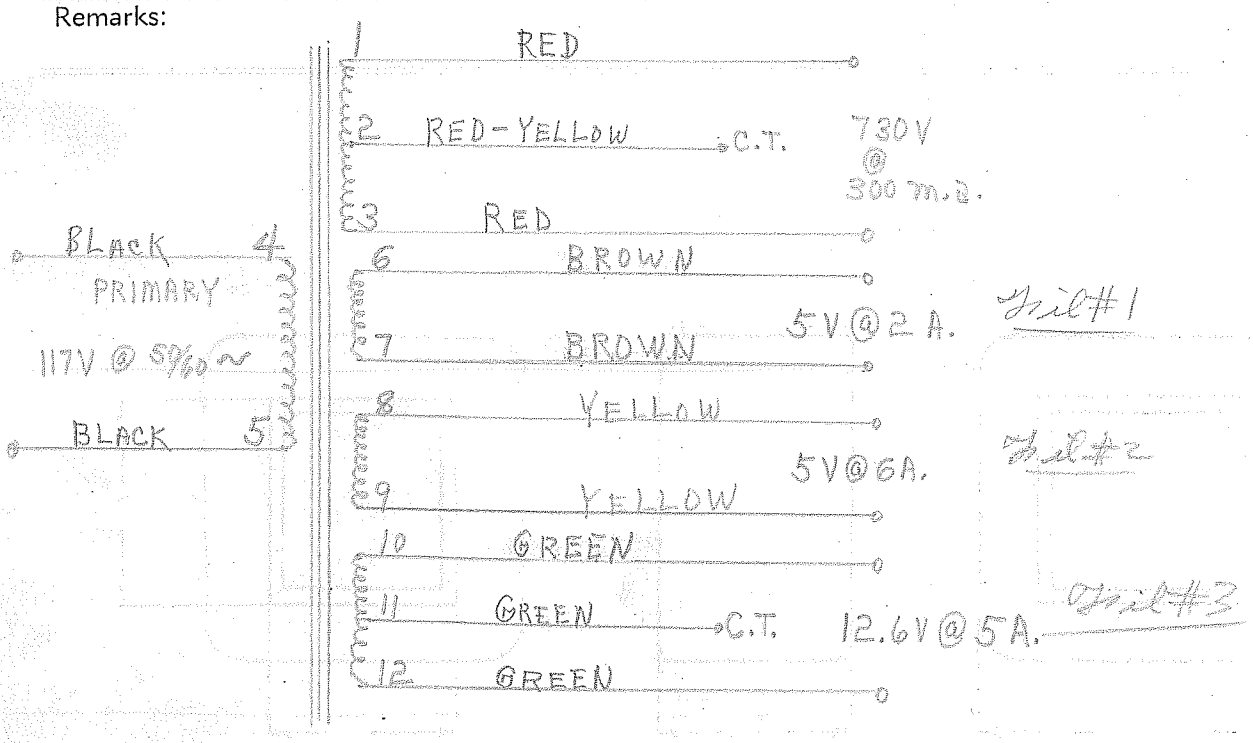
Winding	SEC.	SHIELD	PRIM.	FIL #1	FIL #2	FIL. #3.	
Mean Turn	10.05	—	11.81	13.10	13.10	13.62	
Resistance 25° c	50.2	—	0.89	0.091	0.0285	0.093	
Pounds Copper	0.595	—	1.082	0.0274	0.087	0.180	
Copper Density	747	—	744	511	543	517	
Ratio Volts OPEN CIRCUIT	762	—	117	5.35	5.35	13.38	
Ratio Volts FULL LOAD	731	—	117	5.06	5.07	12.64	
Test to Ground	2500	—	1500	2500	2500	2500	

Iron Induction 11.8 Kg @ 50 Cycles

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



POWER
117 V @ 50/60 ~ TO:
730 V C.T. @ 300 m.a.
5V @ 2 A. 5V @ 6A.
12.6 V C.T. @ 5 A.

NEW STOCK

SPEC. NO. T 506

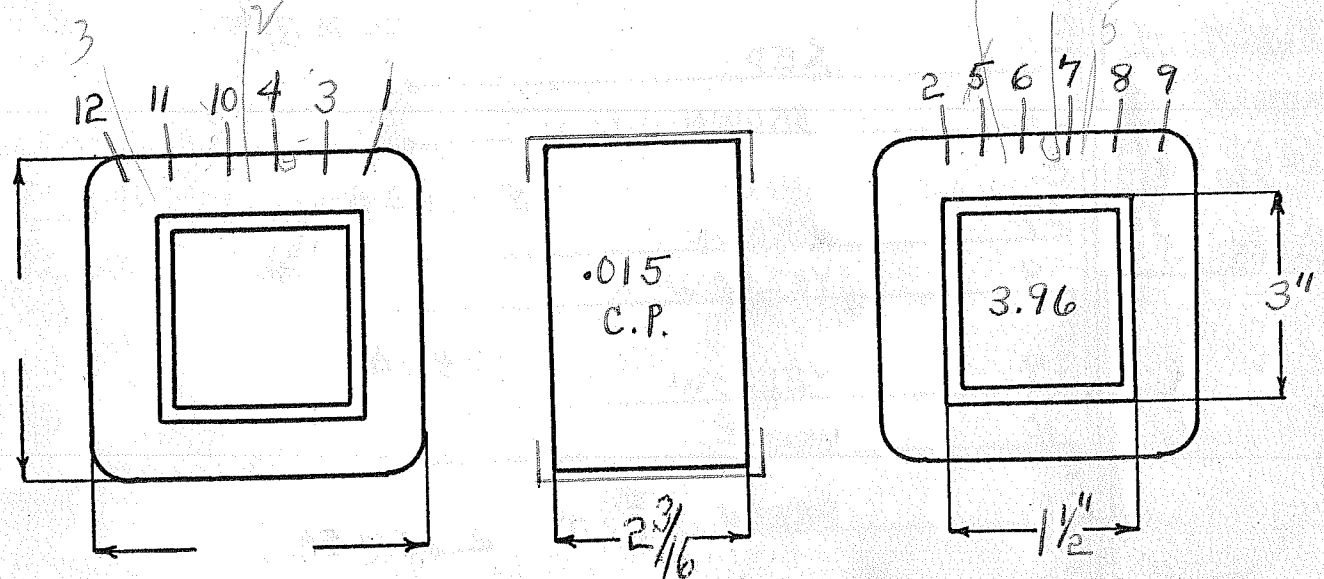
Winding	1-2-3 SEC.	SHIELD	4-5 PRIM	6-7 FIL #1	8-9 FIL #2	10-11-12 FIL #3
Turns	1140	1	175	8	8	20
Taps	570	—	—	—	—	10
Wind. Lgth.	1 7/8	1 7/8	1 7/8	15/16	15/16	1 7/8
Wire Size	#27	0.002 CM.	#17	#20	#15	#16
T. P. L.	114-10L	—	35-5L	8-½L	8-½L	20-1L
~~Finish~~ PITCH	93%	—	87.5%	25%	44%	56%
Type Lead	#22 DULAC	SIL. BR.	W.O. sleeve	W.O. sleeve	W.O. sleeve	W.O. sleeve
Lead Lgth.	cut 14"	3"	cut 14"	cut 14"	cut 14"	cut 14"
Layer Insul.	30 #	—	1L005GA	—	—	—
Test Volt.	2500	—	1500	2500	2500	2500
Wrapper	2L005VC	1L005 VC	2L007GA	← 2L007GA. →		2L005GA.

TUBE 6L010GK + 1L005VC IMPREGNATION VARNISH

CORE 1½ X 3 GA. 24 GRADE D EASTERN STANDARD STACK 2 X 2

MOUNTING A, N

$W_n = 88\%$



DATE

DESIGN AND TEST DATA

Rating: $I_s = 0.9 \times 300 = 270$ m.a.

Sec. VA = 258
Pri. VA. = 322
I_p = 2.75 Amps

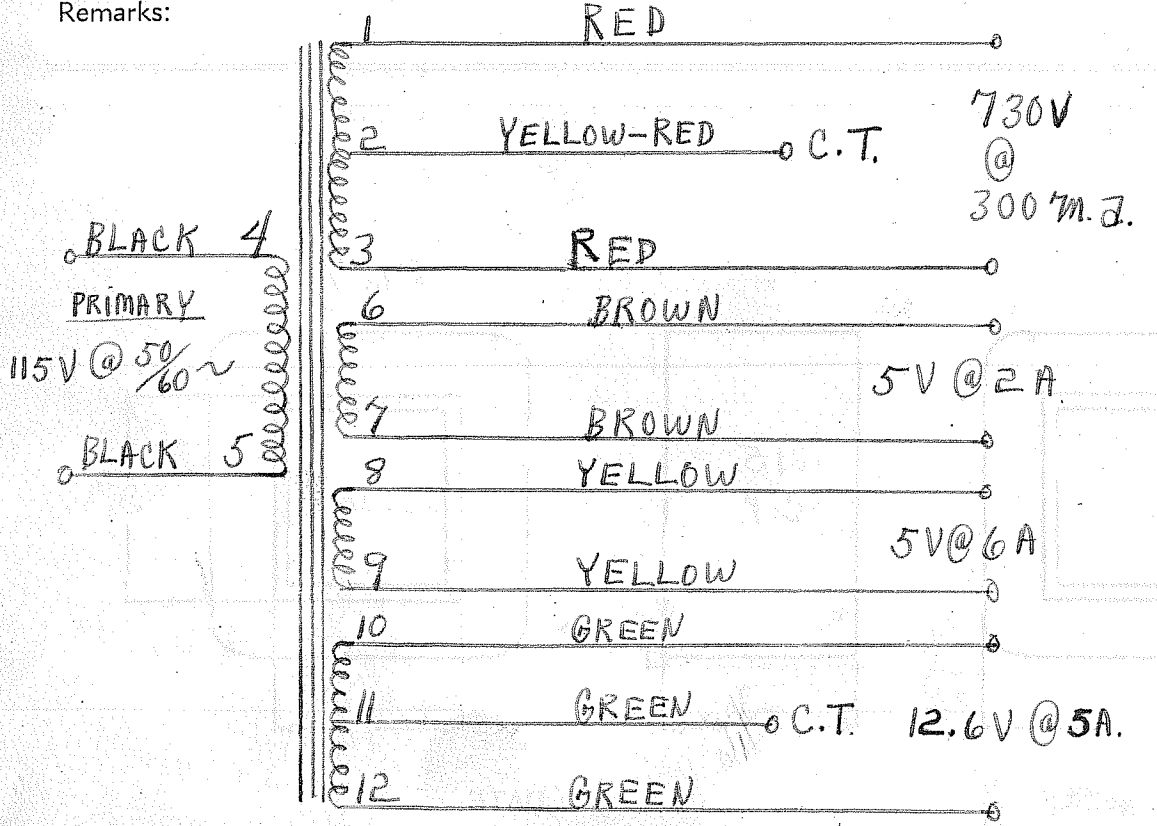
Winding	SEC	SHIELD	PRIM	FIL #1	FIL #2	FIL #3	
Mean Turn	10.05"	—	11.81"	13.10"	13.10"	13.62"	
Resistance 25° c	50.2	—	0.89	0.091	0.0285	0.093	
Pounds Copper	0.595	—	1.082	0.0274	0.087	0.180	
Copper Density	747	—	744	511	543	517	
Ratio Volts OPEN CIRCUIT	762	—	117	5.35	5.35	13.38	
Ratio Volts LOAD	731	—	117	5.06	5.07	12.64	
Test to Ground	2500	—	1500	2500	2500	2500	

Iron Induction 11.8Kg @ 50 Cycles

Exciting Current 230 ma amperes @ 115 volts 60 cycles on

Induced Test: Apply Volts at Cycles on with grounded

Remarks:



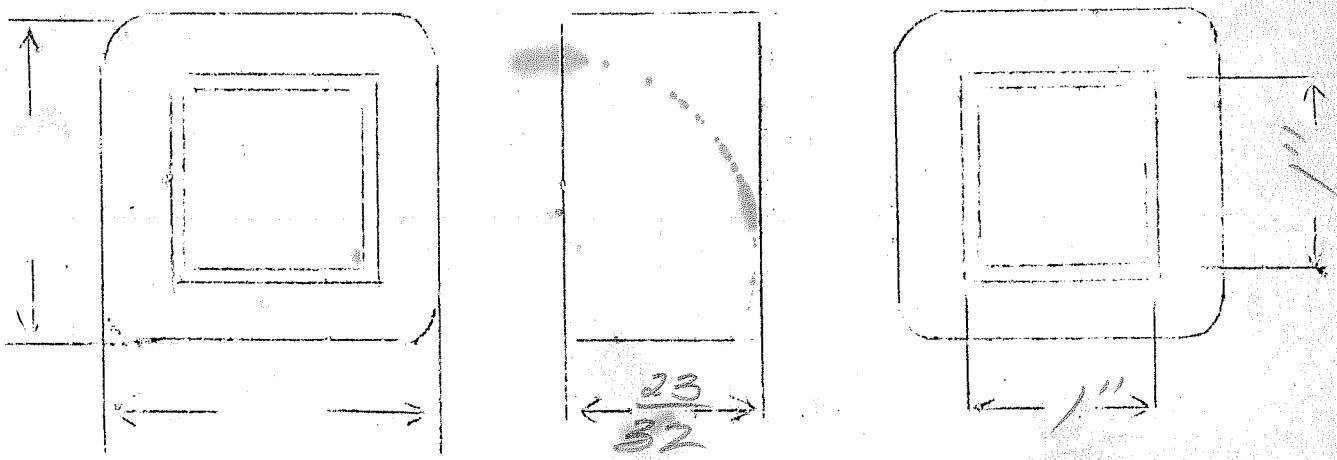
SPEC. NO. 305-

Winding	PRI	SEC.					
Turns	4500	3200					
Taps	NONE	NONE					
Wind. Lgth.	1/2	1/2					
Wire Size	40	32					
T.P.L.	125	88					
Kind Term.							
Term. Lgth.							
Layer Insul.	1 MIL C	1 MIL C					
Wrapper	2 LAYERS 2.005 MP						

TUBE | 7L027 | IMPREGNATION | VPI

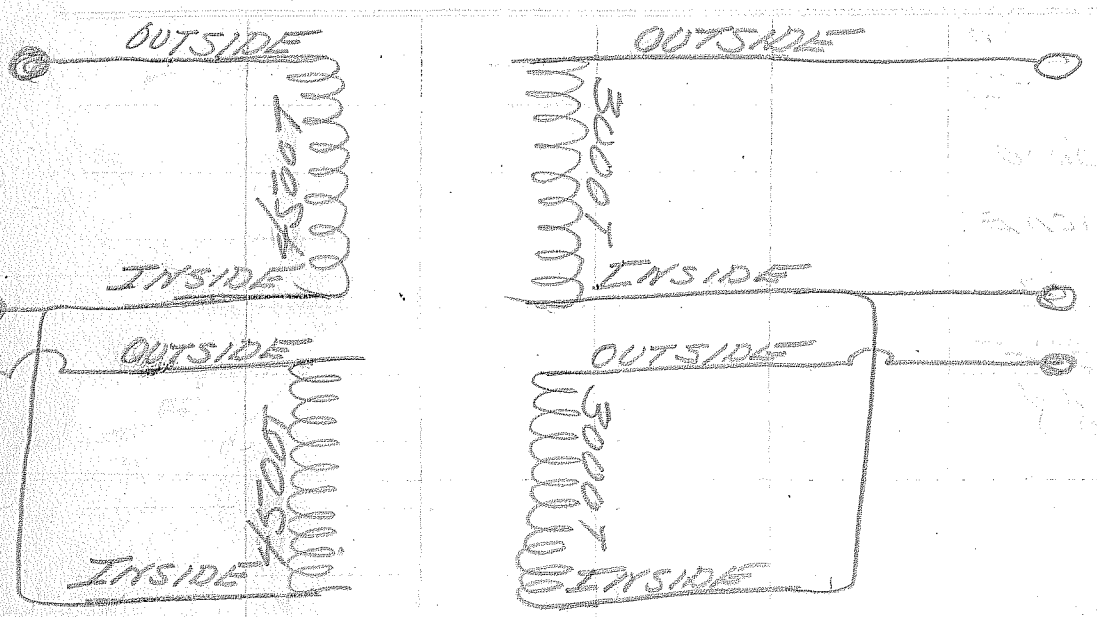
CURE | 1HR @ 120°C

SEE OTHER SIDE FOR ADDITIONAL INFORMATION



2 COILS ASSEMBLED TOGETHER

PRESS SET



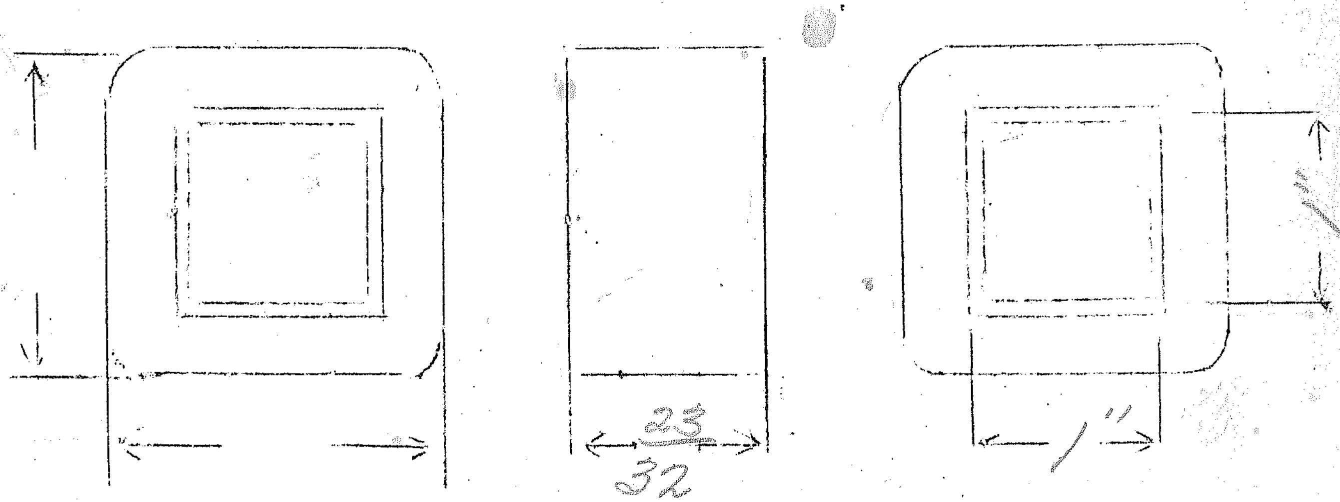
SPEC. NO. 504

	PRI	SEC					
Winding	PRI (6 gm)	SEC (4000)					
Turns	4500	3000					
Taps	NONE	NONE					
Wind. Lgth.	1/2	1/2					
Wire Size	40E	37E					
T.P.L.	125	88					
Kind Term.							
Term. Lgth.							
Layer Insul.	16 (C)	16 (C)					
Wrapper	2L003YP	2L005 6P					

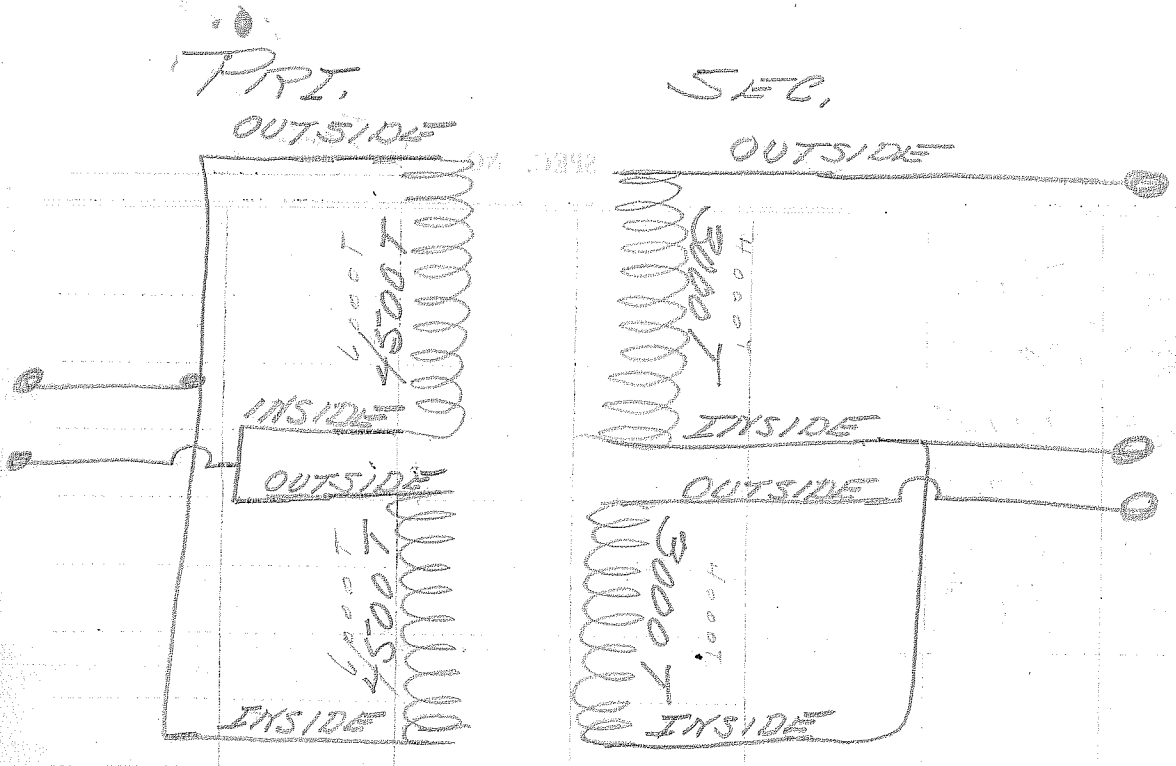
TUBE	7L.007	IMPREGNATION	Wax

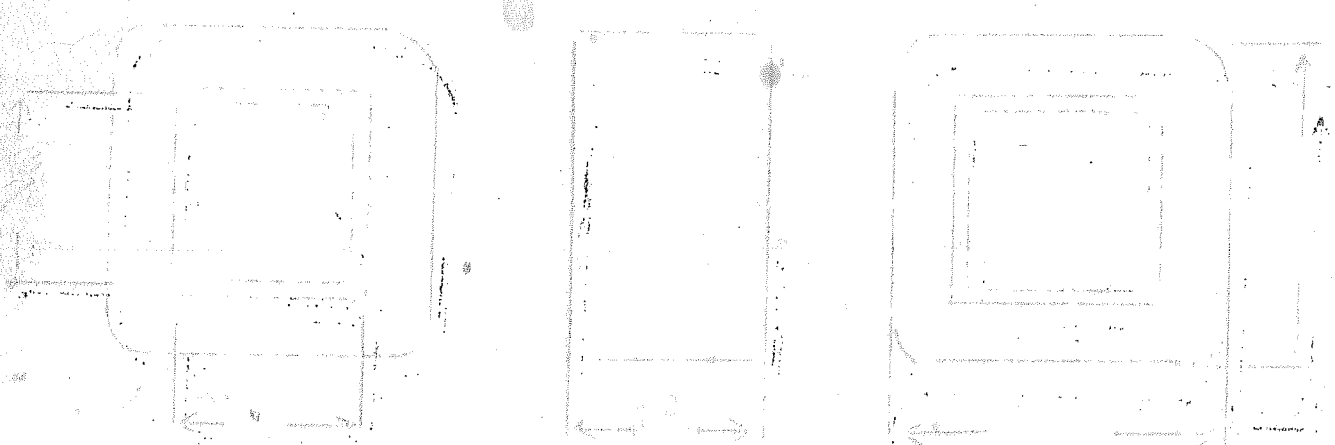
CURE 1X1" NW   Grade A   Enamel

SEE OTHER SIDE FOR ASSEMBLY INFORMATION



Two coils to be assembled in series





Television Tower Replacement for RCA 20N9 + 20T10 New Stock

117V @ 50/60 ~ to
1734 V.C.T. @ 260 ma.
5V @ 6a
6.3V @ 9a
6.3V @ 1.2a tapped @ 5 V @ 2a

SPEC. NO. T 504

	1-2-3		4-5	6-7	8-9	10-11-12	
Winding	Pri	Shield	Sec	Fil #1	Fil #2	Fil #3	
Turns	1270	1	193	11	9	11	
Taps	635		—	—	—	9	
Wind. Lgth.	1 7/8	1 7/8	1 7/8	1 7/8	15/16	15/16	
Wire Size	#28	.002 cu	#18	#13	#15	#20	
T. P. L.	127 - 1L	—	39 - 5L	11 - 1L	9 - ½L	11 - ½L	
Finish Paper	92.3%	—	87%	43.5%	50%	28%	
Type Lead	#22 Pulac	Lit Br.	w. o. sleeve	w. o. sleeve	w. o. sleeve	w. o. sleeve	
Lead Lgth.	cut 14"	3"	cut 14"	cut 14"	cut 14"	cut 14"	
Layer Insul.	3 0#	—	Double 5 0#	—	—	—	
Test Volt.	2500	—	1500	1500	2500	2500	
Wrapper	2L005VC	1L005VC	2L007GA	3L0056A		3L0056A	

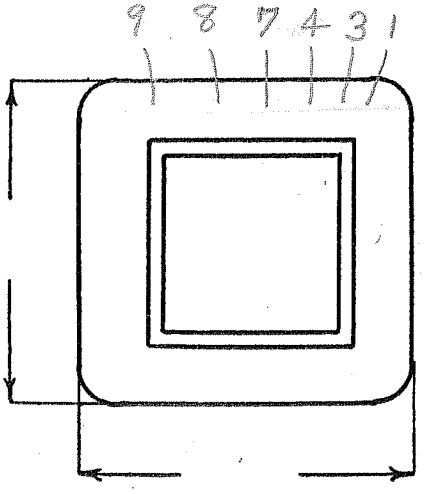
TUBE 6L010GH + 1L005VC IMPREGNATION Varnish

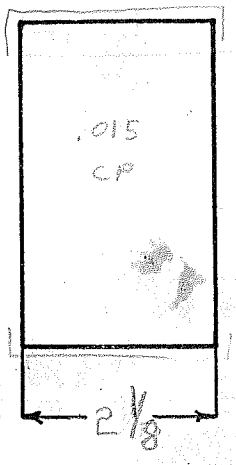
CORE 1½* X 2¾ GA. 24 GRADE D STACK 2X2

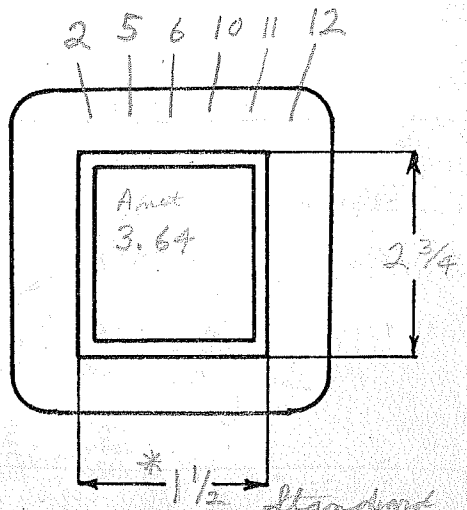
MOUNTING A, N

wn = 87%

*Use 1½" Standard Laminations







DESIGNED BY A. Hadley DATE 7-

DESIGN AND TEST DATA

Rating: $I_s = .9 \times 260 = 234$ ma Sec VA = 235 Pri VA = 293 $I_p = 2.50$ a

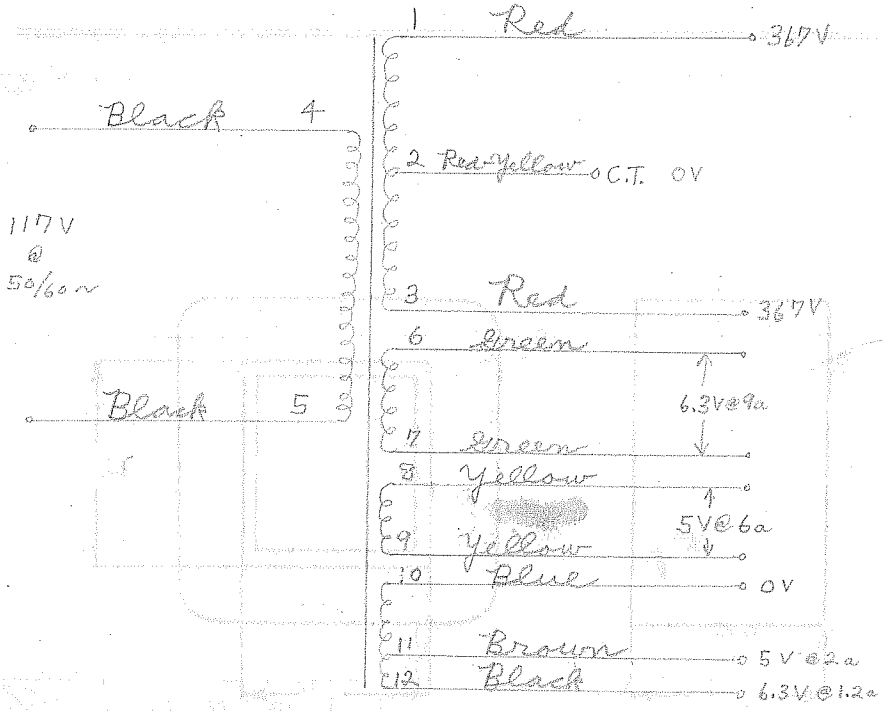
Winding	Sec	Shield	Pri	Fil #1	Fil #2	Fil #3	
Mean Turn	9.61	—	11.16	12.40	12.96	12.96	
Resistance 25° c	67.5	—	1.175	.0232	.0316	.123	
Pounds Copper	.501	—	.900	.180	.0968	.0372	
Copper Density	681	—	650	575	545	511	
Ratio Volts Open Ckt	770	—	117	6.66	5.45	6.66-5.45	
Ratio Volts Load	735	—	117	6.29	5.15	6.35-5.08	
Test to Ground	2500	—	1500	1500	2500	2500	

Iron Induction 16.6 Kc @ 50 Cycles

Exciting Current 165 milli amperes @ 117 volts 60 cycles on 4-5

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

Remarks:



TELEVISION POWER:

NEW STOCK

117 V. @ 50/60 ~ TO:
734V C.T. @ 260 m.a.
5V @ 6A 6.3V @ 9A.
6.3V @ 1.2A Tapped @ 5V @ 2A.

REPLACEMENT FOR R.C.A. 201T9 & 201T10

SPEC. NO. T 504

	1-2-3		4-5	6-7	8-9	10-11-12
Winding	SEC.	SHIELD	PRI.	FIL #1	FIL #2	FIL #3
Turns	1270	1	193	11	9	11
Taps	635	—	—	—	—	9
Wind. Lgth.	1 7/8	1 7/8	1 7/8	1 7/8	15/16	15/16
Wire Size	#28	0.002 Cu	#18	#13	#15	#20
T. P. L.	127-10L	—	39-5L	11-1L	9-½L	11-½L
~~Finish~~ PITCH	92.3%	—	87%	43.5%	50%	28%
Type Lead	#22 DULAC	SIL. BR	W.O. Sleeve	W.O. Sleeve	W.O. Sleeve	W.O. Sleeve
Lead Lgth.	Cut 14"	3"	Cut 14"	Cut 14"	Cut 14"	Cut 14"
Layer Insul.	~~40#~~ ~~50#~~	—	~~DOUBLE~~ ~~60#~~ ~~50#~~	—	—	—
Test Volt.	2500	—	1500	1500	2500	2500
Wrapper	1L005CA ~~2L005VC~~	1L003CA 1L 60# ~~1L005VC~~	2L007GA	3L005GA	← 3L005GA. →	

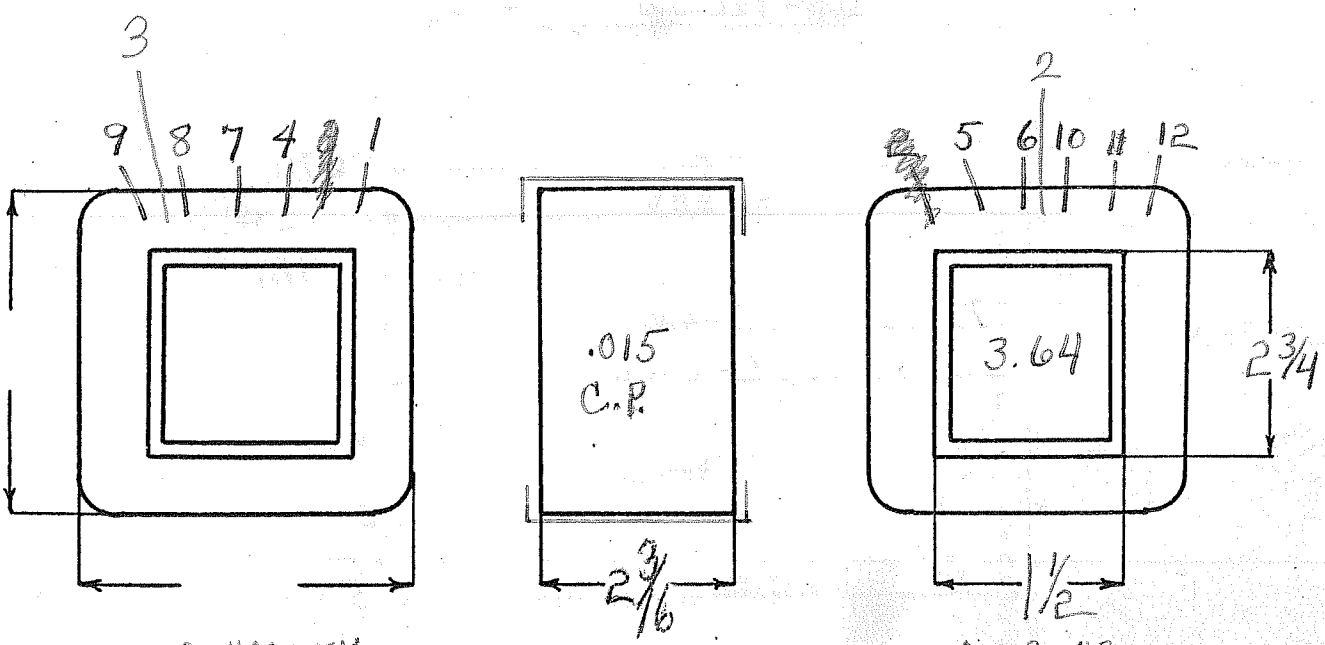
TUBE 6L010GK + ~~1L005VC~~ 1L003CA IMPREGNATION VARNISH

CORE* 1½ X 2 3/4 GA. 24 GRADE D STACK 2 X 2

MOUNTING A, N

$W_n = 87\%$

* USE 1½" STANDARD LAMINATIONS



DESIGNED BY A. HADLEY

DATE 7-9-49

DESIGN AND TEST DATA

Rating: $I_s = 0.9 \times 260 = 234$ m.a.

SEC V.A. = 235
PRI. VA = 293
$I_P = 2.50$ A.

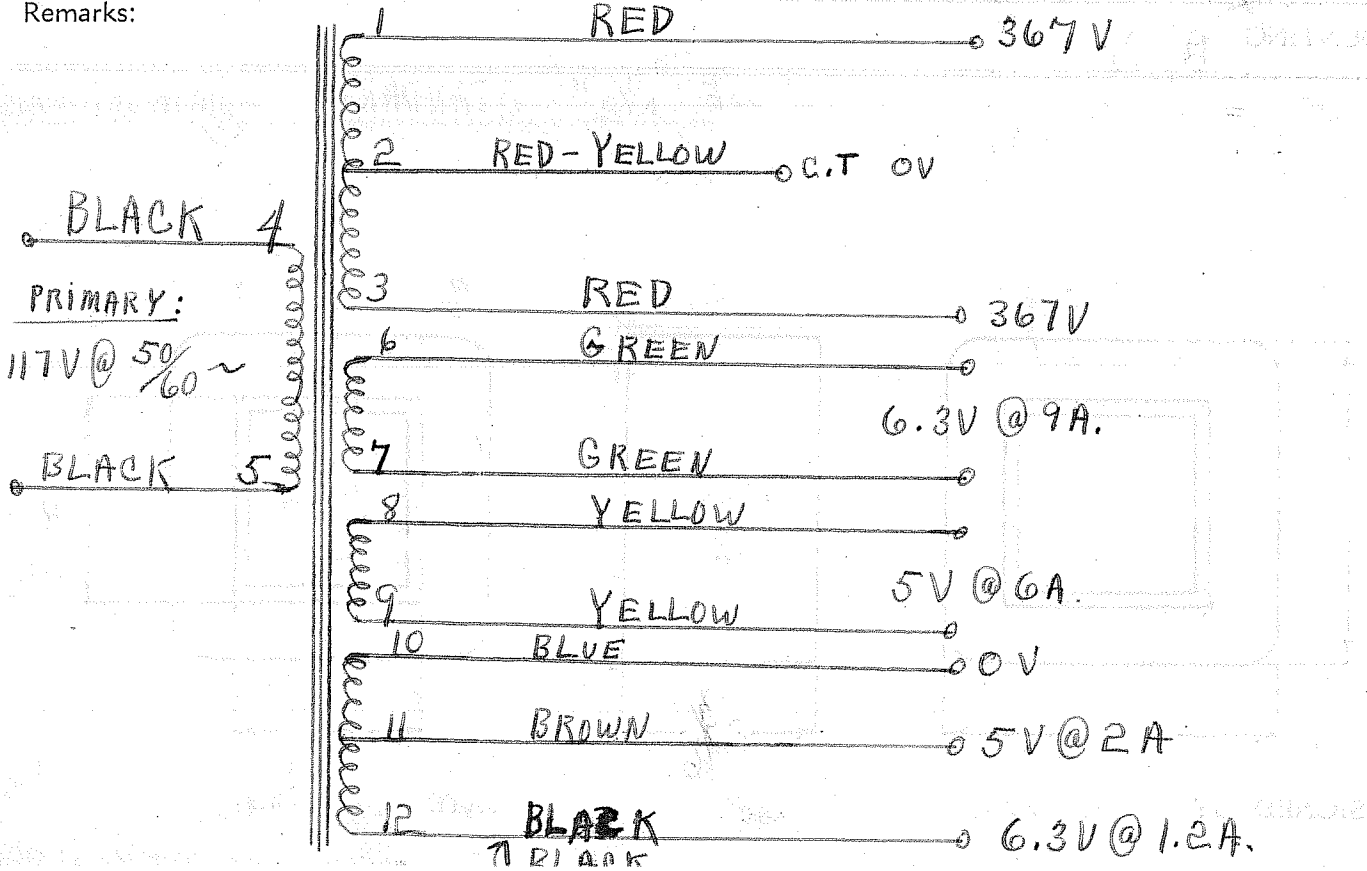
Winding	1-2-3 SEC	SHIELD	4-5 PRI.	6-7 FIL #1	8-9 FIL #2	10-11-12 FIL #3	
Mean Turn	9.61	—	11.16	12.40	12.96	12.96	
Resistance 25° c	67.5	—	1.175	0.0232	.0316	0.123	
Pounds Copper	.501	—	.900	.180	.0968	.0372	
Copper Density	681	—	650	575	545	511	
Ratio Volts OPEN CIRCUIT	770	—	117	6.66	5.45	6.66-5.45	
Ratio Volts LOAD	735	—	117	6.29	5.15	6.35-5.08	
Test to Ground	2500	—	1500	1500	2500	2500	

Iron Induction 11.6Kg @ 50 Cycles

Exciting Current 165 Milliamperes @ 117 volts 60 cycles on 4-5

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

Remarks:



PLATE

STOCK

115 volts @ 50/60 cycles to
4660V CT @ 300 Ma. DC (2000V DC)
4100V CT @ 300 Ma. DC (1750V DC)
3560V CT @ 200 Ma. DC (1500V DC) By taps in primary

SPEC. NO. P473

Winding		1-2-3 Sec.		4-5-6-7 Pri.			
Turns		6450		196			
Taps		3225		151 - 171			
Wind. Lgth.		3 5/8		3 5/8			
Wire Size		#27		#12			
T. P. L.		215-30L		40-5L			
Finish		90%		92%			
Type Lead		#20 Dulac		W.O.			
Lead Lgth.		6"		6"			
Layer Insul.		Double 40#		1L010 cp			
Test Volt.		8500		1500			
Wrapper	1L030 CP	3L40# interleaved 3L007GA		4L007GA			

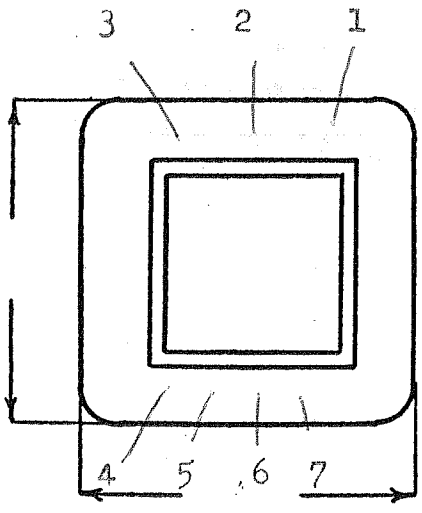
TUBE 12L007GK plus ~~2L007VC~~ 1L010VG

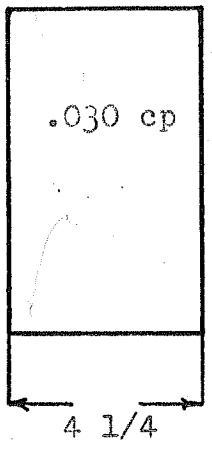
IMPREGNATION Double Varnish

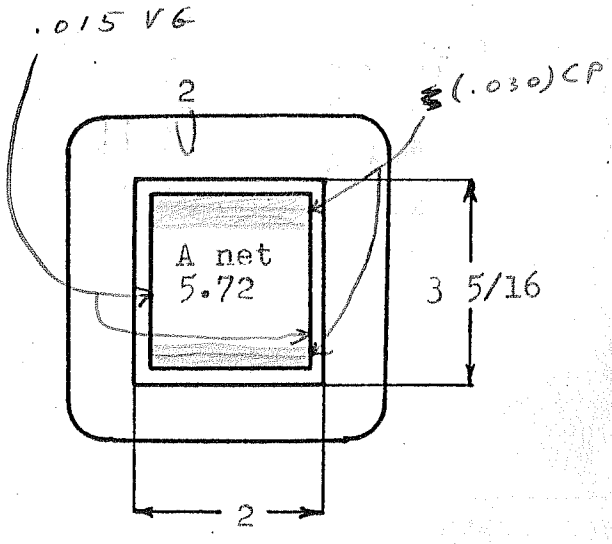
CORE 2 x 3 1/4 GA. 24 GRADE D STACK 2 x 2

MOUNTING M

T.P.V. 1.3, 1.5, 1.65
window 1.245/1.375 = 90.6%







DESIGNED BY F. Fratee

DATE

DESIGN AND TEST DATA

Rating: I sec. (rms) = 212 Ma.

	HI	MED.	LOW
Sec. VA =	699	615	535
Pri. VA =	845	744	647
Pri. I =	7.36	6.47	5.63

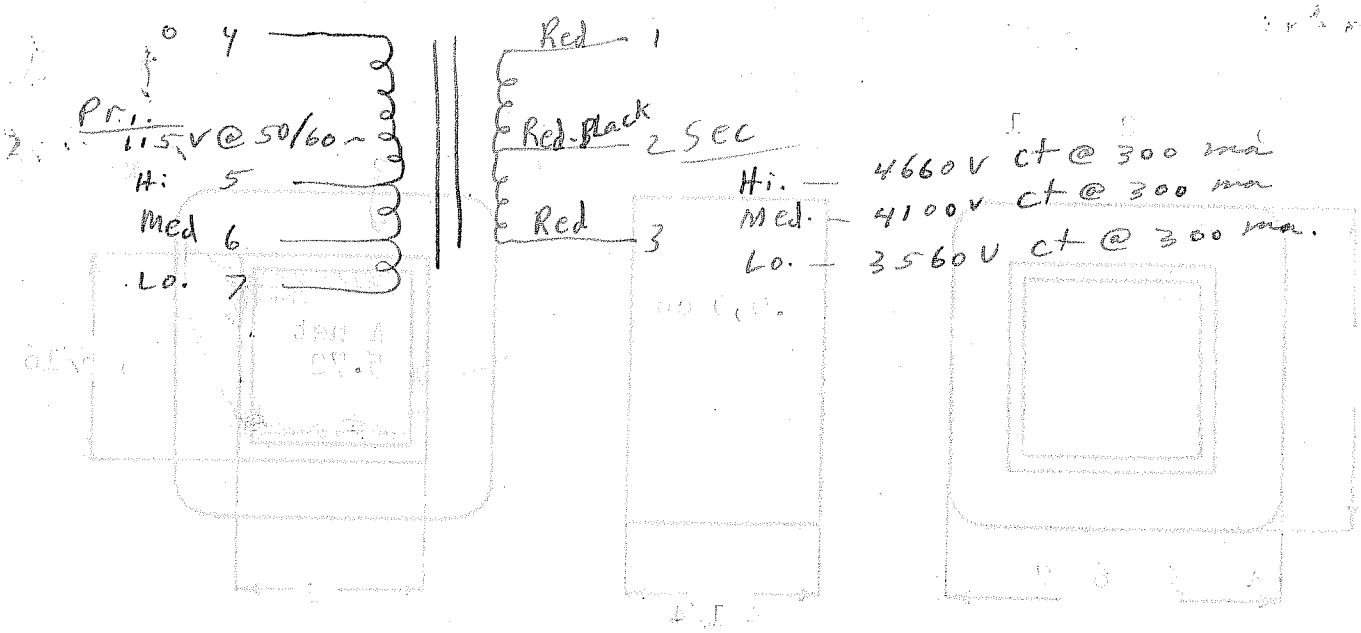
Winding		Sec.			Pri.		
Mean Turn		12.5			17.6		
Resistance 25° c		353			.36 - .41 - .47		
Pounds Copper		4.17			5.79		
Copper Density		950			887		
Ratio Volts	Lo 3594	MED. 4134	HI 4694		115		
Test to Ground		8500			1500		

Iron Induction 9.3 kg @ 50 Cycles with 115 V on 4-5

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



PLATE

STOCK

115 volts @ 50/60 cycles to
3620 volts CT @ 350 Ma. DC (1500V DC) or
3060 volts CT @ 350 Ma. DC (1250V DC)
By tap in primary

SPEC. NO. P472

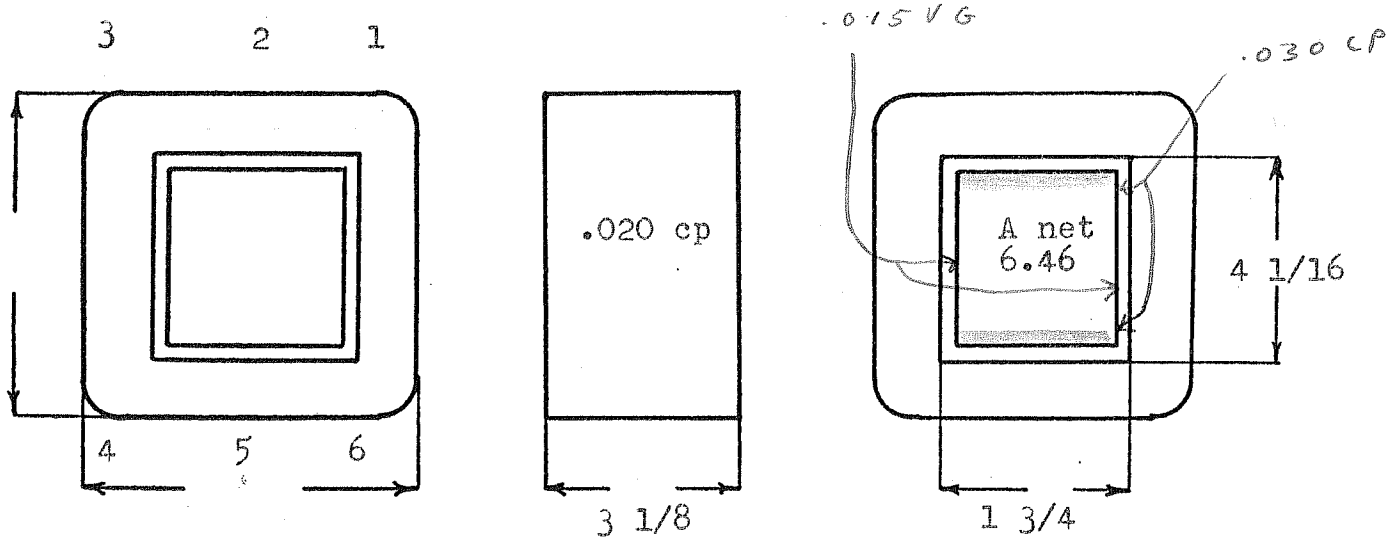
Winding	=	1-2-3 Sec.			4-5-6 Pri.		
Turns		4400			156		
Taps		2200			132		
Wind. Lgth.		2 5/8			2 5/8		
Wire Size		#27			#13		
T. P. L.		157-28L			32-5L		
Finish		91%			90%		
Type Lead		#22 Dulac			W.O.		
Lead Lgth.		6"			6"		
Layer Insul.		Double 40#			1L010CP		
Test Volt.		6000			1250		
Wrapper		~~2L007VC~~ 1L007VG plus ~~2L40#~~ interleaved 2L007GA + 1L015CP			3L007GA		

TUBE	12L007GK plus ~~2L005VC~~ 1L010VG	IMPREGNATION	Double Varnish

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

MOUNTING M Pour with Tar

T. P. V. — 1.15, 1.35
Window — 1.13/1.25 = 90.4%



DESIGNED BY F. Frazee

DATE 6-4-47

DESIGN AND TEST DATA

Rating: I sec. (rms) = .707 x 350 = 248

	HI	LO
Sec. VA =	635	537
Pri. VA =	767	656
Pri. I =	6.68	5.71

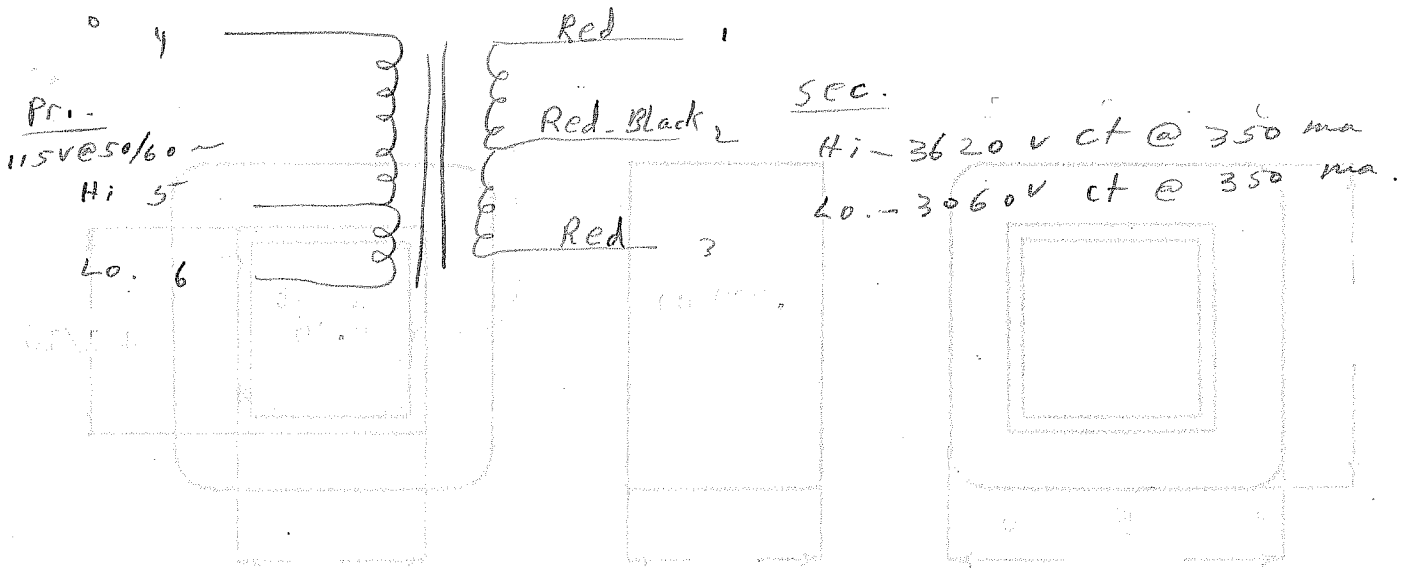
Winding		1-2-3 Sec.			4-5-6 Pri.		
Mean Turn		14.32			18.16		
Resistance 25° c		276			.411-.488		
Pounds Copper		3.26			3.78		
Copper Density		813			774 max.		
Ratio Volts	HI - 1915-1915 LO - 1620-1620				115		
Test to Ground		6000			1250		

Iron Induction 9.9 kg @ 50 Cycles

Exciting Current 383 milli amperes @ 115 volts 60 cycles on 4-5

Induced Test: Apply Volts at Cycles on with grounded

Remarks:



Television Tower

117V @ 50/60 ~ to
690V C.T. @ 190 ma
5V @ 3a
6.3V @ 7.6a

New Stock

OBSOLETE

SPEC. NO. T500

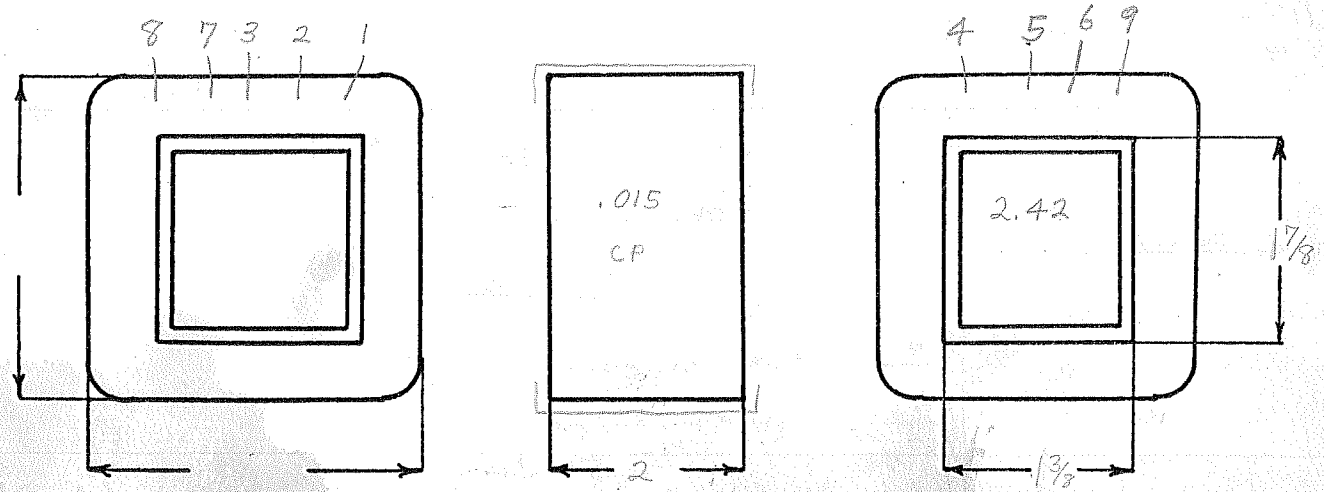
	1-2-3		4-5	6-7	8-9		
Winding	Sec	Shield	Pri	Fil #1	Fil #2		
Turns	1770	1	282	17	13		
Taps	885	—	—	—	—		
Wind. Lgth.	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4		
Wire Size	#30	.002 cw	#20	Double #17	Double #21		
T. P. L.	148 - 12L	—	47 - 6L	17 - 1L	13 - 1L		
Finish Pitch	92%	—	90%	91%	45%		
Type Lead	#22 Dalac	Lit. Br	w. o. sleeve	w. o. sleeve			
Lead Lgth.	cut 14"	3"	cut 14"	cut 14"	cut 14"		
Layer Insul.	30#	—	50#	—	—		
Test Volt.	2500	—	1500	1500	2500		
Wrapper	2L005VC	1L005VC	2L007GA	3L007GA	2L007GA		

TUBE 5L010GK + 1L003VP IMPREGNATION Varnish

CORE 1 3/8 X 2 GA. 24 GRADE D STACK 2 X 2

MOUNTING A, N

wn = 88%



DESIGNED BY A. Hadley

DATE 7-17-49

DESIGN AND TEST DATA

Rating: $I_s = .9 \times 190 = 171$ ma.

Sec VA = 155.7
Pri VA = 196.5
I_p = 1.680 a

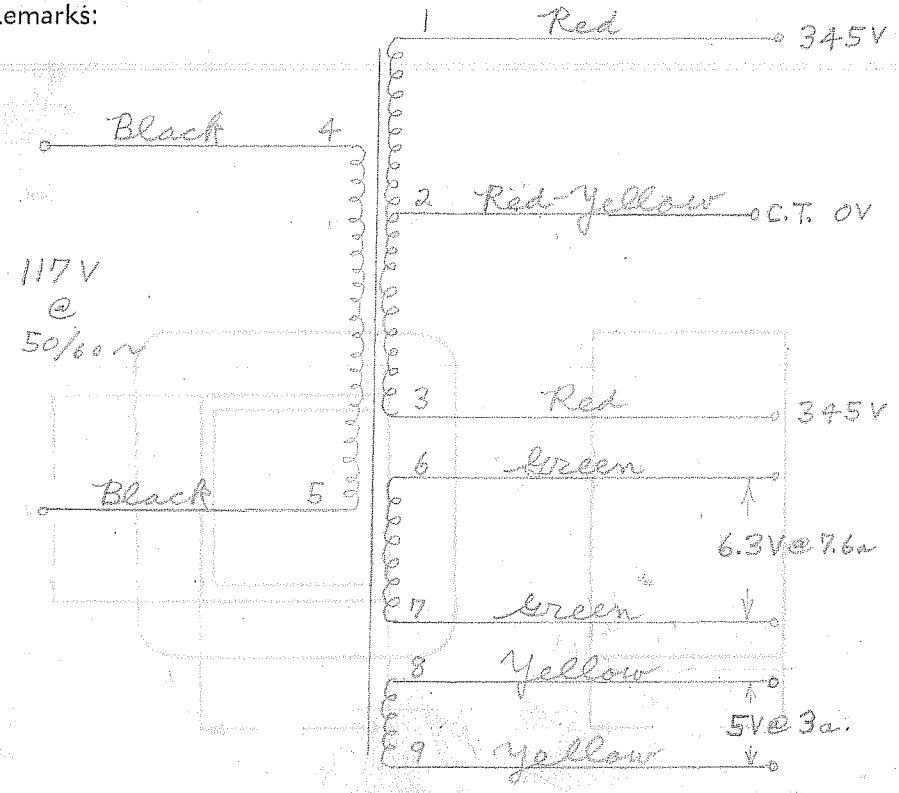
Winding	Sec	Shield	Pri	6.3v 7.6a	5v 3a		
Mean Turn	7.49	—	8.96	10.04	10.48		
Resistance 25° c	1.16	—	2.18	.0367	.0740		
Pounds Copper	.348	—	.676	.179	.0564		
Copper Density	589	—	610	540	540		
Ratio Volts Open Circuit	7.35	—	117	7.06	5.40		
Ratio Volts Load	6.92	—	117	6.56	5.01		
Test to Ground	2500	—	1500	1500	2500		

Iron Induction 12.0Kg @ 50 Cycles

Exciting Current 200 milli amperes @ 117 volts 60 cycles on 4—5

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

Remarks:



Power

117V @ 60 cycles

to

690VCT @ 190ma

5V @ 3a

6.3V @ 7.6a

New stock

SPEC. NO. T 500

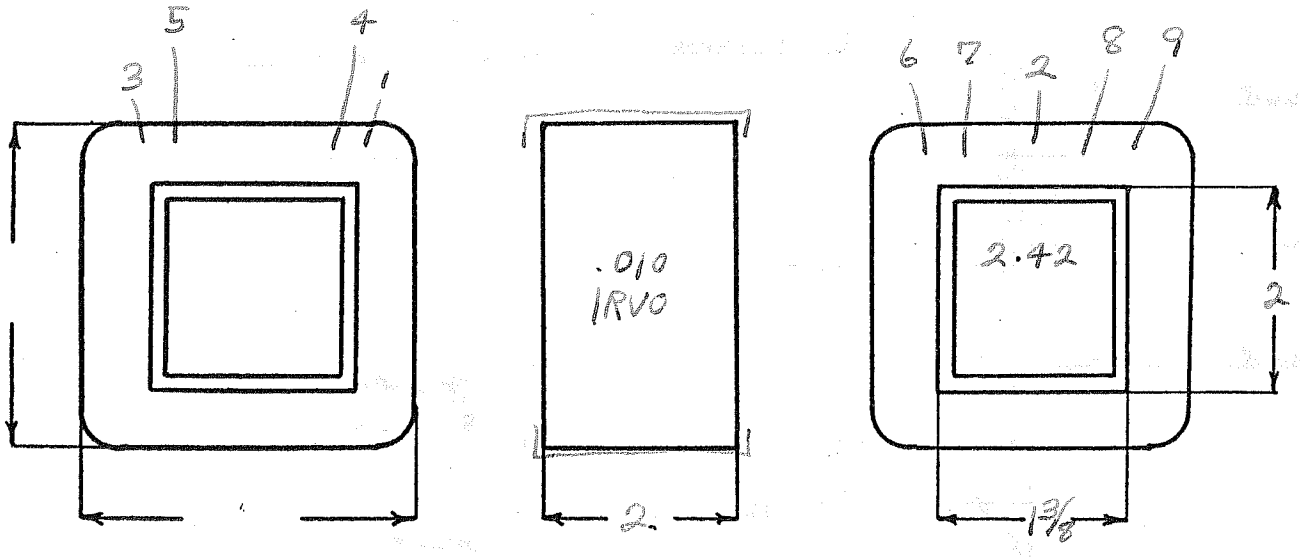
	1-2-3		4-5	6-7	8-9		
Winding	Pri	Shield	Sec	Fil #1	Fil #2		
Turns	1480	1	240	11	14		
Taps	740	—	—	—	—		
Wind. Lgth.	1 1/16	1 1/16	1 1/16	← 1 1/16 →			
Wire Size	#28	.001 cu	#19	#18	#15		
T. P. L.	106-14L	—	40-6L	11-1/3L	14-2/3L		
Finish Pitch	86%	—	89%	90%	90%		
Type Lead	#22 Pulse	#26 T.C.	#18 P.B.	w.o. sleeve	w.o. sleeve		
Lead Lgth.	cut 14"	3"	cut 14"	cut 14"	cut 14"		
Layer Insul.	40#	—	50#	—	—		
Test Volt.	2500	—	1500	2000	1000		
Wrapper	IL002CA IL005VC	IL003CA	IL010CP	IL003CA IL005GA			

TUBE 6L010GH+IL002CA IMPREGNATION Varnish

CORE 1 3/8 x 2 GA. 24 GRADE D STACK 2x2

MOUNTING A, N

wm = 89%



RE-DESIGNED BY A. Hadley

DATE 6-1-50

DESIGN AND TEST DATA

Rating: I_s = 190 ma.

dec VA = 156
Pri VA = 198
I_p = 1.69

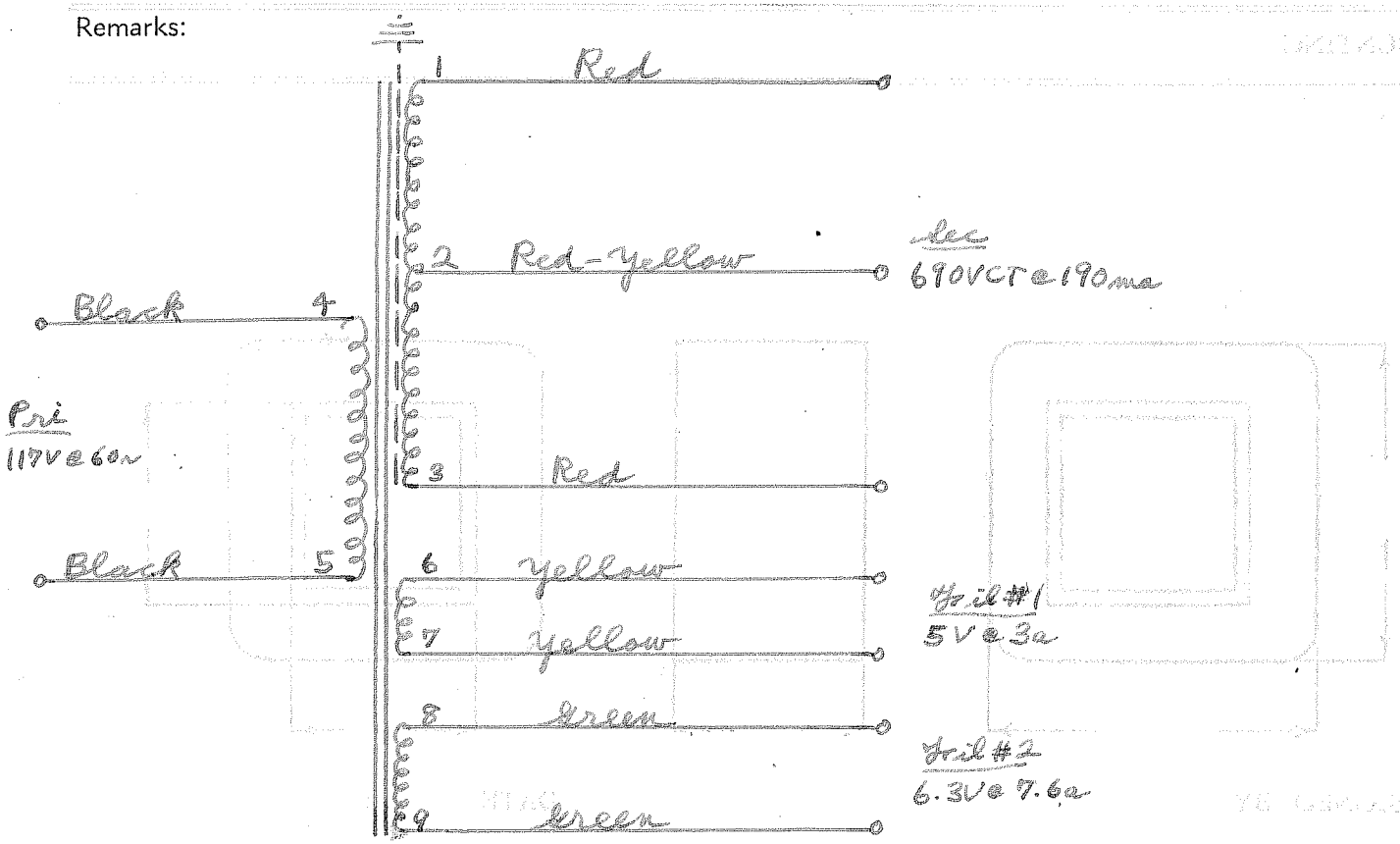
Winding	1-2-3 Sec	Shield	4-5 Pri	6-7 Fil #1	8-9 Fil #2		
Mean Turn	8.03	—	9.85	10.96	11.00		
Resistance 25° c	65.6	—	1.62	.0654	.0417		
Pounds Copper	.488	—	.778	.0501	.1280		
Copper Density	842	—	762	542	428		
Ratio Volts open circuit	721	—	117	5.37	6.82		
Ratio Volts Load	692	—	117	5.04	6.34		
Test to Ground	2500	—	1500	2000	1000		

Iron Induction 11.7kg @ 60 Cycles with 117V on 4-5

Exciting Current 320 milli amperes @ 117 volts 60 cycles on 4-5

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

Remarks:



Power
117V @ 60 cycles
to
690VCT @ 190 ma
5V @ 3a
6.3V @ 7.6a

"New stock

SPEC. NO. T 500

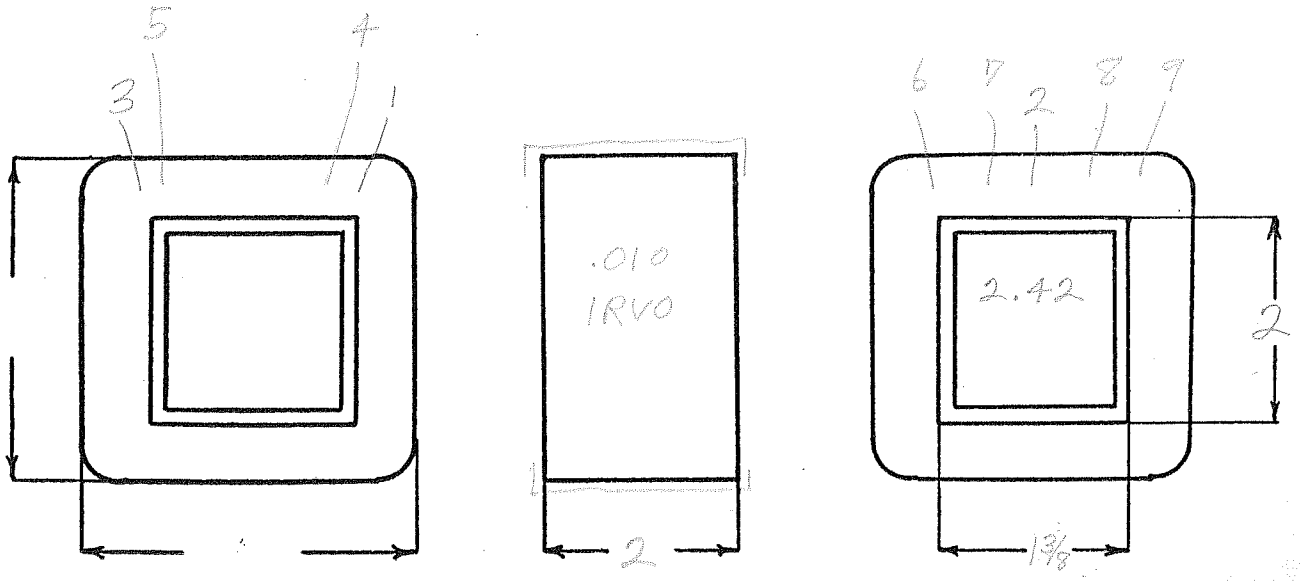
Winding	1-2-3 Sec	Shield	4-5 Pri	6-7 Fil #1	8-9 Fil #2		
Turns	1480	1	240	11	14		
Taps	740	—	—	—	—		
Wind. Lgth.	1"1/16	1"1/16	1"1/16	← 1"1/16 →			
Wire Size	#28	.001 cu	#19	#18	#15		
T. P. L.	106 – 14L	—	40 – 6L	11 – 1/2 L	14 – 2/2 L		
Finish	86%	—	89%	90%	90%		
Type Lead	#22 Enlac	Lil Br.	#18 P.B.	w. o. sleeve	w. o. sleeve		
Lead Lgth.	cut 14"	3"	cut 14"	cut 14"	cut 14"		
Layer Insul.	40#	—	50#	—	—		
Test Volt.	2500	—	1500	2000	1000		
Wrapper	IL002CA IL005VC	IL003CA	IL010CP	IL003CA IL005CA			

TUBE 6L010GR + IL002CA IMPREGNATION Varnish

CORE 1 3/8 × 2 GA. 24 GRADE D STACK 2×2

MOUNTING A, N

wn = 89%



RE DESIGNED BY A. Hadley

DATE 6-1-50

DESIGN AND TEST DATA

Rating: $I_s \cong 190$ ma

Sec VA = 156
Pri VA = 198
$I_p = 1.69$

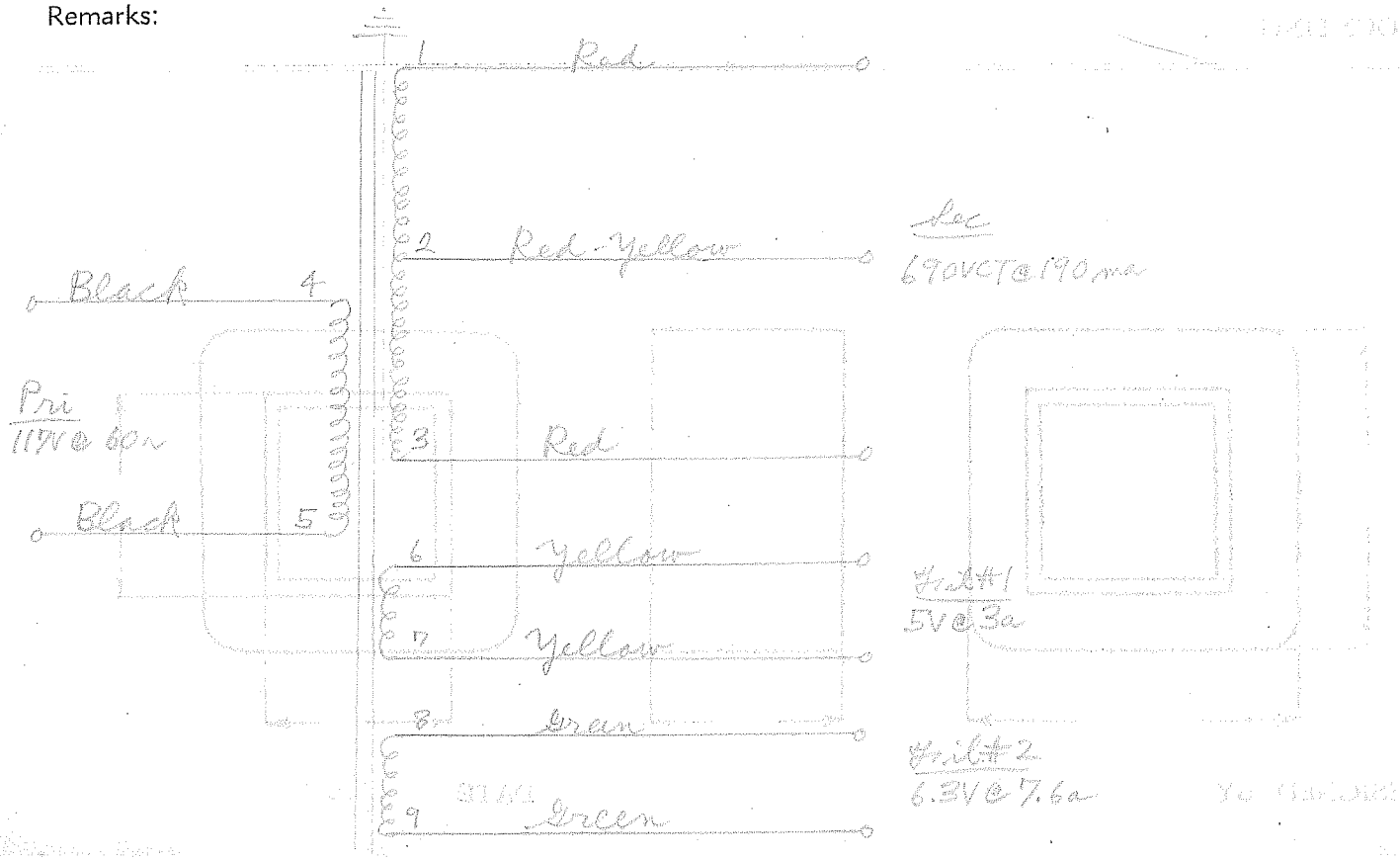
Winding	1-2-3 Sec	Shield	4-5 Pri	6-7 Fil #1	8-9 Fil #2		
Mean Turn	8.03	—	9.85	10.96	11.00		
Resistance 25° c	65.6	—	1.62	.0654	.0417		
Pounds Copper	.488	—	.778	.0501	.1280		
Copper Density	842	—	762	542	428		
Ratio Volts open circuit	7.21	—	117	5.37	6.82		
Ratio Volts Load	692	—	117	5.04	6.34		
Test to Ground	2500	—	1500	2000	1000		

Iron Induction 11.7kg @ 60 Cycles with 117V on 4-5

Exciting Current 320 milli amperes @ 117 volts 60 cycles on 4-5

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

Remarks:



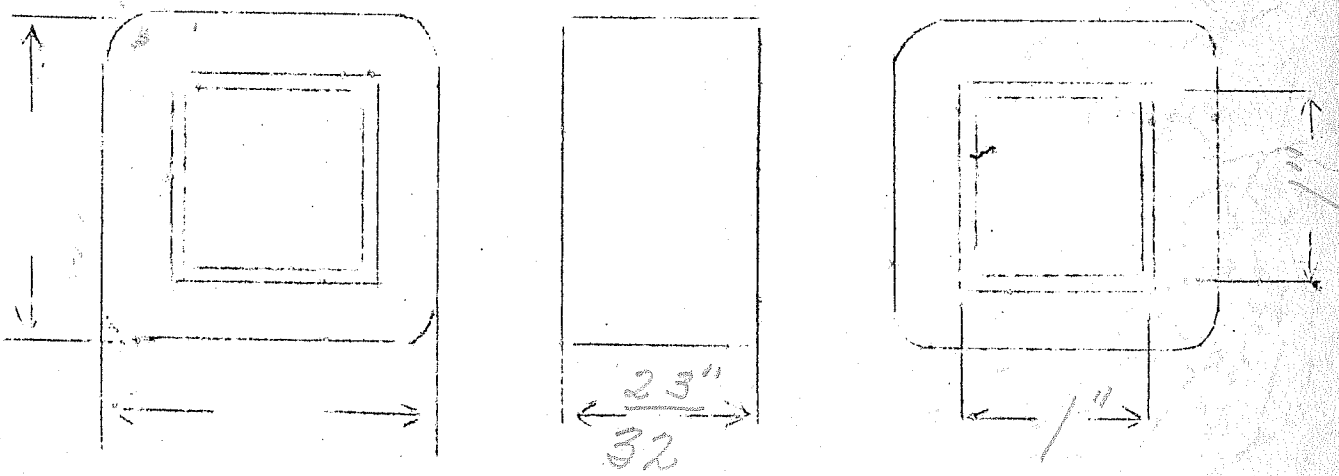
SPEC. NO. 500

Winding	SEC	PRI					
Turns	1500	3000					
Taps	NONE	NONE					
Wind. Lgth.	1/2	1/2					
Wire Size	#40	#32					
T.P.L.	125	58					
Kind Term.							
Term. Lgth.							
Layer Insul.	1660	1660					
Wrapper	24003 1/4	24005 6A					

TUBE | 24007 | IMPREGNATION | VPI

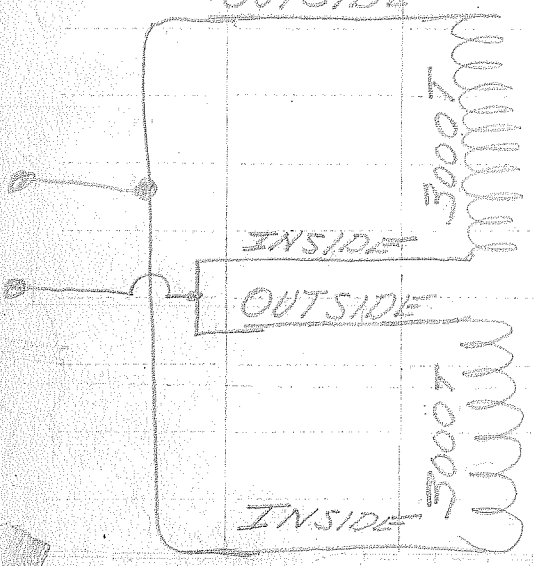
CURE | 1" x 1" N.V.

SEE OTHER SIDE FOR ASSEMBLY INFORMATION

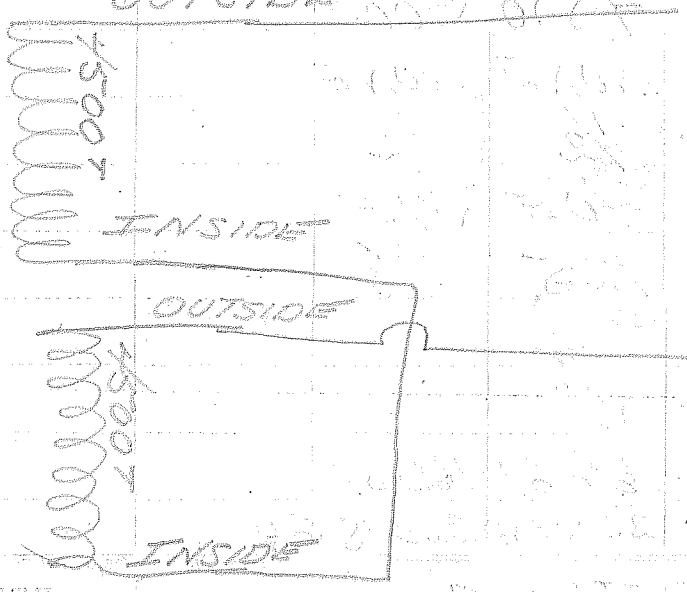


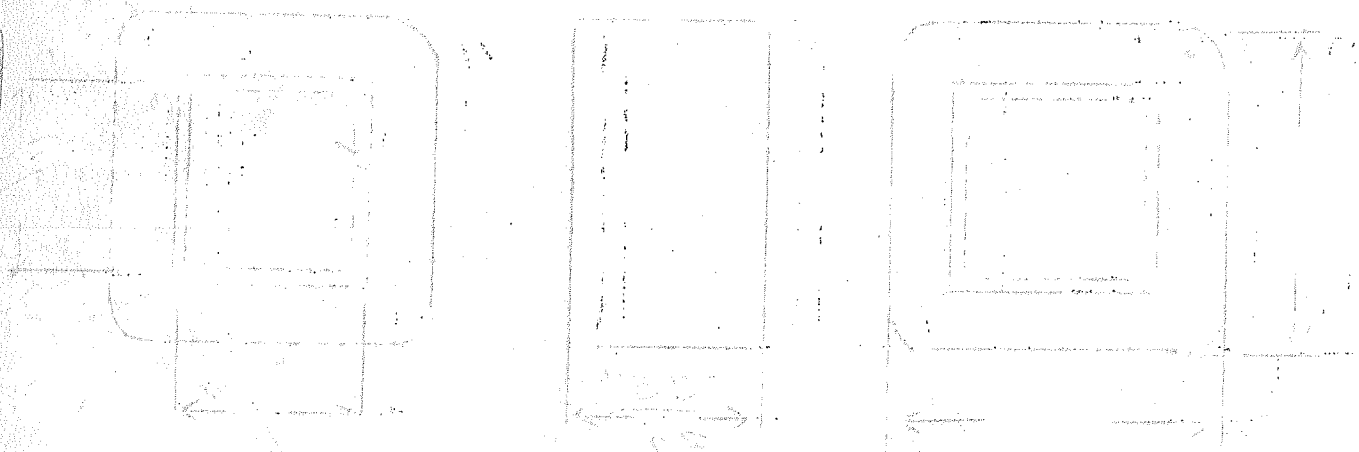
TWO
COILS TO BE ASSEMBLED ON CORE IN
REVERSED WINDING DIRECTION

PRI.



SEC.





6

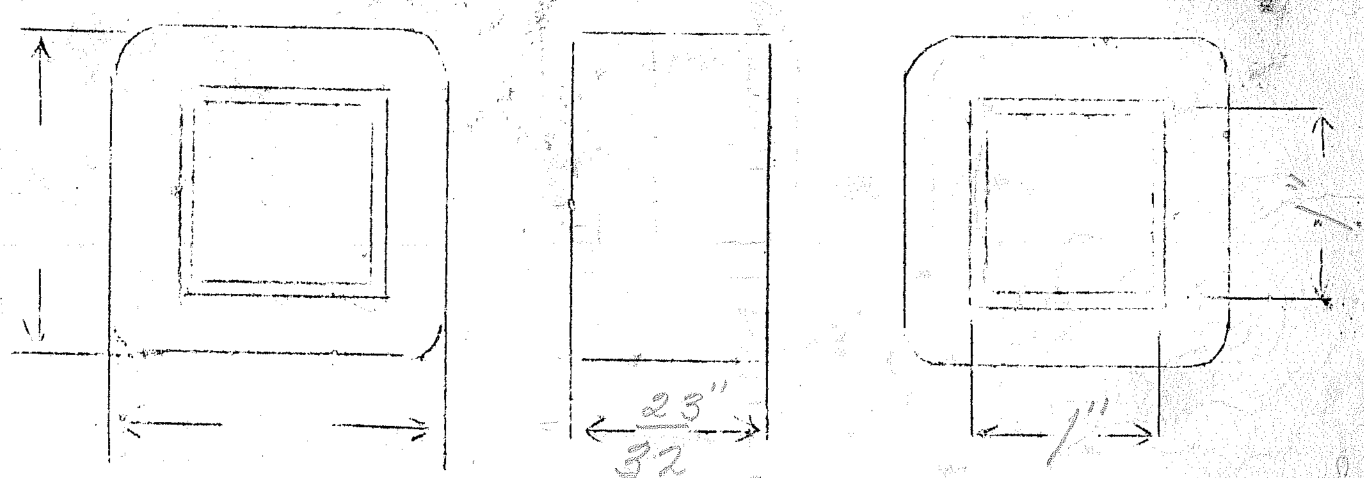
SPEC. NO. 501

Winding	SEC.	PRI					
Turns	6000	4000					
Taps	NONE	NONE					
Wind. Lgth.	1/2	1/2					
Wire Size	40E	40E					
T.P.L.	125	125					
Kind Term.	ail	Br					
Term. Lgth.	3	3					
Layer Insul.	16lb G1	16lb G					
Wrapper	2L003VP	2L005GA					

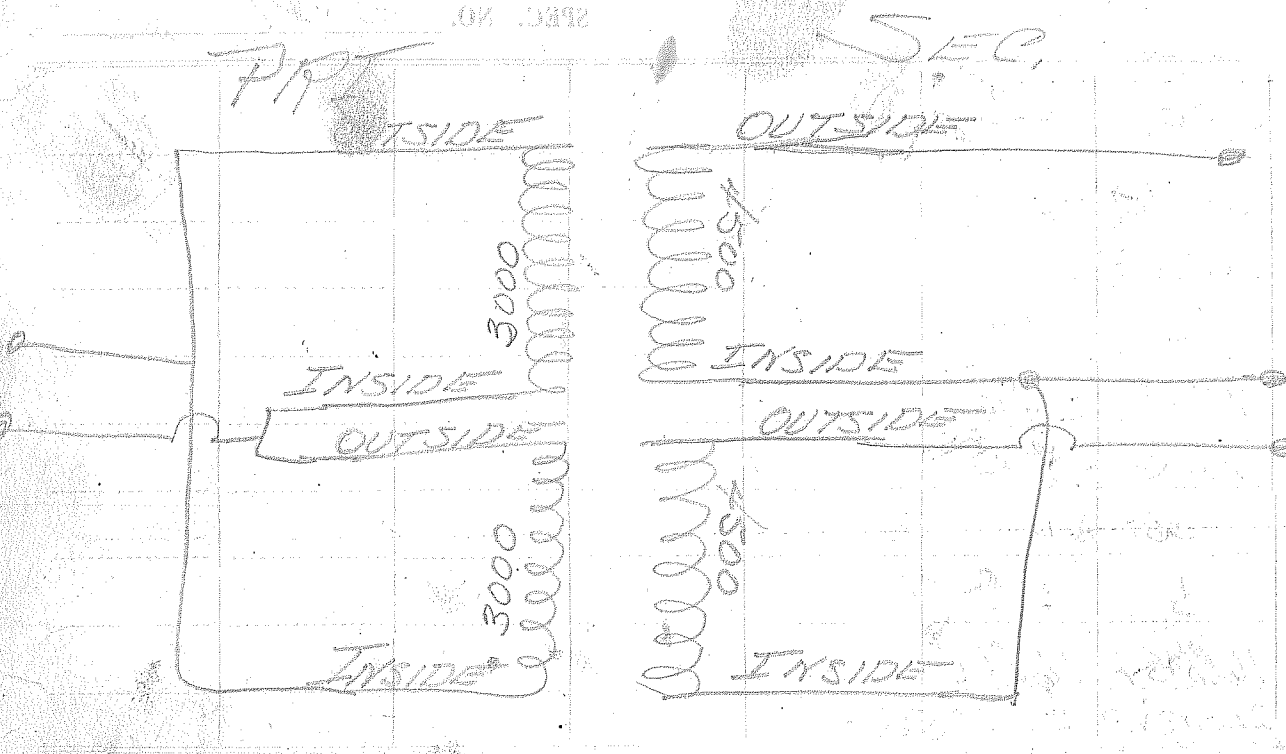
TUBE 7L607 IMPREGNATION WAX

CURE 1"X1"NW 2X2 Grade A annealed

SEE OTHER SIDE FOR ASSEMBLY INFORMATION



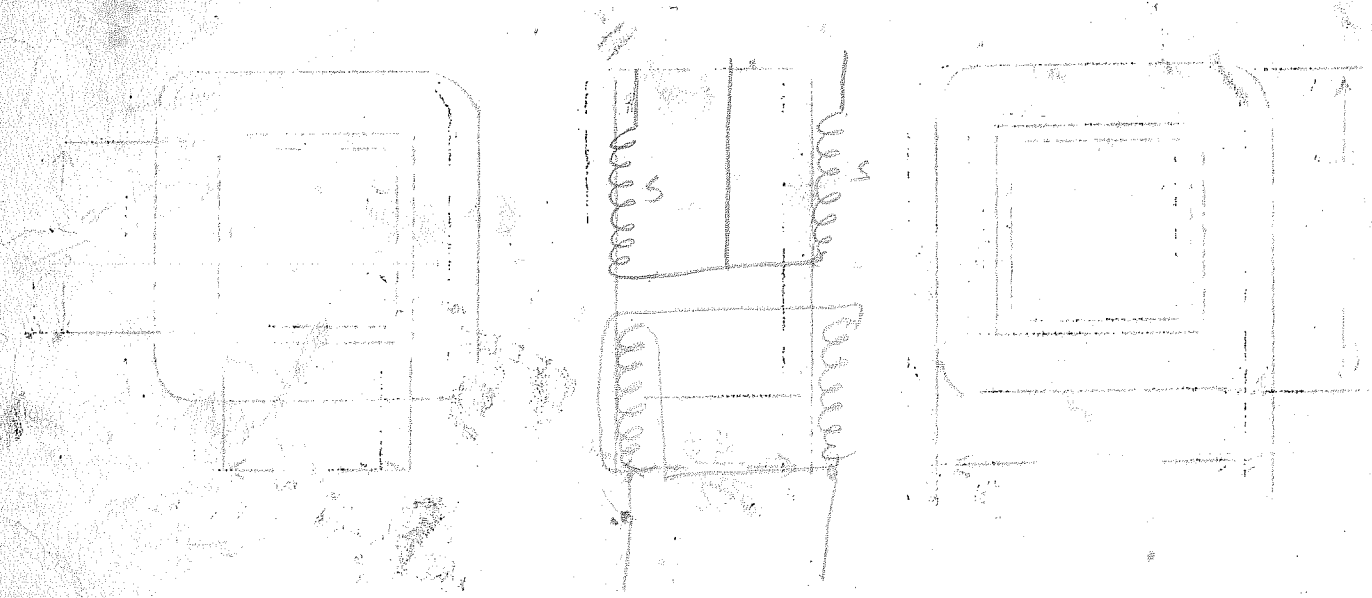
Two Coils to Be Assembled in Reverse Direction



Resistance Test

Primary 390-

Secondary 1900 - 1900
-3000-



POWER: 117 V @ 50/60 ~ TO:

720 V C.T. @ 250 ma.
6.3 V @ 0.6A
6.3 V @ 1.2A Tapped at 5V @ 2A
5 V @ 3A 6.3 V @ 8A.

NEW STOCK

SPEC. NO. T-502

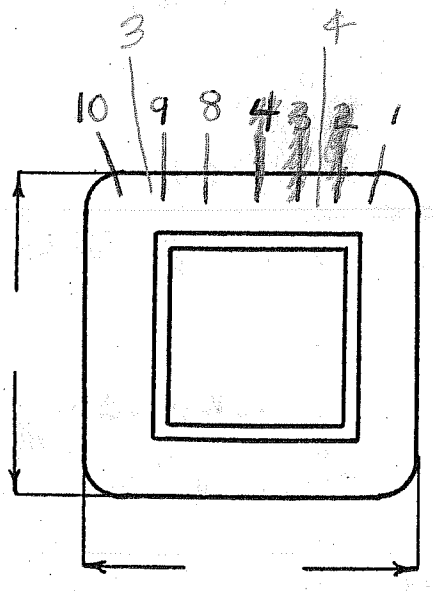
Winding	1-2-3 SEC	SHIELD	4-5 PRIM	6-7 FIL #1	8-9-10 FIL #2	11-12 FIL #3	13-14 FIL #4
Turns	~~1270~~ ~~635~~	1	200	12	12	9	12
Taps	~~6~~ ~~4~~	—	—	—	9	—	—
Wind. Lgth.	1 7/8	1 7/8	1 7/8	15/16	15/16	15/16	15/16
Wire Size	#28	.002 Cu	#18	#24	#19	#17	#14
T. P. L.	127-10L	—	40-5L	12-½L	12½L	9-½L	12-½L
~~Finish~~ PITCH	93.6%	—	89.2%	27%	48%	45%	85%
Type Lead	#22 DULAC	SIL. BR.	W.O. Sleeve	W.O. Sleeve	W.O. Sleeve	W.O. Sleeve	W.O. Sleeve
Lead Lgth.	Cut 14"	3"	Cut 14"	Cut 14"	Cut 14"	Cut 14"	Cut 14"
Layer Insul.	40#	—	~~1L005CA~~ 60#	—	—	—	—
Test Volt.	2500	~~1L003CA~~	1500	2500	2500	2500	1500
Wrapper	~~1L005CA~~ ~~2L005VC~~	~~1L007GA~~ 1L60# ~~1L005VC~~	2L007GA	2L007GA		2L007GA	

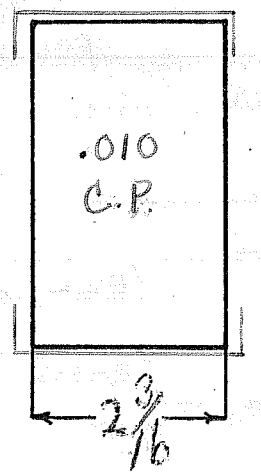
TUBE ~~2L010GK~~ + ~~1L003CA~~ ~~1L005VC~~ IMPREGNATION VARNISH

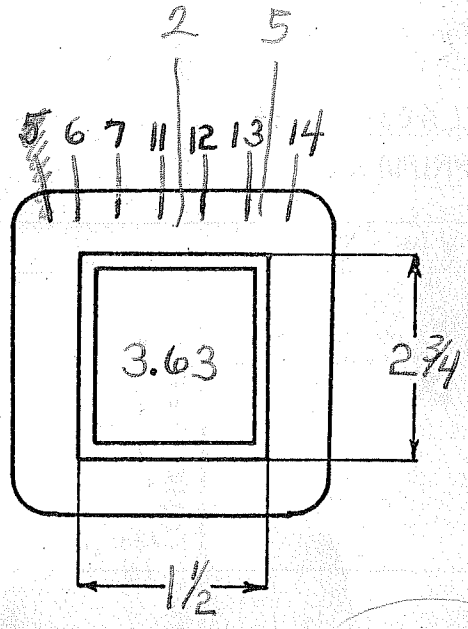
CORE 1½ X 2¾ GA. 24 GRADE D EASTERN STANDARD STACK 2X2

MOUNTING A, N

W_n = 82.0%







DESIGNED BY AL SHASKY

DATE 27-7-49

DESIGN AND TEST DATA

Rating: $I_s = 0.9 \times 250 = 225$ m.a.

SEC V.A. = 210
PRI V.A. = 263
$I_P = 2.23$

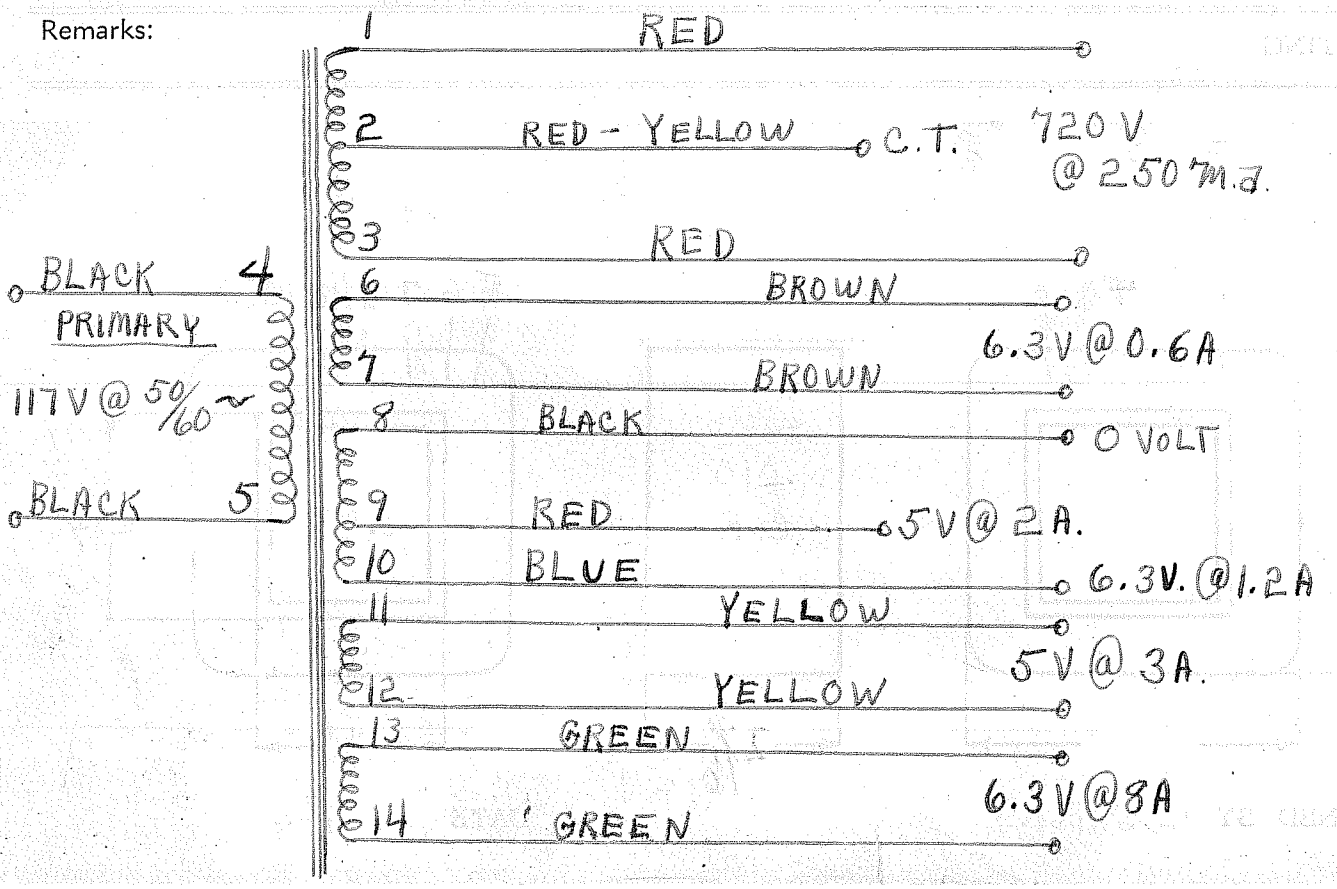
Winding	1-2-3 SEC	SHIELD	4-5 PRIM.	6-7 FIL.#1	8-9-10 FIL.#2	11-12 FIL.#3	13-14 FIL.#4
Mean Turn	9.47	—	11.07	12.18	12.18	12.67	12.67
Resistance 25° c	67.0	—	1.21	0.319	0.100 0.075	0.049	0.0326
Pounds Copper	0.50	—	0.93	0.015	0.048	0.06	0.16
Copper Density	710	—	728	674	644	684	521
Ratio Volts OPEN CIRCUIT	752	—	117	7.02	7.02; 5.27	5.27	7.02
Ratio Volts LOAD	720	—	117	6.67	6.63; 5.00	5.00	6.60
Test to Ground	2500	—	1500	2500	2500	2500	1500

Iron Induction 11.25 Kg @ 50 Cycles

Exciting Current 160 m.a. amperes @ 117 volts 60 cycles on Pri

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

Remarks:



POWER. 117V @ 50/60 ~ 70:
720V c.t. @ 250 m.a.
6.3V @ 0.6A.
6.3V @ 1.2A TAPPED at 5V @ 2A.
5V @ 3.A. 6.3V @ 8.A

NEW STOCK.

SPEC. NO. T-502

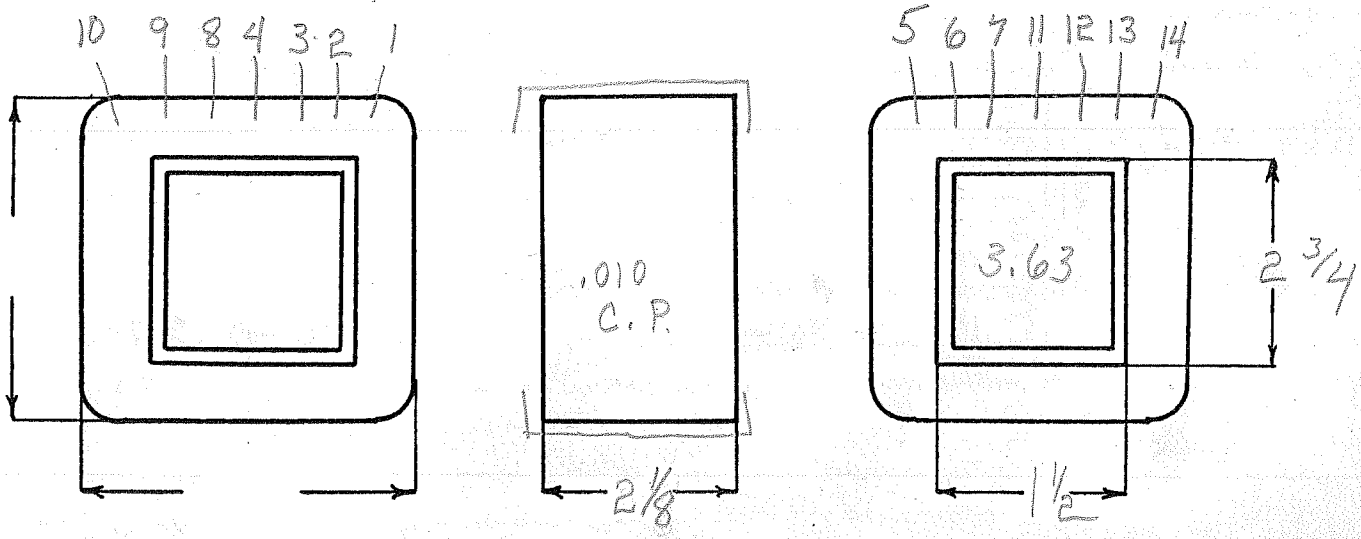
Winding	1-2-3 SEC	SHIELD	4-5 PRIM	6-7 FIL #1	8-9-10 FIL #2	11-12 FIL #3	13-14 FIL #4
Turns	1270	1	200	12	12	9	12
Taps	635	—	—	—	9	—	—
Wind. Lgth.	1 7/8	1 7/8	1 7/8	15/16	15/16	15/16	15/16
Wire Size	#28	.002 Cy	#18	#24	#19	#17	#14
T. P. L.	129-10L	—	40-5L	12-½L	12-½L	9-½L	12-½L
~~Finish~~ PITCH	93.6%	—	89.2%	27%	48%	45%	85%
Type Lead	#22 DVLAC	SIL. BR.	w. o. sleeve	w. o. sleeve	w. o. sleeve	w. o. sleeve	w. o. sleeve
Lead Lgth.	Cut 14"	3"	Cut 14"	Cut 14"	Cut 14"	cut 14"	Cut 14"
Layer Insul.	40#	—	1L005GA	—	—	—	—
Test Volt.	2500	—	1500	2500	2500	2500	1500
Wrapper	2L005VC	1L007GA 1L005VC	2L007GA	← 2L007GA		→ 2L007GA	

TUBE 6L010GK + 1L005VC IMPREGNATION VARNISH

CORE 1½ X 2¾ GA. 24 GRADE D EASTERN STANDARD STACK 2X2

MOUNTING A, N

W_m = 82.0%



DESIGNED BY AL SIMASKY

DATE 27-7-49

DESIGN AND TEST DATA

Rating: $I_s = 0.9 \times 250 = 225$ M.A.

SEC. V.A. = 210
PRI. V.A. = 263
$I_p = 2.23$

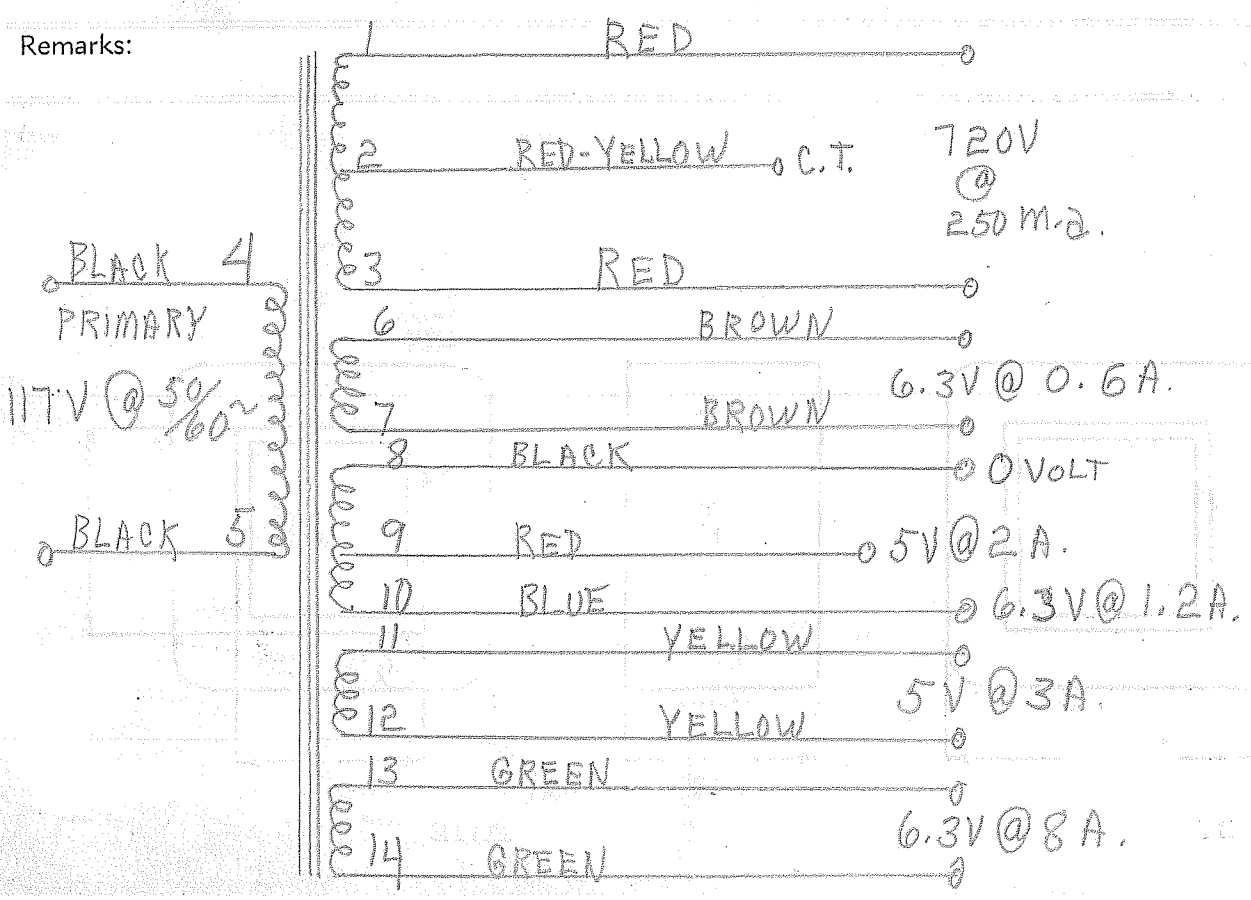
Winding	1-2-3 SEC	SHIELD	4-5 PRIM.	6-7 FIL#1	8-9-10 FIL#2	11-12 FIL#3	13-14 FIL#4
Mean Turn	9.47	—	11.07	12.18	12.18	12.67	12.67
Resistance 25° c	67.0	—	1.21	.319	.100 .075	.049	.0326
Pounds Copper	0.50	—	0.93	.015	.048	0.06	0.16
Copper Density	710	—	728	674	644	684	521
Ratio Volts OPEN CIRCUIT	752	—	117	7.02	7.02, 5.27	5.27	7.02
Ratio Volts LOAD	720	—	117	6.67	6.63, 5.00	5.00	6.60
Test to Ground	2500	—	1500	2500	2500	2500	1500

Iron Induction 11.25 Kg @ 50 Cycles

Exciting Current ____ amperes @ ____ volts 60 cycles on ____

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

Remarks:



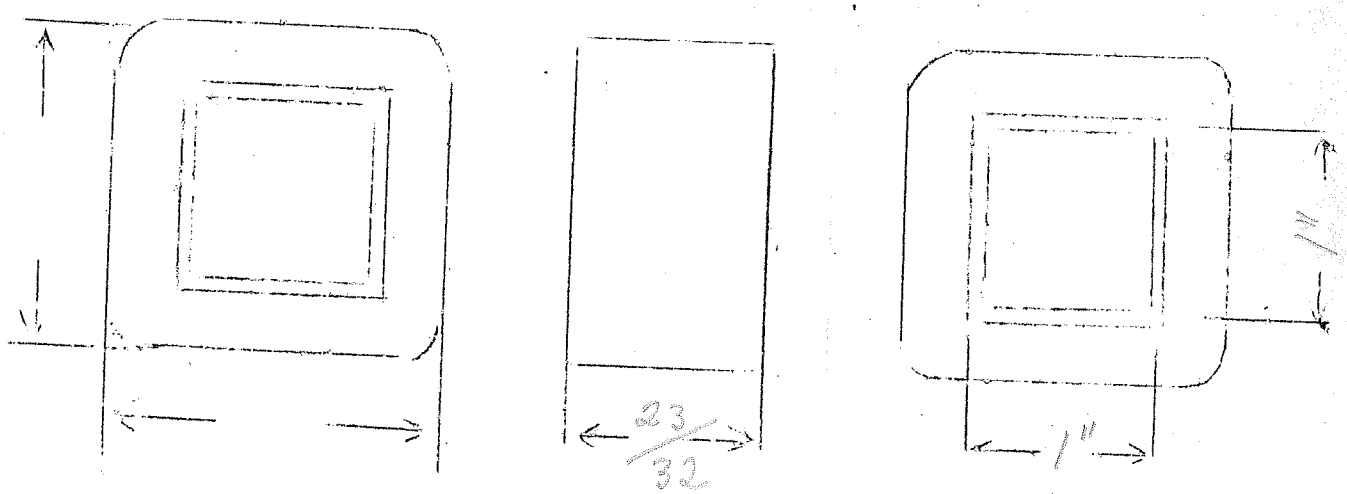
SPEC. NO. 502

Winding	SEC	PRI					
Turns	4500	3000					
Taps	None	None					
Wind. Lgth.	1/2	1/2					
Wire Size	40E	37E					
T.P.L.	125	88					
Kind Term.							
Term. Lgth.							
Layer Insul.	16# CI	16# CI					
Wrapper	2L003VP	2L005VP					

TUBE | 7L007 | IMPREGNATION | Wax

CURE | 1" X 1" NW

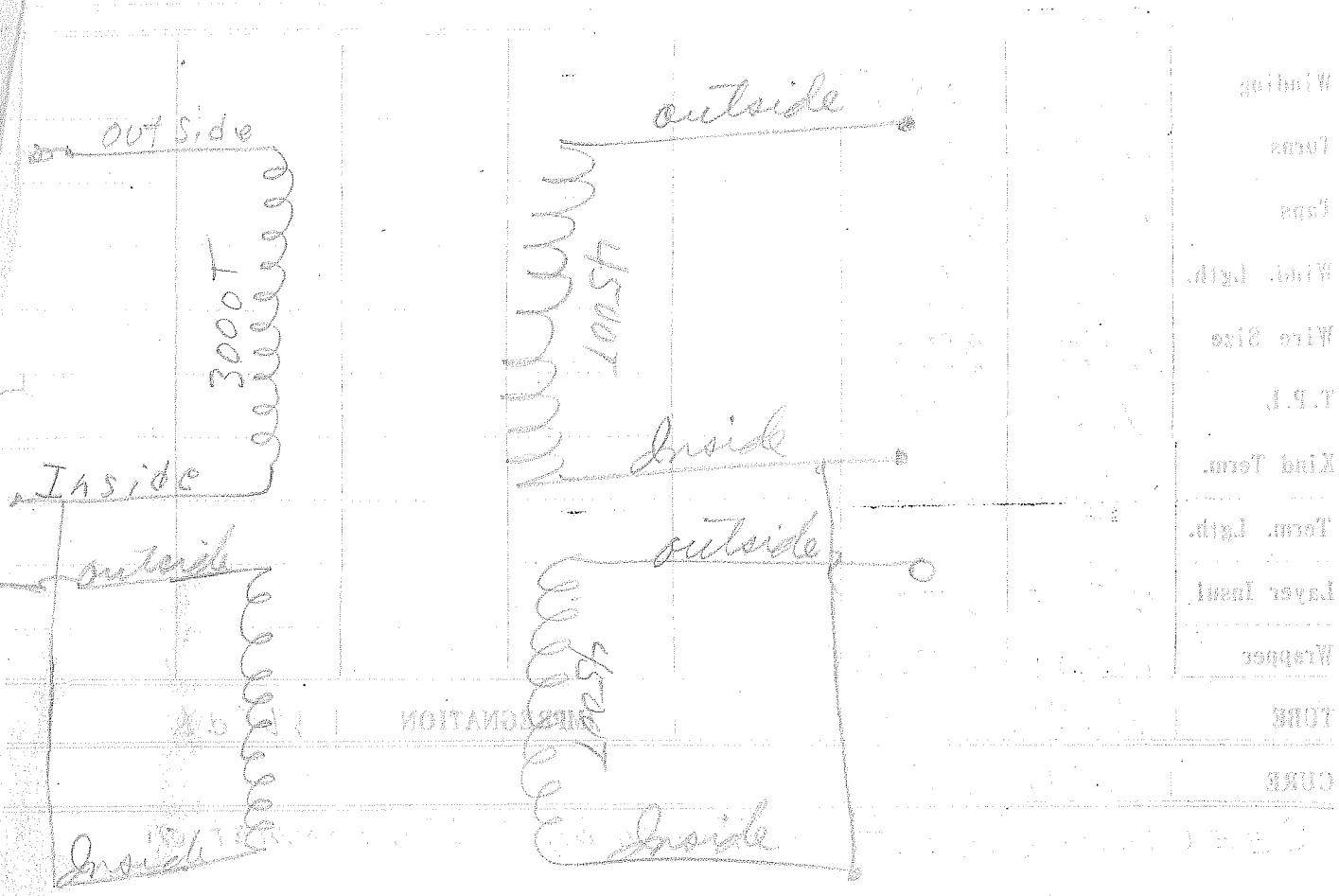
SEE Other Side For Assembly Information



Two Coils To Be Assembled in
REVERSED Direction

Pri

Sec



Resistance Test

Primary
750-0-750
7400
Secondary
1800-0-1800

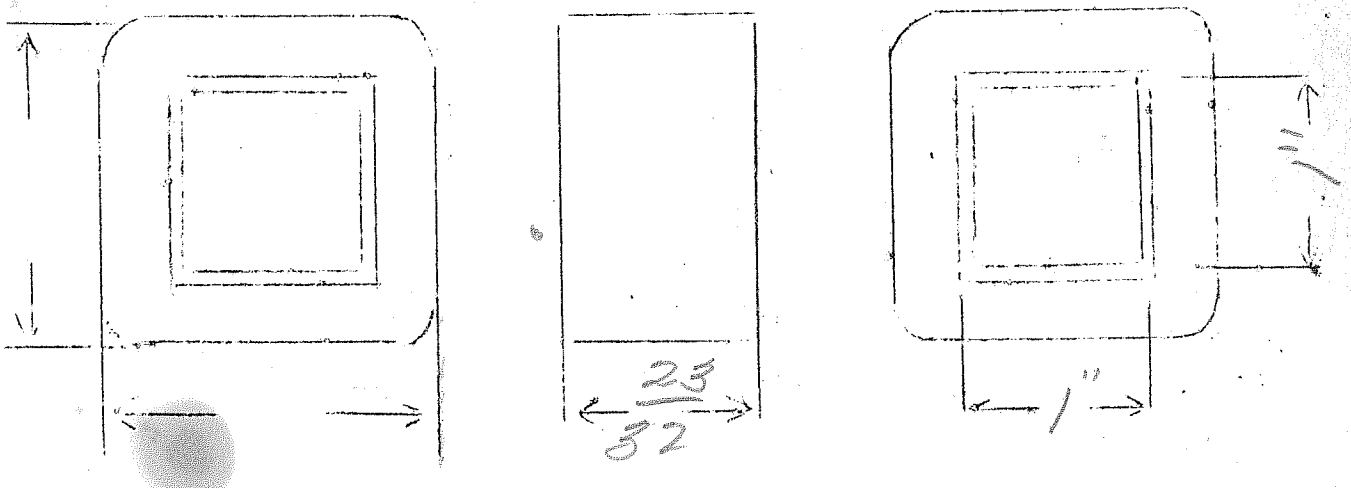
SPEC. NO. 503

Winding	SEC	PRI					
Turns	4500	3000					
Taps	None	None					
Wind. Lgth.	½	½					
Wire Size	#40	#37					
T.P.L.	125	88					
Kind Term.							
Term. Lgth.							
Layer Insul.	1 Lb 6	1 Lb 6					
Wrapper	2403 VP	2403					

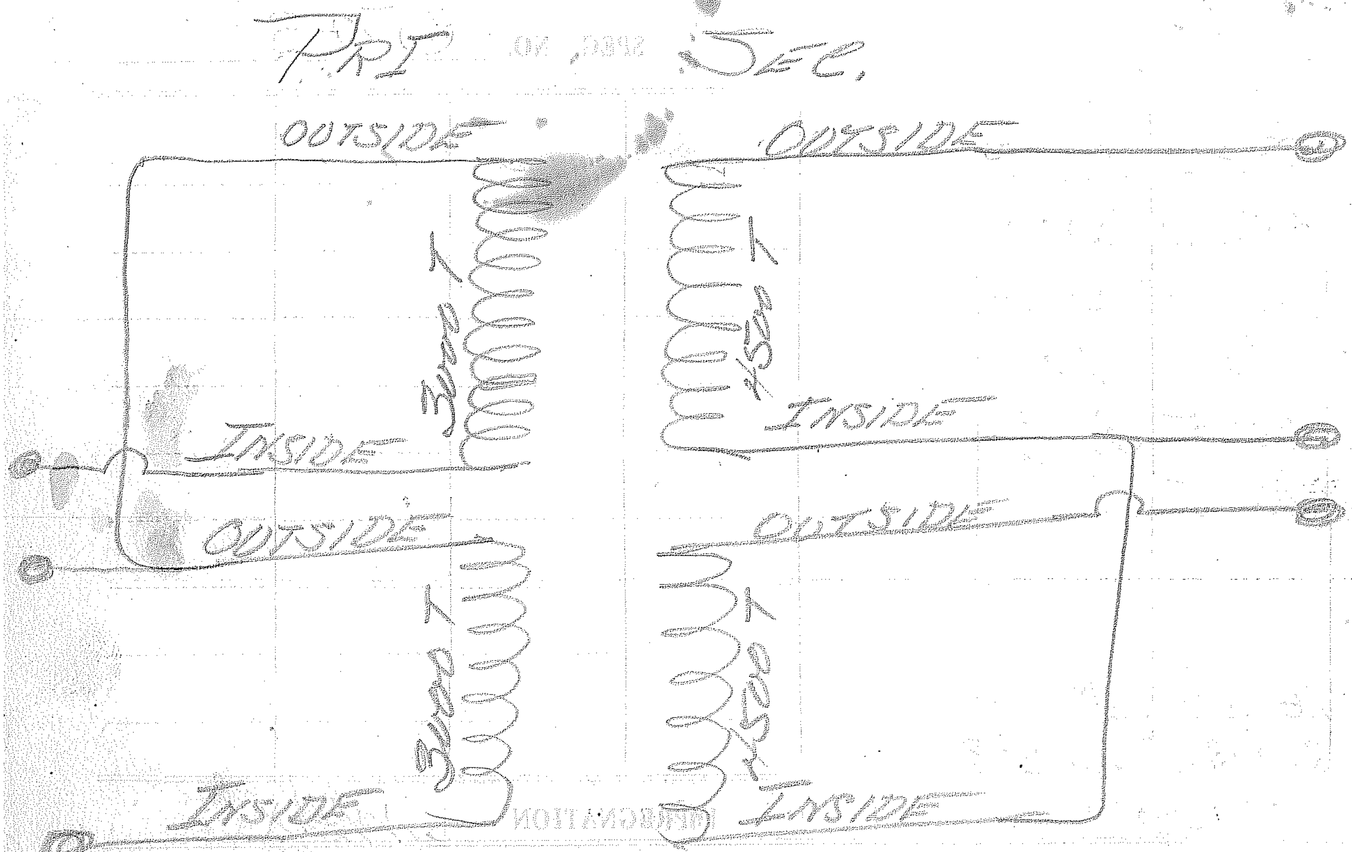
TUBE | 2407 | IMPREGNATION | VPX

CURE | 1" x 1" Rev.

See other Side for Assembly Information



TWO COILS TO BE ASSEMBLED IN
REVERSE DIRECTION



Pri - 2A5, 42, 6F6 (Triode)

Sec - 2-2A5, 42, 6F6

Class AB OLD

Ratio P/½S - 1:1.4

SPEC. NO. D-506

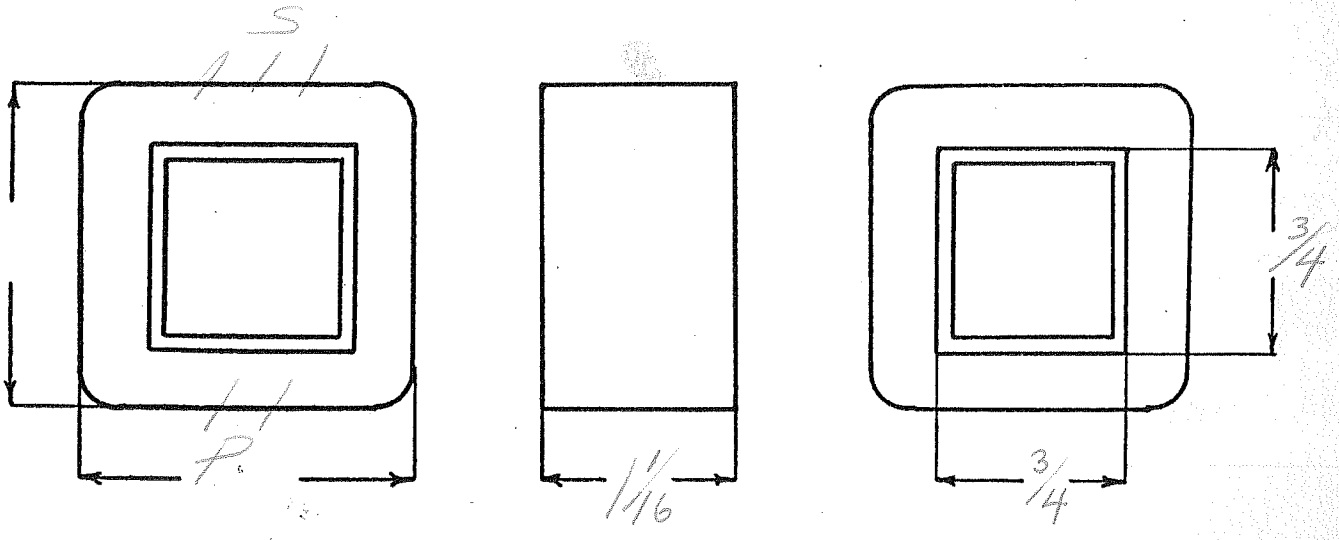
Winding	Sec	Pri	Sec				
Turns	2360	2700	2360				
Taps	—	—	—				
Wind. Lgth.	7/8"	7/8"	7/8"				
Wire Size	#37	#37	#37				
T. P. L.	160-15	160-17	160-15				
Finish							
Type Lead		A & B					
Lead Lgth.	3"	3"	3"				
Layer Insul.	20#	20#	20#				
Test Volt.							
Wrapper	12005VC	12005VC	12005GA				

TUBE 5Z4007GK | IMPREGNATION Varnish

CORE ¾ X ¾ | GA. 29 | GRADE B | STACK 0.005" gap

MOUNTING D

Connect finish of sec, to start of sec2.



DESIGNED BY G.W.

DATE 6-29-38

Audio Driver
Class B Interstage
Ratio - 2.5 to 1
20,000 Ohm to PP Grids
Rating - 0.7 Watt (Pri)

SPEC. NO. D-507

Winding	Sec. #1		Pri.			Sec. #2	
Turns	900		4500			900	
Taps	---		---			---	
Wind. Lgth.	7/8"		7/8"			7/8"	= 0.875
Wire Size	#34		#38			#34	
T. P. L.	113 - 8L		174 - 26L			113 - 8L	
Finish Pitch	88%		87½%			88%	
Type Lead	#22 Pr. Br.		#22 Pr. Br.			#22 Pr. Br.	
Lead Lgth.	9"		9"			9"	
Layer Insul.	1L - 20#G		1L - 20#G			1L - 20#G	
Test Volt.	—						
Wrapper	1L .005 VC 4L 20#G		1L .005 VC 4L - 20#G			2L .005 GA	

TUBE	4L - .007" GK	IMPREGNATION	VARNISH

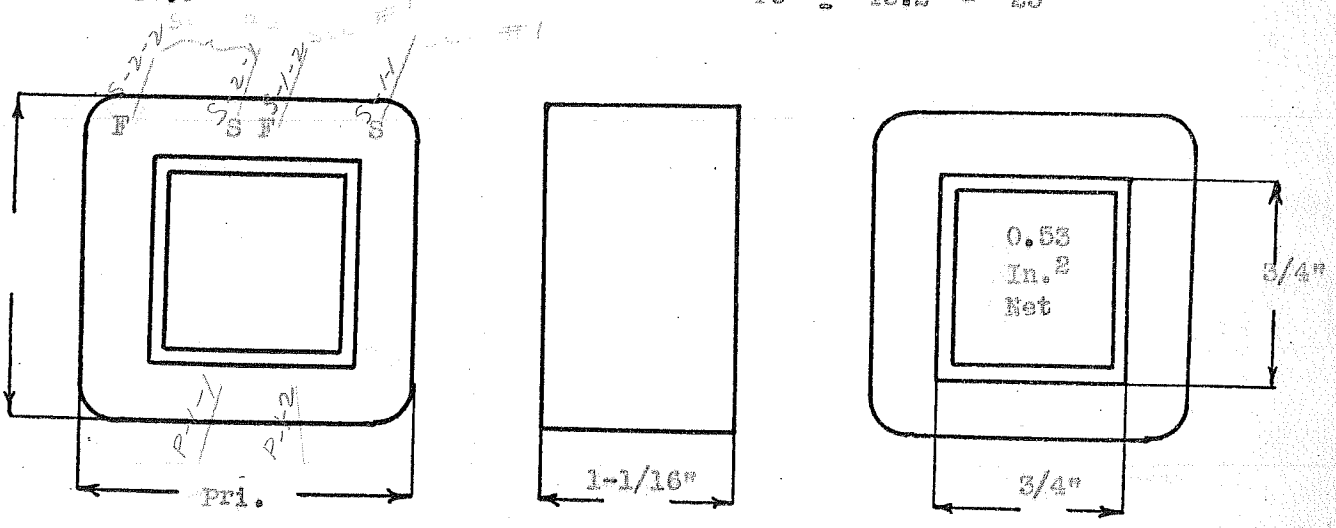
CORE 3/4 x 3/4 E & I GA. 29 GRADE D - Annealed STACK Butt - No Gap

MOUNTING "D" - Leads Only

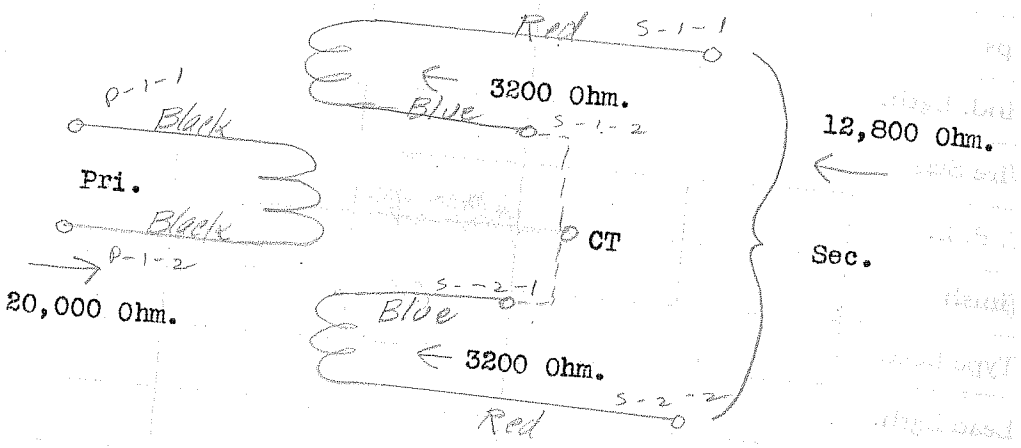
Wire Net = 0.270" (0.268")
Cu = 1572 - 10 Ma.
TPV = 37.5

$\frac{4500}{120} = 37.5$

Fe = 45.2 - 25



RE-DESIGNED BY H. W. S. DATE 8-1-41


Red
S-1-1
3200 Ohm.
Blue
S-1-2
12,800 Ohm.
P-1-1
Black
Pri.
Black
CT
Sec.
P-1-2
20,000 Ohm.
S-2-1
Blue
3200 Ohm.
S-2-2
Red

Pri 1-53, 6A6 (parallel). Class B Driver

Sec 1-53, 6A6, 6N7 - Class B

P/½S-5.0

OLD

SPEC. NO. D-501

Winding	Pri	Sec					
Turns	4500	1800					
Taps		900					
Wind. Lgth.	7/8	7/8					
Wire Size	#38	#34					
T. P. L.	182-25	113-16					
Finish							
Type Lead	Lt Br						
Lead Lgth.	3"	3"					
Layer Insul.	20#	20#					
Test Volt.	1250						
Wrapper	1L005VC 4L.G.L.	2L005GA					

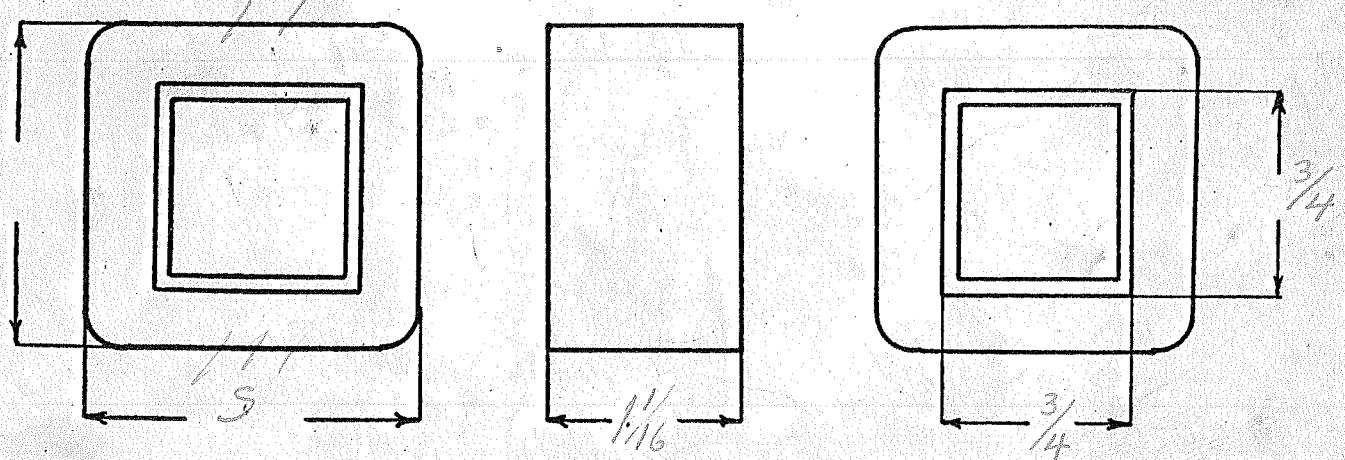
TUBE 4-007GK IMPREGNATION Varnish

CORE 3/4 X 3/4 GA. 29 GRADE B STACK 2X2

MOUNTING D

~~Sec Red, blue c.t.~~

~~Pri-Black~~



DESIGNED BY G.W. DATE 5-26-38

CLASS B DRIVER

STOCK

Single Plate 6C5 or 6N7 (par) 7 watts
to
6N7 Class B
Pri./½ Sec equals 2.5 or 3.3

SPEC. NO. D-507

Winding	1-2-3 Pri.		4-5-6 Sec.				
Turns	3600		2180				
Taps	~~1420~~ 775		1090				
Wind. Lgth.	7/8		7/8				
Wire Size	#38		#34				
T. P. L.	182-20L		109-20L				
Finish	91½%		89%				
Type Lead	Silver Braid		Silver Braid				
Lead Lgth.	3"		3"				
Layer Insul.	20#		20#				
Test Volt.	1250		1250				
Wrapper	1L007VC		2L005GA				

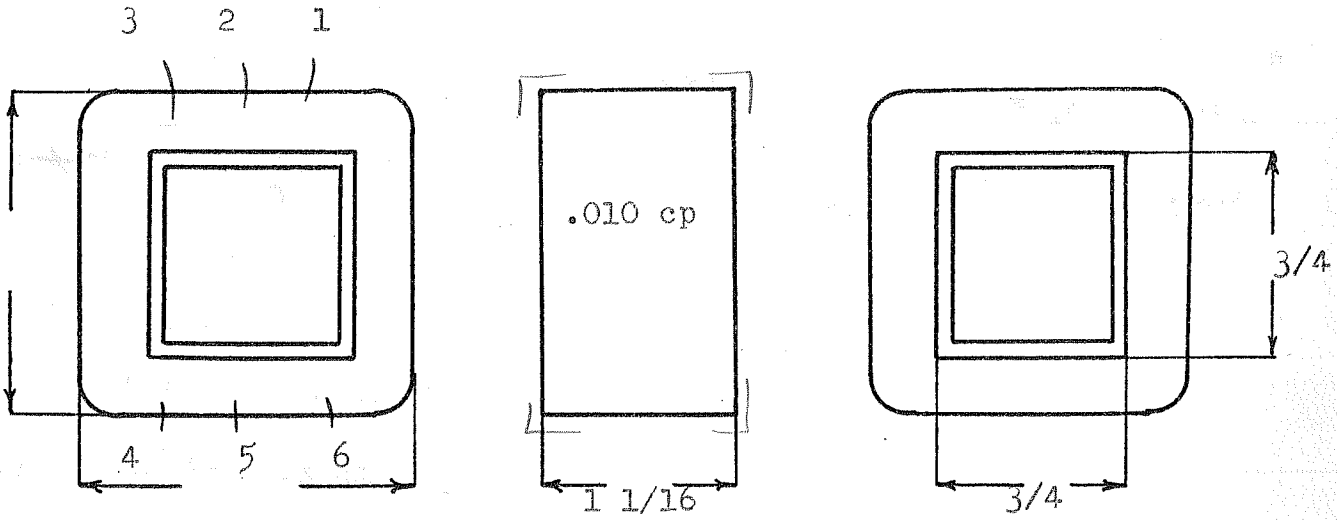
TUBE 5L007GK plus 1L003VC IMPREGNATION

CORE 3/4 x 3/4 GA. 29 GRADE B STACK Butt no gap

MOUNTING D - ~~lugs~~ Leads

T. P. V.
window - .335/.375 = 89.3%

$E = \sqrt{7 \times 20{,}000} = 118\,V$



DESIGNED BY F.F. DATE

DESIGN AND TEST DATA

Rating:

Winding		Pri.		Sec.			
Mean Turn		3.681		4.72			
Resistance 25° c		743.0		228.0			
Pounds Copper		.0537		.105			
Copper Density							
Ratio Volts		110 43.4		66.6 33.4			
Test to Ground		1250		1250			

Iron Induction ____ @ ____ Cycles ____

Exciting Current ____ amperes @ ____ volts 60 cycles on ____

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

Remarks: 6C5 $R_L = 20{,}000\,\Omega$ @ 8 ma

$R_p = 10{,}000\,\Omega$

$$L = \frac{3.18 \times 10^{-8} \times .502 \times (2180)^2}{.004 + \frac{4.5}{1600}} = 12.5\ Hy$$

$R_{par} = 6670$

2 db dn X_p = .77 × 6670 = 5140

freq 2 db dn $= \frac{5140}{2\pi \times 12.5} = 66\sim$

$$B_{ac} = \frac{34.9 \times 10^{5} \times 118}{80 \times .495 \times 2180} = 4770$$

$$B_{DC} = \frac{.495 \times 2180 \times .008}{.004} = 2160$$

$\mu_\Delta = 1600$ half audio A

High

$$L = \frac{2.9 \times 4.3 \times (360)^2}{.875} \left[.007 + \frac{.108 + .155}{3} \right] \times 10^{-}$$

$L = .177\ Hy$

$R_{gen} = 20{,}000 + 10{,}000 = 30000$

2 db dn X_s = .77 × 30,000 = 23,100

freq 2 db dn $= \frac{23100}{2\pi \times .177} = 20{,}700\sim$

Television Power — New Stock

117 V. @ 50/60 ~ to
1800 V @ 2 ma.
2.5 V @ 1.8a.
6.3 V @ .6a. tapped @ 2.5 V @ 2.1a.

SPEC. NO. T 508

Winding	1-2 Sec	Shield	3-4 Pri	5-6 Fil	7-8-9 Fil		
Turns	10,600	1	650	16	38		
Taps	—	—	—	—	22		
Wind. Lgth.	1⅛	1⅛	1⅛	1⅛	1⅛		
Wire Size	#40	.001 cu	#29	#20	#18		
T. P. L.	287-37L	—	82 - 8L	16 - 1L	22 - 2L		
Finish Pitch	90%	—	89%	48%	82%		SMALL SLEEVING
Type Lead	#22 Vinyl Sulec Sl.	Lil. Br.	#22 P.B.	w. o. Vinyl Sleeve	w. o. Sleeve		
Lead Lgth.	cut 14"	3"	cut 14"	cut 14"	cut 14"		
Layer Insul.	16#	—	30#	—	.0056A		
Test Volt.	5000	—	1250	5000	1500		
Wrapper	1OL0012CA ~~2L010VC~~	3L0012CA 1L005VC	~~2L005CA~~ 2L010VC 1L005GA	~~2L005CA~~ 2L010VC 1L005GA	2L007GA		

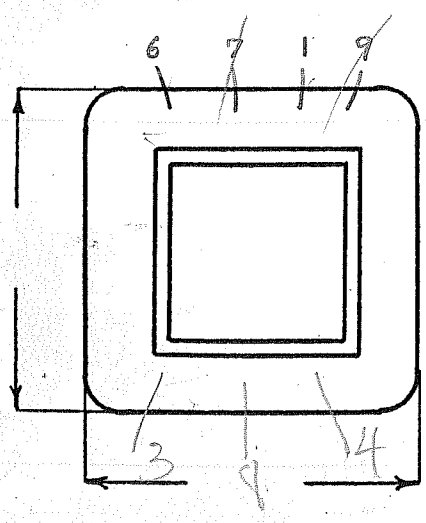
TUBE 5L010GK + ~~2L007VC~~ 6L0012CA — IMPREGNATION Varnish

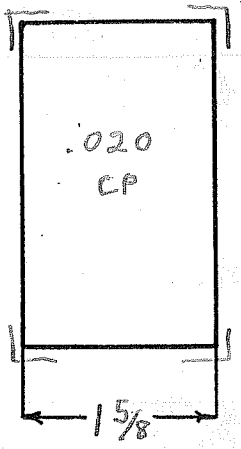
CORE 1⅛ × 1⅛ — GA. 24 — GRADE D — STACK 2 X 2

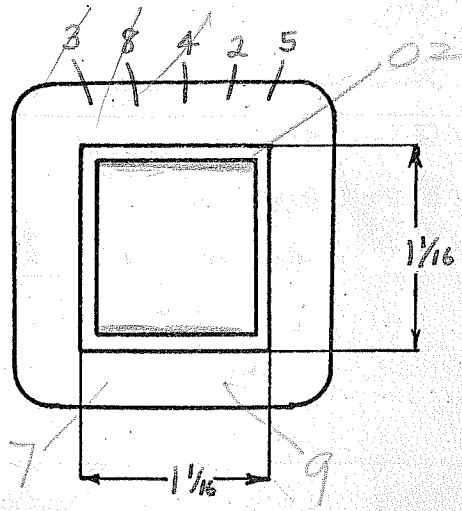
MOUNTING AA

wn = 85%

VINYL SLEEVE SECONDARY (RED) AND YELLOW FIL. FULL LENGTH







DESIGNED BY S. BABCOCK — DATE 6-15-49

DESIGN AND TEST DATA

Rating:

Sec VA = 17.1
Pri VA = 24.7
I_p = 208 ma.

Winding	Sec	Pri	Fil	Fil			
Mean Turn	5.28	6.56	7.29	7.93			
Resistance 25° c	4980	29.6	.101	.163			
Pounds Copper	.143	.139	.0305	.125			
Copper Density	4930	608	570	602			
Ratio Volts	1800	117	2.54	6.38			
Test to Ground	5000	1250	5000	1500			

Iron Induction _____ @ _____ Cycles _____

Exciting Current .65 ma. amperes @ 117 volts 60 cycles on Pri.

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

Remarks:

1 – 2 Red

3 – 4 Black

5 – 6 Yellow

~~7 – 8 – 9 Green~~

6.85 { 7 – Brown } 3.95
8 – Green }
9 – Black } 2.85

Television Power

New stock

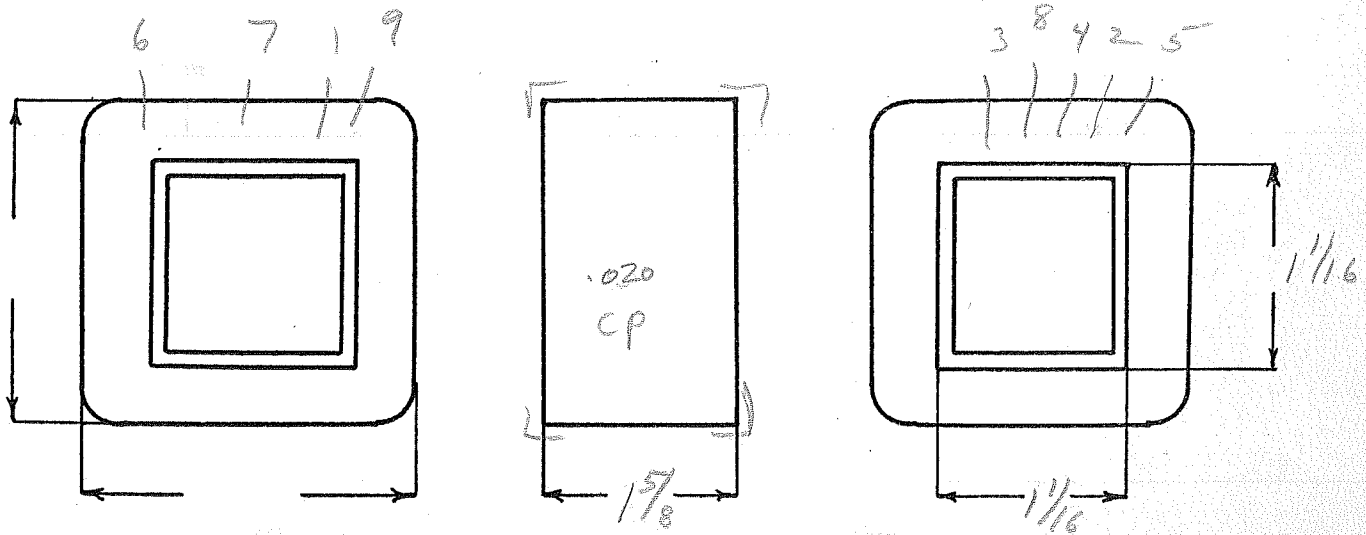
115V @ 50/60~ to
1800V @ 2 ma
2.5V @ 1.8a 6.3V @ .6a tapped @ 2.5V @ 2.1a

SPEC. NO. T 508

Winding	1-2 Sec	5L.	3-4 Pr.	5-6 Fil	7-8-9 Fil		
Turns	10,600	1	650	16	38		
Taps	—	—	—	—	22		
Wind. Lgth.	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8		
Wire Size	#40	.001 ea.	#29	#20	#18		
T. P. L.	287-37L	—	82-8L.	16-1L	22-2L.		
Finish	90%	—	89%	48%	82%		
Type Lead	#22 Vinyl DuLac Sl.	Sl. Lo. Br.	#22 P. B	W.O. sleeve	W.O. sleeve		
Lead Lgth.	cut 14"	3"	cut 14"	cut 14"	cut 14"		
Layer Insul.	16#	—	30#	—	—		
Test Volt.	5000	—	1250	5000	1500		
Wrapper	2L010VC	1L005VC	2L010VC 1L005GA	2L010VC 1L005GA	2L007GA		

TUBE	5L010GK + 2L007VG		IMPREGNATION	Varnish	
CORE	1 1/16 x 1 1/16	GA. 24	GRADE D	STACK 2 x 2	
MOUNTING	A.				

85%



DESIGNED BY S. Babcock

DATE 6-15-49

DESIGN AND TEST DATA

Rating:

Sec VA: 17
Pri VA: 24
Ip: 208 ma.

Winding	Sec	Pri	F.L.	F.L.			
Mean Turn	5.28	6.56	7.29	7.93			
Resistance 25° c	4980	29.6 6.2V	.101	.163	.1V		
Pounds Copper	.143	.139	.1035 .16	.125			
Copper Density	4930	608	570	602			
Ratio Volts	1800	117	2.54	6.38			
Test to Ground	5000	1250	5000	1500			

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

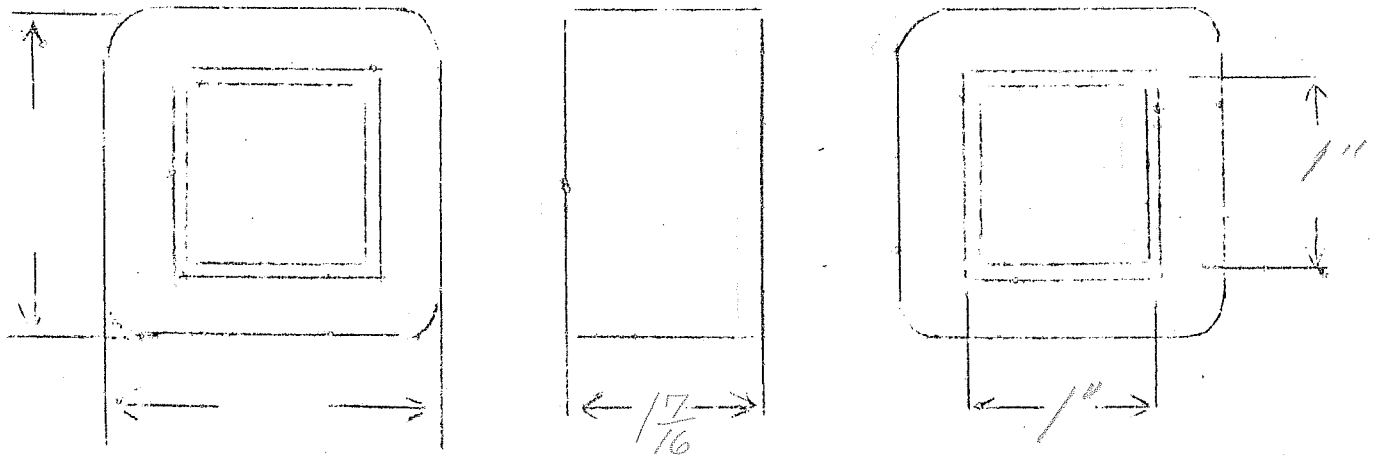
1 – 2 Red
3 – 4 Black
5 – 6 Yellow
7 – Brown.
8 – Green
9 – Black

SPEC. NO. 508

Winding	PRI						
Turns	50000						
Taps	25000						
Wind. Lgth.							
Wire Size	#42						
T.P.L.	400						
Kind Term.							
Term. Lgth.							
Layer Insul.							
Wrapper							

TUBE | 4L007 | IMPREGNATION | VARNISH

CURE | 1X1 NW (AUDIO)



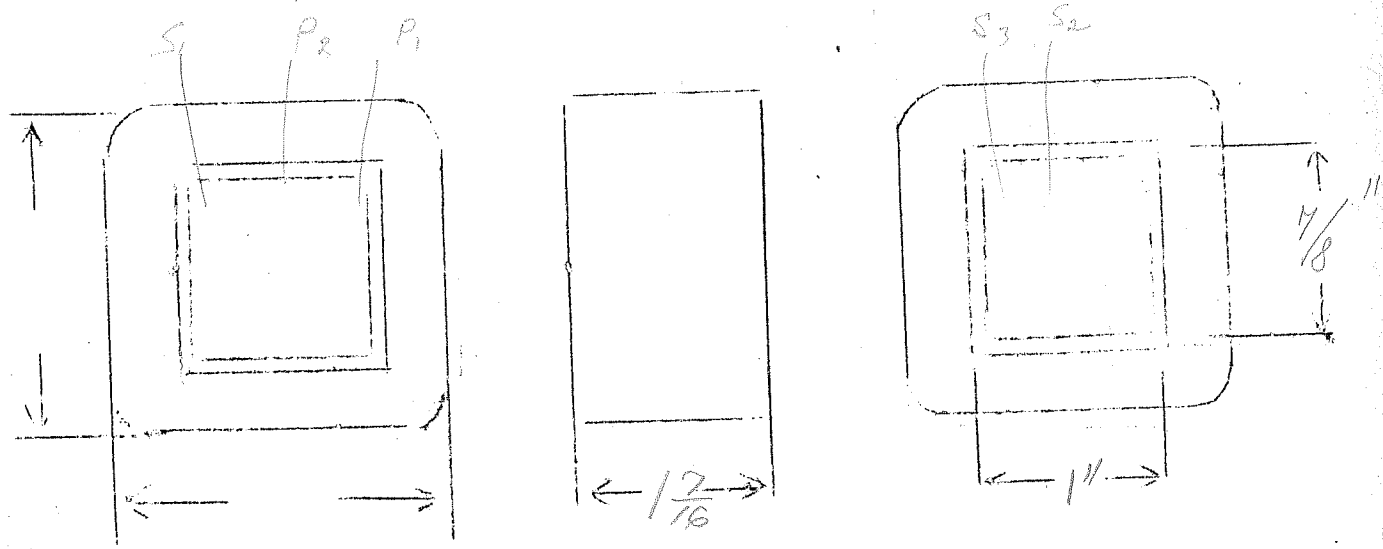
BAKER

SPEC. NO. 509

Winding	PRI	SEC					
Turns	3200	6400					
Taps		3200					
Wind. Lgth.	1.25	1.25					
Wire Size	#37E	#37E					
T.P.L.	2.25	2.25					
Kind Term.	#20 P.B.S.	#20 P.B.S.					
Term. Lgth.	9"	9"					
Layer Insul.	20#	20#					
Wrapper	2L003VP	2L005GA					

TUBE | 4L007 | IMPREGNATION | WAX

CURE | 1 X 3/8 MW.



OUTPUT — 53 PTS. — 5000 Ω — MODULATOR — SEC MA = 70

LOAD RES. P_T–P_T = 8000 Ω

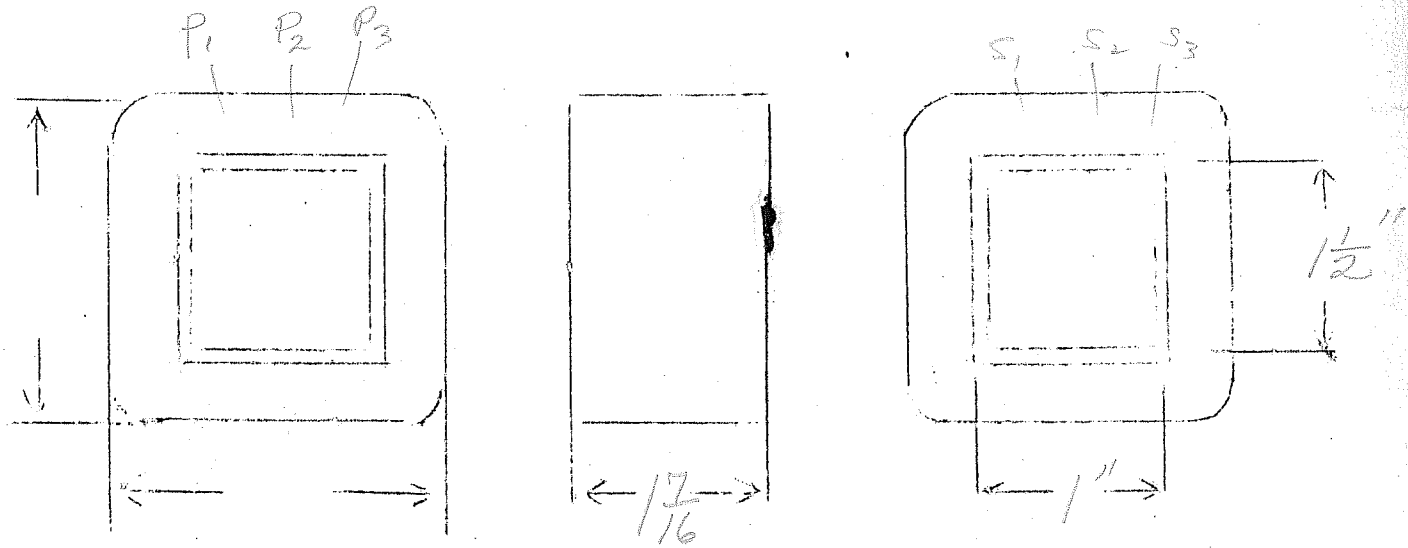
POWER OUT PUT = 8 WATTS

BAKER

SPEC. NO. 510

Winding	PRI	SEC					
Turns	3000	2400					
Taps	1500	1200					
Wind. Lgth.	1.25	1.25					
Wire Size	#37E	#34E					
T.P.L.	225	145					
Kind Term.	#20 P.BR.	#20 P.BR.					
Term. Lgth.	9"	9"					
Layer Insul.	20#	20#					
Wrapper	2L005VP 2L005BA	2L005BA					

TUBE	4L007	IMPREGNATION	WAX
CURE	1X1½ NW		

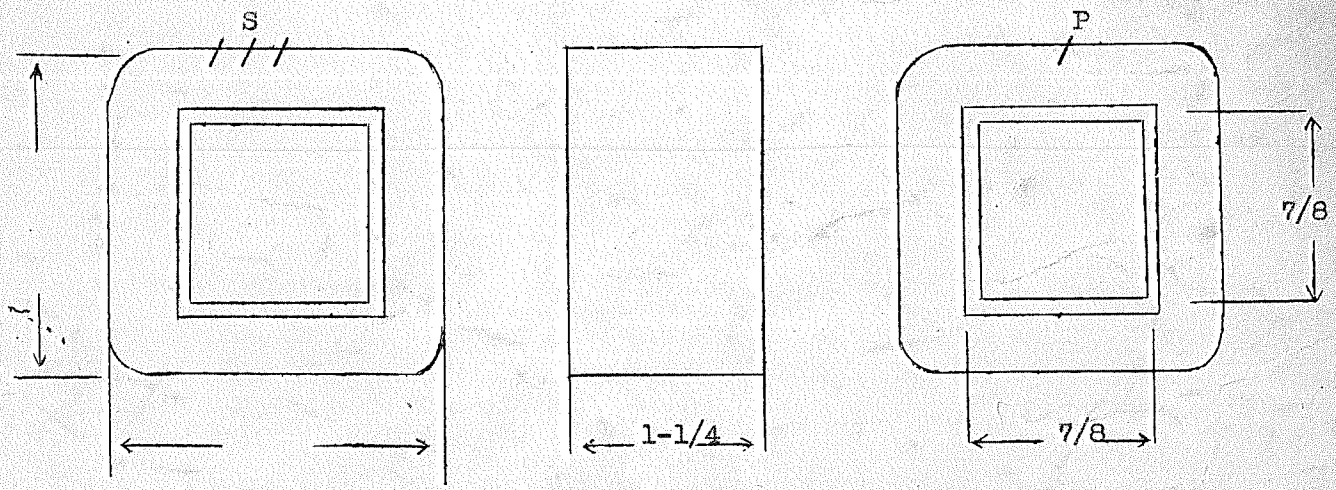


79,53,6A6 parallel plates to 53,75, 6A6, Class B grids

SPEC. NO. 8511

Winding	PRI.	SEC.					
Turns	4750	1900					
Taps		950					
Wind. Lgth.	1-1/16	1-1/16					
Wire Size	#36	#36					
T.P.L.	174-29	174-13					
Kind Term.	#20 Par. Br. or Sil. Br.						
Term. Lgth.	9"	or 3"					
Layer Insul.	20#	20#					
Test Volt.	1250						
Wrapper	3LGL 1L007VC	2L005GA					

TUBE	7L007	IMPREGNATION	VARNISH
CORE	7/8 X 7/8 - B Grade 29 Ga 2 x 2	PRIMARY V.A.	
MOUNTING	A or F		



DESIGNED BY G. W. DATE 4/8/37

Primary - 10,000 Ohm CT
Secondary - 3000 Ohm @ 100 Ma.

DUPLICATE S-512
OLD STOCK TO #8323

Modulation Transformer

SPEC. NO. S-512-F

	1-2-3		4-5				
Winding	Primary		Secondary				
Turns	3020		1660				
Taps	1510		-				
Wind. Lgth.	1-1/16"		1-1/16" = 1.06"				
Wire Size	#35		#32				
T. P. L.	151 - 20L		111 - 15L				
Finish Pitch	90%		90%				
Type Lead	Sil. Br. + Vinyl Sw.		Sil. Br. + Vinyl Sleeving		(See Below)		
CUT Lead Lgth.	4"		4"				
Layer Insul.	1L 20#G		1L 30#G				
Test Volt.	2500V		2500V				
Wrapper	2L .003CA ~~.005" VC~~		~~1L .007 VC~~ 2L.007GA 2L ~~.005 CA~~				

TUBE 5L - .007" GK / 1L - .005" VC 1L .0012CA

IMPREGNATION

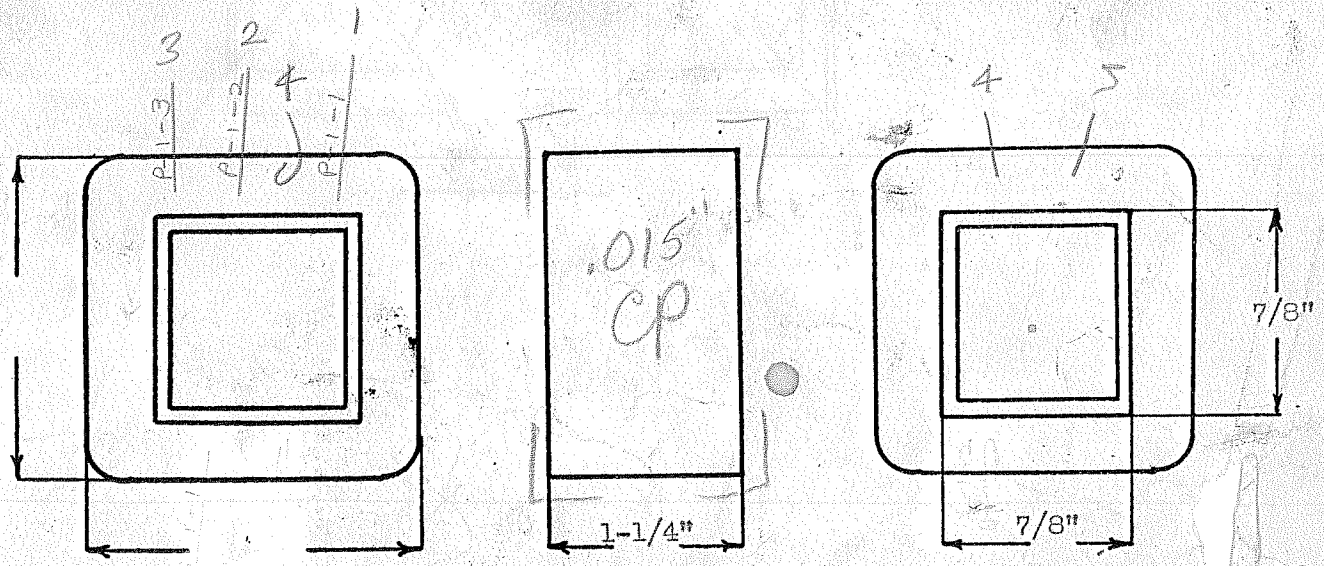
VARNISH

CORE 7/8" x 7/8" E & I GA. 29 GRADE A B STACK Butt - .005" GAP

MOUNTING "F"

Wire Net = 0.312" (0.309")

VINYLITE SLEEVING TO EXTEND 2" FROM COIL.

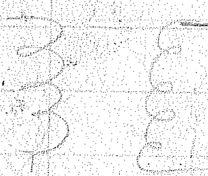


Re-DESIGNED BY HWS

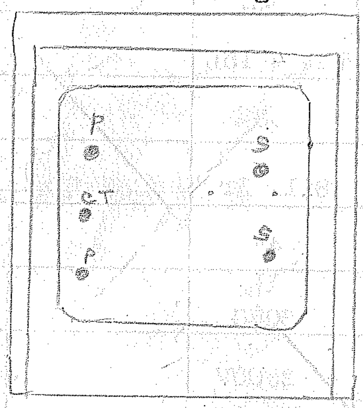
DATE 12-29-41

110 on Sec
Read 95 off of Pri

Run 115V
Ex I = 12
Sec = 60V

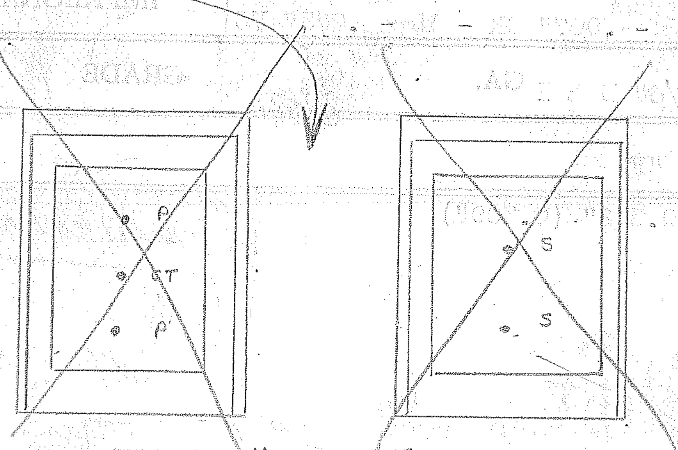


"F" Mounting



Stamp Panel as Shown Above

$Z = \frac{115V}{.012} = 9580 \Omega$



"F" MTG.

PP. A prime 2A5, 42 or 6F6 to 5000 Ω 3500 Ω

Slc - 120 ma

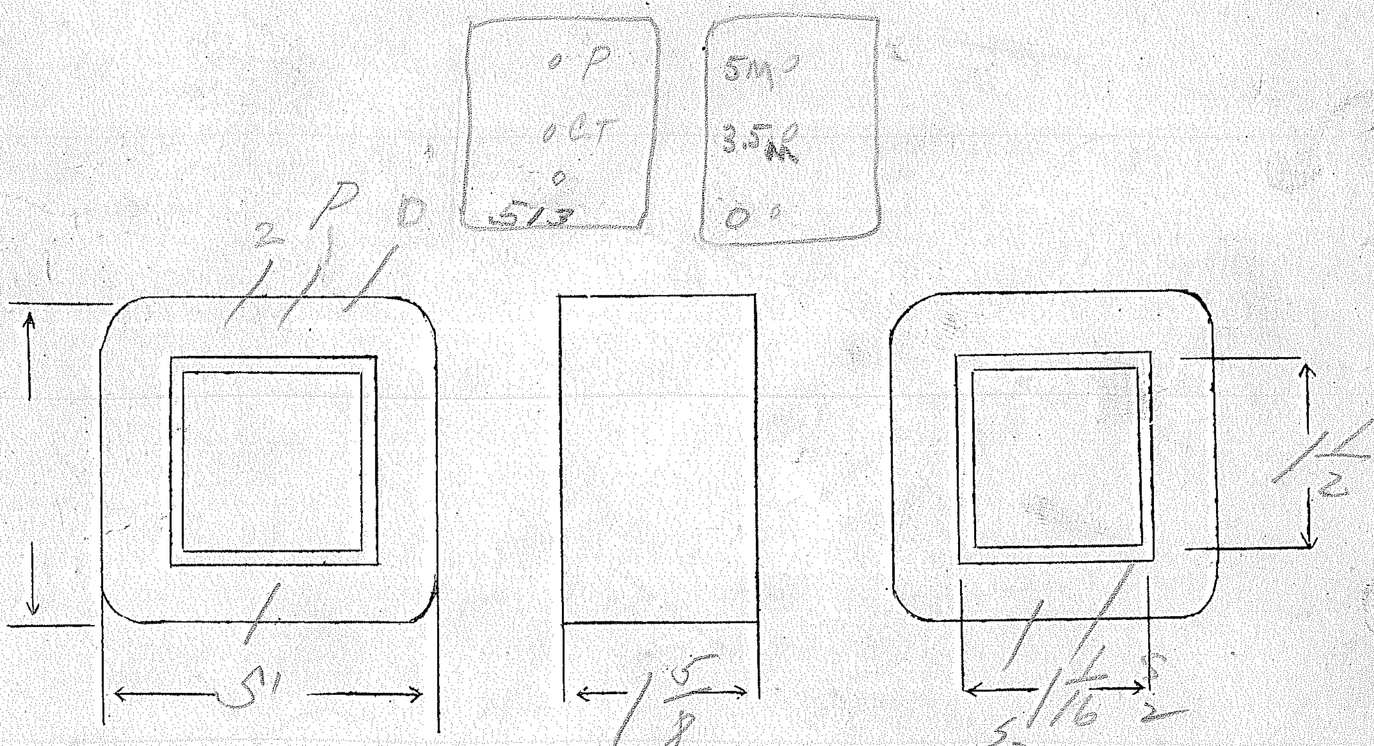
SPEC. NO. 513

Winding	PRI	SEC					
Turns	3600	2860					
Taps	1800	2400					
Wind. Lgth.	1 3/8	1 3/8					
Wire Size	#34	#30					
T.P.L.	180-20	115-25					
Kind Term.	Silver Braid						
Term. Lgth.	4"	4"					
Layer Insul.	30#	40#					
Test Volt.							
Wrapper	2100 TVC	2100 TVC 2600 SGA					

TUBE 2600 T | IMPREGNATION VARNISH

CORE 1 1/16 x 1 1/2 - 24 Ga Dynamo 2x2 | PRIMARY V.A.

MOUNTING F



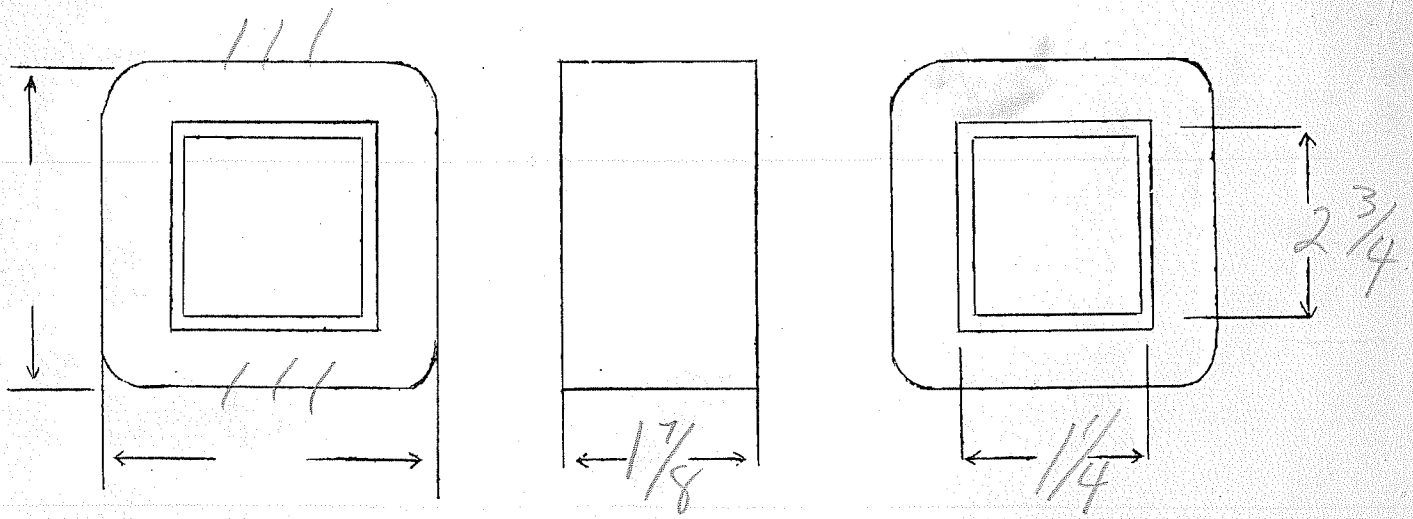
DESIGNED BY GW DATE 5/20/37

Pri. - P.P. parallel 46 or 59 plates
Sec. - 3,500 Ohms - 240 D. C. Ma.
or 5,000 Ohms

SPEC. NO. S514

Winding	Pri	Sec					
Turns	2250	2880					
Taps	1125	2430					
Wind. Lgth.	1 5/8	1 1/2					
Wire Size	#30	#29					
T.P.L.	142-16	103-28					
Kind Term.	Wire	Only					
Term. Lgth.	6"	6"					
Layer Insul.	30 ☒	30 ☒					
Test Volt.	2500	5000V					
Wrapper	2L007VC 4LGL	2L007VC 2L007GA					

TUBE	7L007GK+1L007VC	IMPREGNATION	VARNISH
CORE	1 1/4 X 2 3/4 24 Ga D	PRIMARY V.A.	
MOUNTING	J	0.025" gap	



DESIGNED BY G. W. DATE

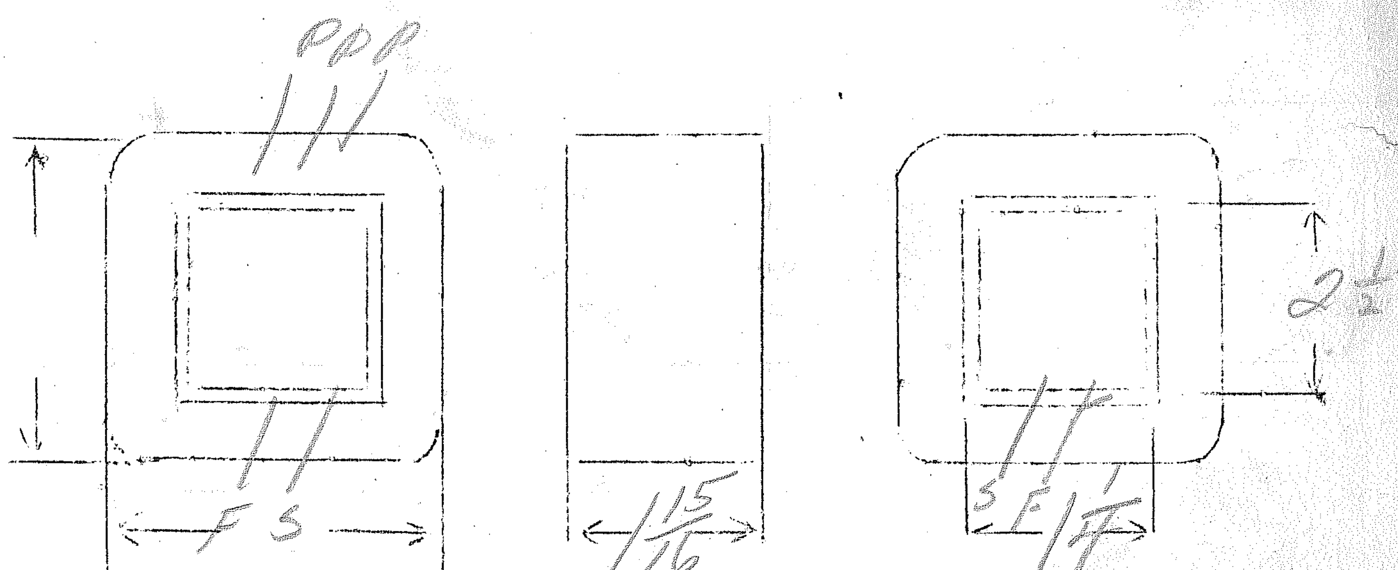
PP. Class B 210, 830, 841 plates to modulator
Pri – 8000   4500 or 18,000 Ω
25 or 150 Ma

Sec 5000 V. Ins   **SPEC. NO.** 515

Winding	PRI	SEC1	SEC2				
Turns	3400	2600	2600				
Taps	1700	—	—				
Wind. Lgth.	1 5/8	1 5/8	1 5/8				
Wire Size	#32	#32	#32				
T.P.L.	170-20	170-16	170-16				
Kind Term.	sil Braid –		placed by winders				
Term. Lgth.	5"	5"	5"				
Layer Insul.	double 16#	—					
Wrapper	2L007VC 3L [illegible]	2L007VC	2L007VC 2L007CA				

TUBE | 7L007 + 1L007VC   **IMPREGNATION** | VARNISH

CURE | 1 1/4 X 2 1/2   Gap .010"   26 Ga



Pri. -P.P. Class B 800, RK18, 825's
Sec. - 5,000 Ohms - 200 D. C. Ma.
or 20,000 Ohms - 100 D. C. Ma.

OLD

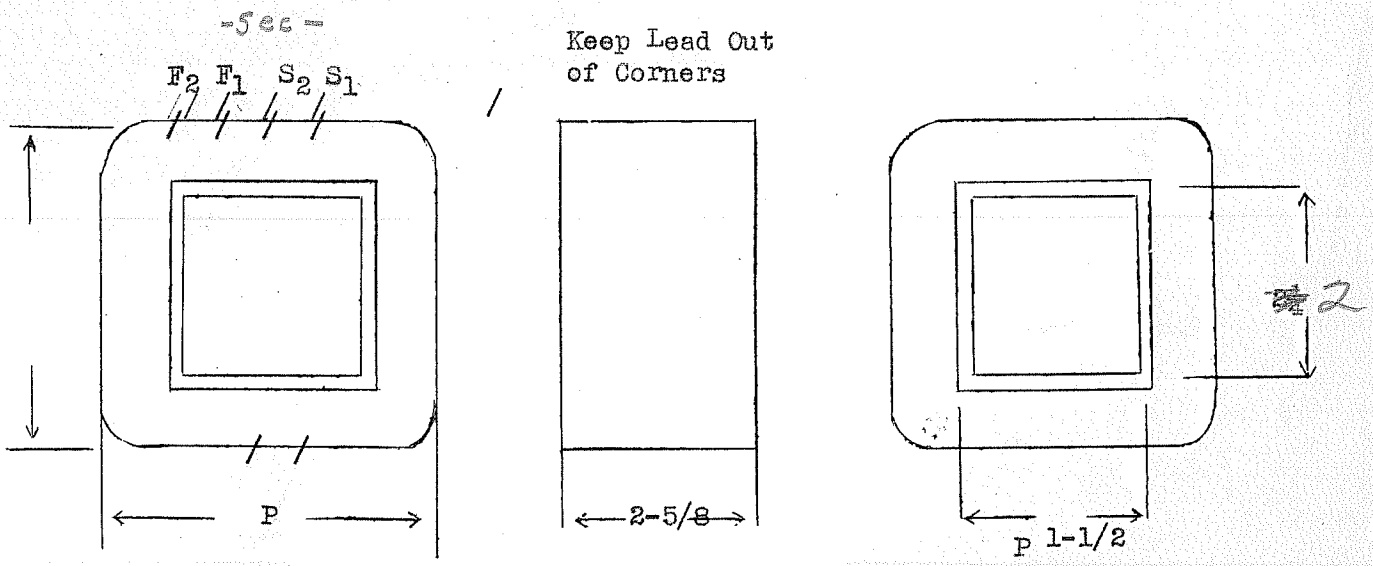
SPEC. NO. S516

Winding	SEC	PRI	SEC				
Turns	1720	2600	1720				
Taps		1300					
Wind. Lgth.	1-3/4	✓	✓				
Wire Size	#30	#30	#30				
T.P.L.	145-12	145-18	145-12				
Kind Term.	WIRE	ONLY					
Term. Lgth.	4"	4"	4"				
Layer Insul.	double 30#						
Test Volt.	7500	✓	✓				
Wrapper	3L007VC 4LG1	3L007VC 4LG1	3L007VC 2L005GA				

TUBE	9L007 - 2L007VC	IMPREGNATION	VARNISH
CORE	$1\frac{1}{2}$ x 2 3/4 - .020" Gap - 24 Ga Dynamo	PRIMARY V.A.	

MOUNTING J

WATCH LEAD POSITION



DESIGNED BY G. W. DATE 4/8/37

Pri. - P.P. Class B 03A, 11 plates
Sec. - 2,500 Ohms - 400 D. C. ma.
or 10,000 Ohms - 200 D. C. Ma.

400 watts

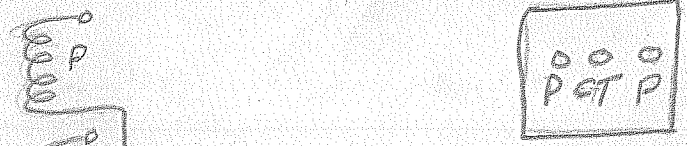
SPEC. NO. S517

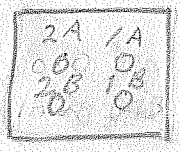
Winding	P_1	S_1	S_2	P_1			
Turns	960	1150	1150	960			
Taps							
Wind. Lgth.	2"						
Wire Size	#27	#27	#27	#27			
T.P.L.	120-8	120-10	120-10	120-8			
Kind Term.		WIRE ONLY					
Term. Lgth.	6"	6"	6"	6"			
Layer Insul.	~~Double~~ 20#	40#					
Test Volt.		7500					
Wrapper	4L007VC	4L007VC	41007VC	3L007VC 3L005GA			

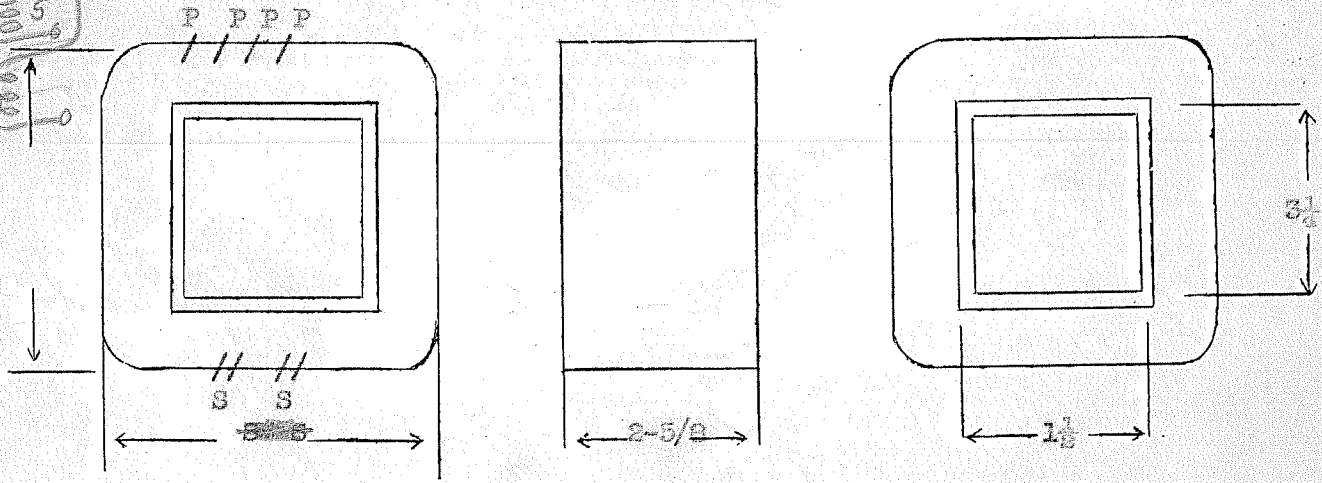
TUBE | 9L007 - 11007VC | IMPREGNATION | VARNISH Laminations

CORE | 1½ x 3½ - Batt Stock, .020" Gap - 24 lbs | PRIMARY V.A. Approx

MOUNTING J







DESIGNED BY G. W. DATE 4/5/37

Pri – 20,000 Ω
PP Plates Class B Eimac 50T to two – 2,500 Ω, 200ma windings
series – 10,000 Ω, 200ma
parallel – 2,500 Ω – 400ma

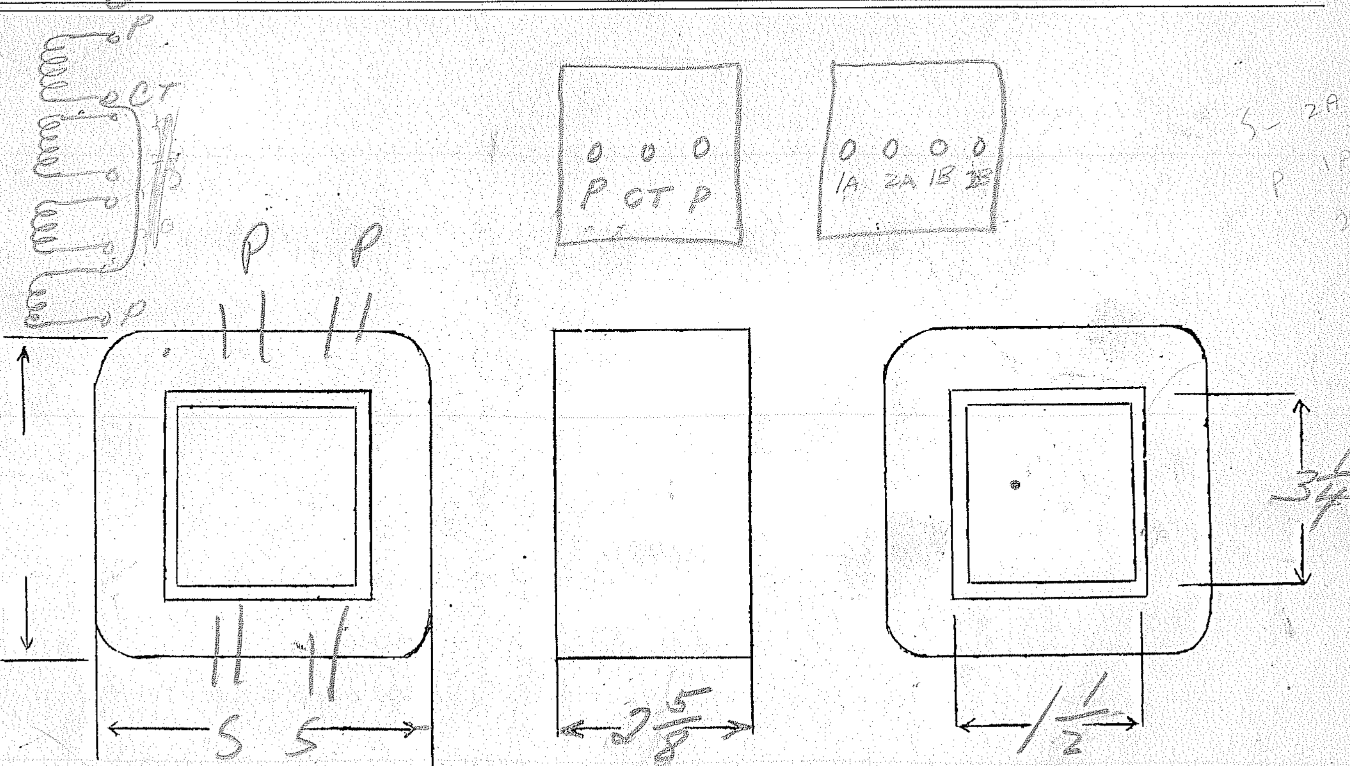
SPEC. NO. 518

Winding	PRI₁	SEC₁	SEC₂	PRI			
Turns	1500	1150	1150	1500			
Taps	—	—	—	—			
Wind. Lgth.	2"	2	2	2			
Wire Size	#28	#27	#27	#28			
T.P.L.	137-11	120-10	120-10	137-11			
Kind Term.	WIRE ONLY			—			
Term. Lgth.	6"	✓	—	—			
Layer Insul.	double 20 #	✓	✓	✓			
Test Volt.	7500	7500	✓	✓			
Wrapper	4L007VC	4L007VC	4L007VC	3L007VC 3L005BA			

TUBE | 9L007 + 1L007VC | IMPREGNATION | Varnish

CORE | 1½ x 3¼ – Butt stack, no gap | PRIMARY V.A.

MOUNTING



S – 2A+1B
P 1A+1B
2A+2B

DESIGNED BY GW DATE 4/5/37

7000 Ω Primary to 7000 Ω Secondary @ 35 ma.
5 max. Audio Watts
42 or 2A5 pentode to Suppressor or Control Grid.

OLD

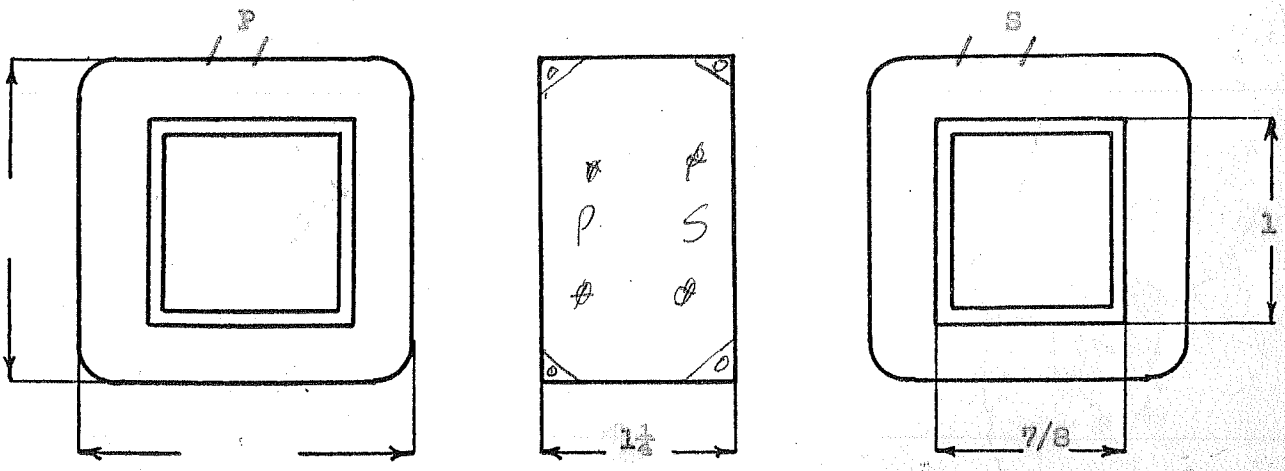
SPEC. NO. S-519

Winding	P	S					
Turns	3850	3850					
Taps	---	---					
Wind. Lgth.	1-1/16						
Wire Size	#36	#36					
T. P. L.	175-22	175-22					
Finish							
Type Lead	Sil.	Br.					
Lead Lgth.	6"	6"					
Layer Insul.	20#	20#					
Test Volt.	2500	1250					
Wrapper	1L007WC	3L005GA					

TUBE	6L007	IMPREGNATION	VARNISH

CORE GA. 29 GRADE B STACK .005" gap

MOUNTING F



DESIGNED BY GW DATE 6/29/38

Special Vary Television Vertical Output

D.C. Pri current = 15ma max.

New stock

SPEC. NO. T 520

Replacement for RCA 204T2 or 204T9

	1-2	3-4					
Winding	Pri	Sec					
Turns	4480	448					
Taps	—	—					
Wind. Lgth.	1¼	1¼					
Wire Size	#36	#26					
T. P. L.	195-23L	56-8L					
~~Finish~~ Pitch	88%	77%					
Type Lead	~~#22~~ Dulac	#22 P.B.					
Lead Lgth.	16"	11"					
Layer Insul.	20#	40#					
Test Volt.	2500	1000					
Wrapper	3L005VC	2L005GA					

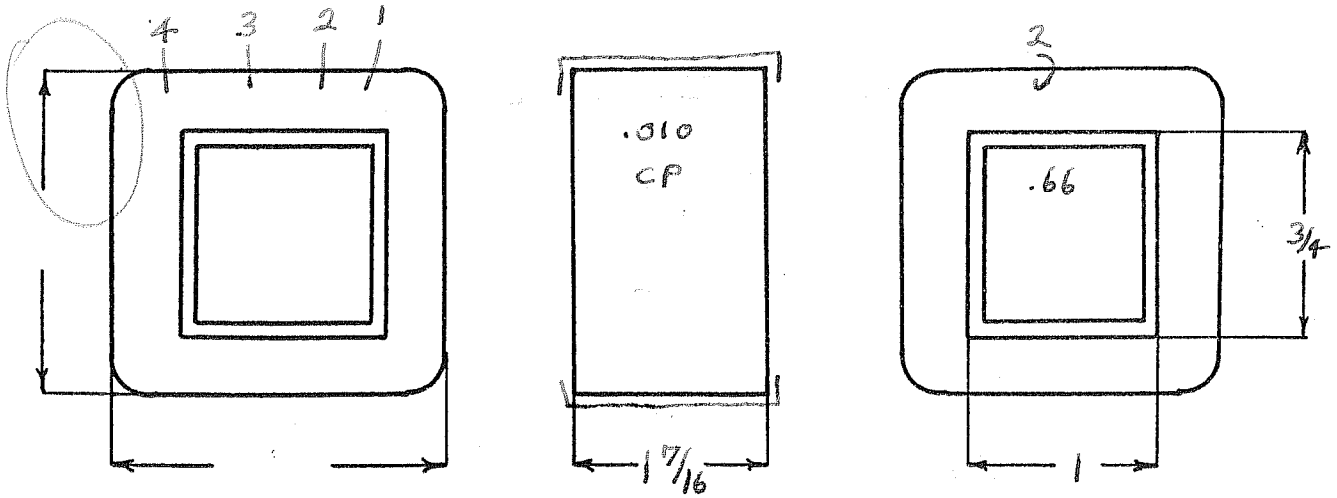
TUBE 5L010GK + 1L005VC IMPREGNATION Varnish

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

MOUNTING BB

wn = 77%

RE-DESIGNED 11-11-49



DESIGNED BY A. Hadley

DATE 8-6-49

DESIGN AND TEST DATA

Rating: Pri – Sec

T_R 10 – 1

T 4480 – 448

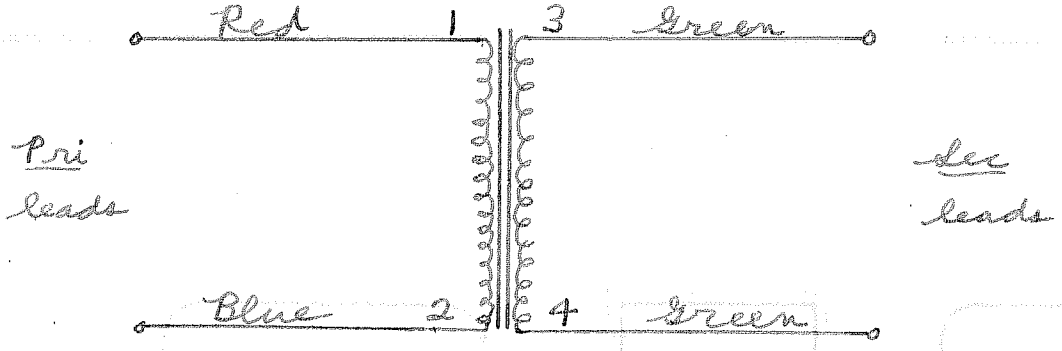
Winding	1-2 Pri	3-4 Sec					
Mean Turn	4.47	5.71					
Resistance 25° c	708	8.8					
Pounds Copper	.1295	.167					
Copper Density	—	—					
Ratio Volts open circuit	117	11.7					
Test to Ground	2500	1000					

Iron Induction 2.77 Kg @ 50 Cycles with 117 volts on 1-2

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



Special Duty Television
Vertical Output

New stock

SPEC. NO. T 520

Replacement for RCA 204T2 or 204T9

	1-2	3-4					
Winding	Pri	Sec					
Turns	4640	464					
Taps	—	—					
Wind. Lgth.	1¼	1¼					
Wire Size	#35	#25					
T. P. L.	179 - 26L	58 - 8L					
~~Finish~~ Pitch	89%	89%					
Type Lead	~~#22~~ Dulac	~~#22~~ P.B.					
Lead Lgth.	16"	11"					
Layer Insul.	20#	40#					
Test Volt.	2500	1000					
Wrapper	2L003CA ~~3L005VC~~ 1L40#	2L005GK ~~2L005GA~~					

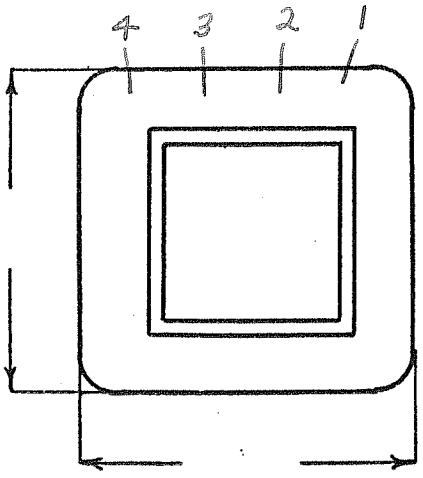
TUBE 5L 010 GK + 1L003CA 1L005VC

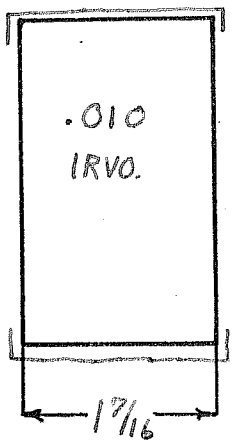
IMPREGNATION Tarnish

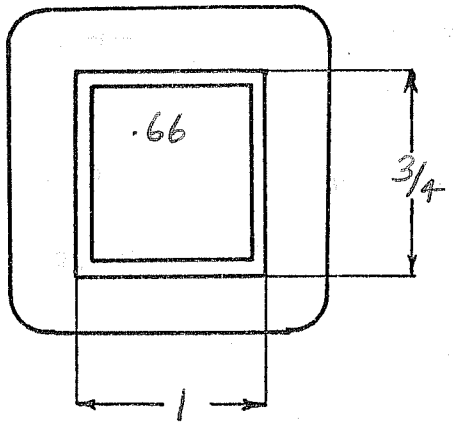
CORE 1 X 3/4 GA. 29 GRADE A STACK Butt - no lap

MOUNTING BB - leads

wn = 87.5%







RE-DESIGNED BY A. Hadley

DATE 11-11-49

DESIGN AND TEST DATA

Rating:

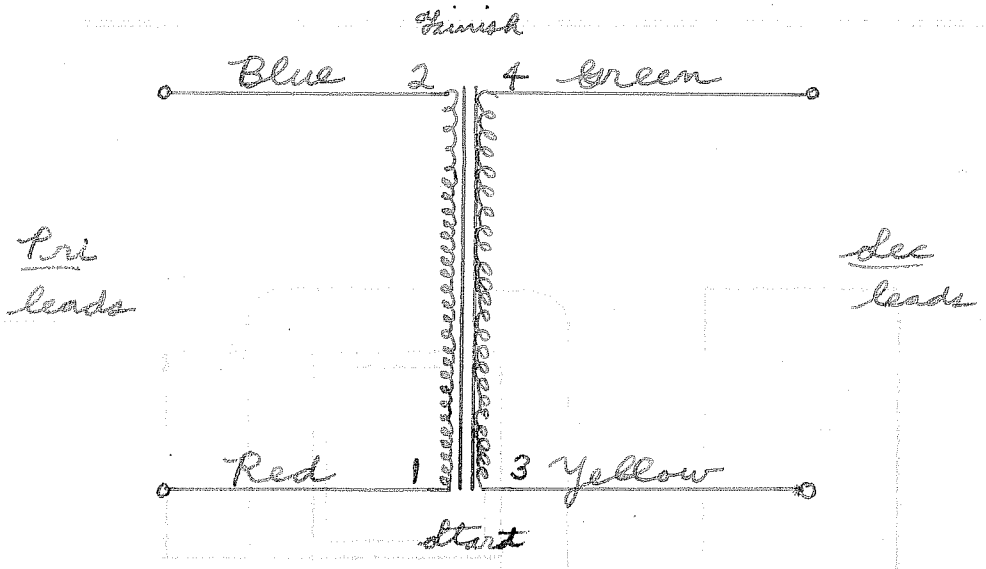
Winding	1-2 Pri	3-4 Sec					
Mean Turn	4.60	6.04					
Resistance 25° c	596	7.8					
Pounds Copper	.174	.230					
Copper Density	—	—					
Ratio Volts open circuit	117	11.7					
Test to Ground	2500	1000					

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

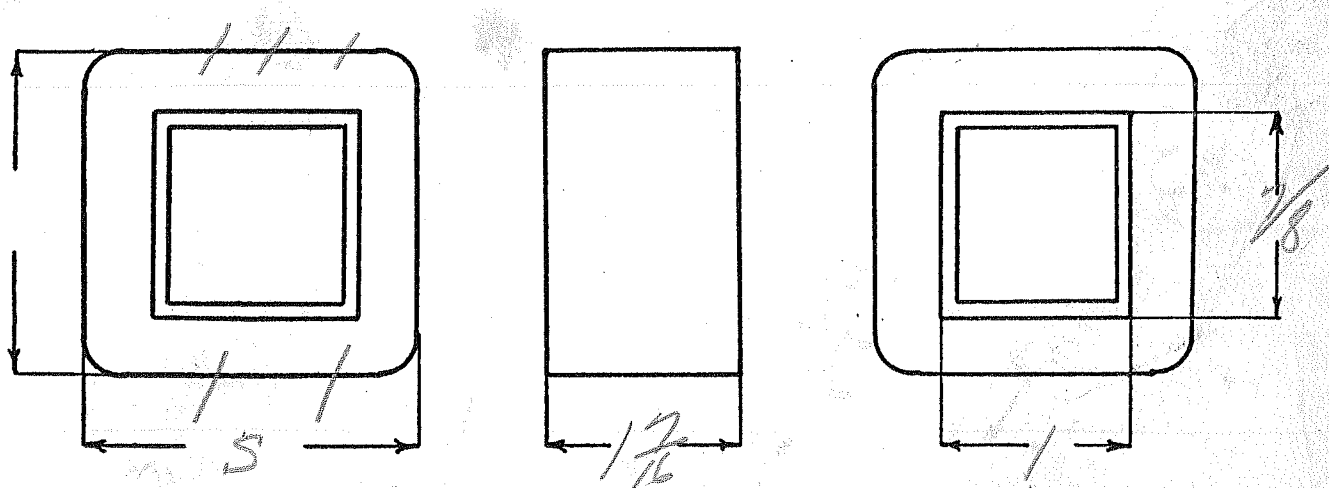


PP 42 or 2A5 to suppressor or control grid

SPEC. NO. 5520

Winding	P	S					
Turns	4000	4000					
Taps	2000	—					
Wind. Lgth.	1.25	1.25					
Wire Size	#35	#35					
T. P. L.	182-22	182-22					
Finish							
Type Lead	Sil Br.						
Lead Lgth.	4"	4'					
Layer Insul.	20#	20#					
Test Volt.							
Wrapper	1L005VP 6LGr.	2L005GA					

TUBE	5L007	IMPREGNATION	Varnish
CORE	GA. 29	GRADE B	STACK 2x2
MOUNTING	F		



DESIGNED BY Gw

DATE 7/12/39

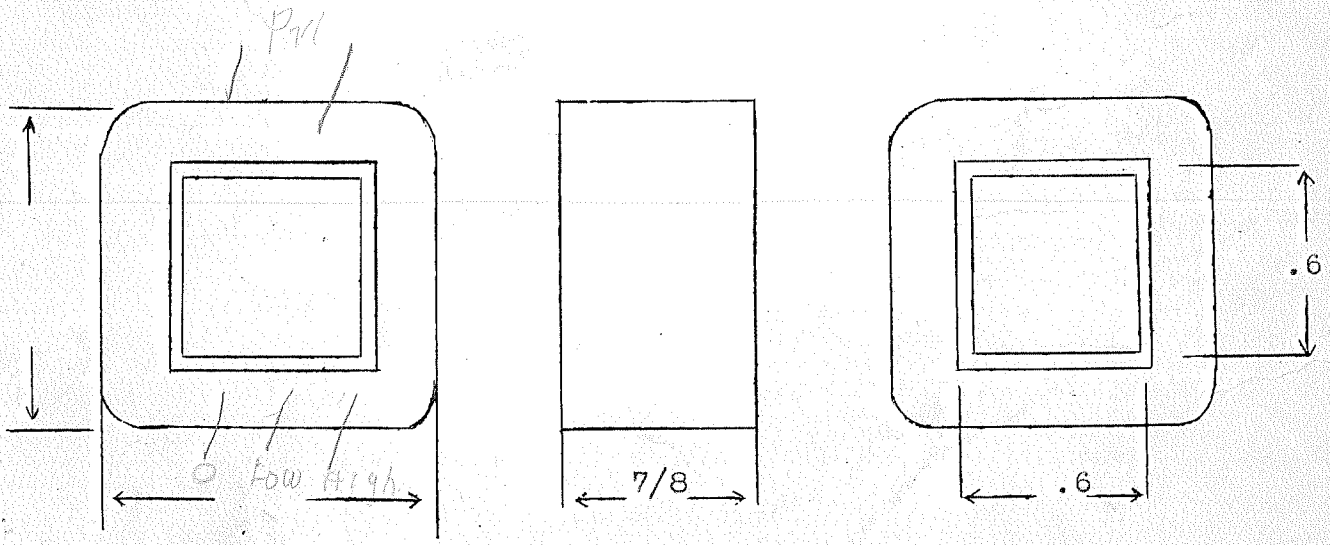
Tranciever output, single pentode to low or high impedance phones

OLD

SPEC. NO. D522

Winding	PRI	SEC					
Turns	2500	1360					
Taps		950					
Wind. Lgth.	$\frac{3}{4}$	$\frac{3}{4}$					
Wire Size	#38	#33					
T.P.L.	157-16	88-16					
Kind Term.	Sil Braid						
Term. Lgth.	3	3					
Layer Insul.	16#	30#					
Test Volt.							
Wrapper	1L007VC	2L005Ga					

TUBE	4L007	IMPREGNATION	VARNISH
CORE	.6 x .6 .003" Gap	PRIMARY V.A.	
MOUNTING	D		



DESIGNED BY G.W. DATE

SPECIAL DUTY TELEVISION

NEW STOCK

Horizontal blocking Oscill. tranf.

TR PRI. TO: SEC. = 1:2

REPLACEMENT FOR R.C.A. 208T1

SPEC. NO. T-522

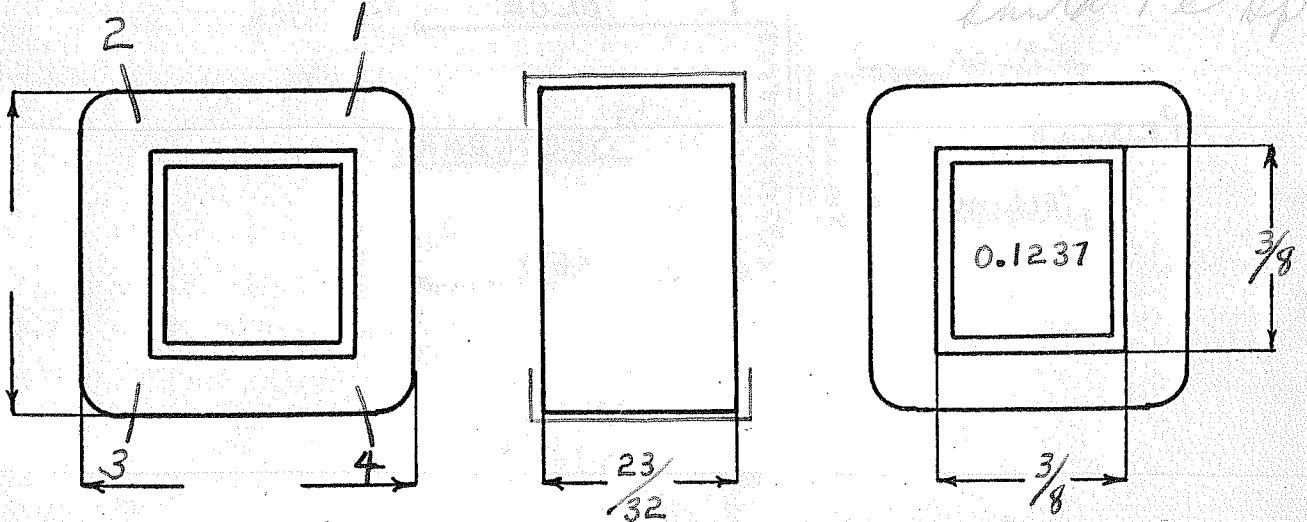
Winding	1-2 SEC.	3-4 PRI.					
Turns	336	168					
Taps	—	—					
Wind. Lgth.	15/32	15/32					
Wire Size	#32	#32					
T. P. L.	42-8L	42-4L					
~~Finish~~ PITCH	78%	78%					
Type Lead	~~#22~~ P.B.	~~#22~~ P.B.	← #26 AUDIO				
Lead Lgth.	6"	6"					
Layer Insul.	DOUBLE ~~#30~~ 5#	DOUBLE ~~#30~~ 5#					
Test Volt.	1500	1500					
Wrapper	1L003CA 1L 5# 2L005VC	2L005GA					

TUBE	5L010GK	IMPREGNATION	VARNISH

CORE 3/8 X 3/8 F-12 GA. 29 GRADE A STACK 2X2

MOUNTING D - LEADS ; P

Wn. = 68%



DESIGNED BY A.R. Shasky

DATE 8-6-49

DESIGN AND TEST DATA

Rating: TURNS RATIO: PRI. TO SEC. = 1:2

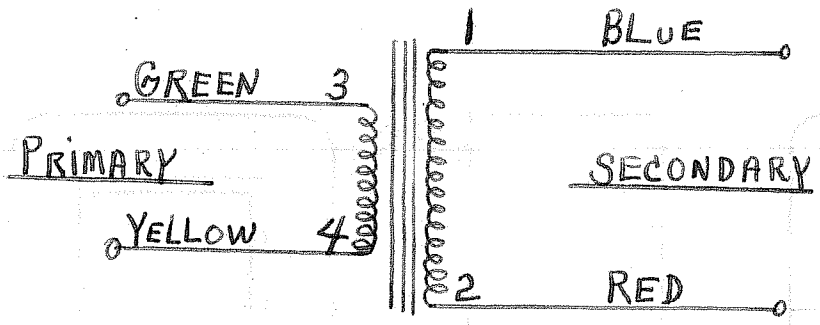
Winding	1-2 SEC.	3-4 PRI.					
Mean Turn	2.22	2.82					
Resistance 25° c	10.4	6.6					
Pounds Copper	0.0121	0.0077					
Copper Density	—	—					
Ratio Volts OPEN CIRCUIT	5.0	2.5					
Test to Ground	1500.	1500.					

Iron Induction 8.4 Kg @ 50 Cycles with 5 VOLTS on 1-2

Exciting Current 4 Ma amperes @ 15 volts 60 cycles on

Induced Test: Apply Volts at Cycles on with grounded

Remarks: SECONDARY: Loc = 0.174 HENRY @ 2.0 VOLTS & 1000 C.P.S. CALCULATED



SPECIAL DUTY TELEVISION

NEW

Horizontal blocking osc. transf.

Tr. Pri. to Sec = 1:2

SPEC. NO. T-522

REPLACEMENT FOR RCA 20RT1

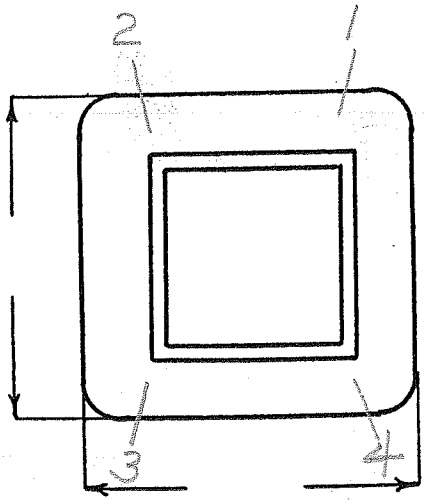
Winding	1-2 SEC.	3-4 PRI					
Turns	336	168					
Taps	—	—					
Wind. Lgth.	15/32	15/32					
Wire Size	#32	#32					
T. P. L.	42-8L	42-4L					
~~Finish~~ PITCH	78%	78%					
Type Lead	#22 P.B.	#22 P.B.					
Lead Lgth.	6"	6"					
Layer Insul.	DOUBLE #30	DOUBLE #30					
Test Volt.	1500	1500					
Wrapper	2L005VG	2L005GA					

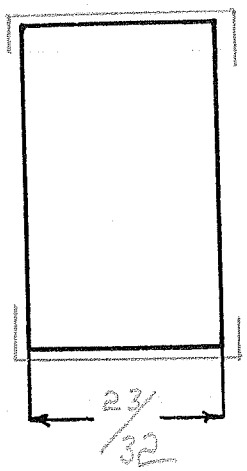
TUBE 5L010GK IMPREGNATION VARNISH

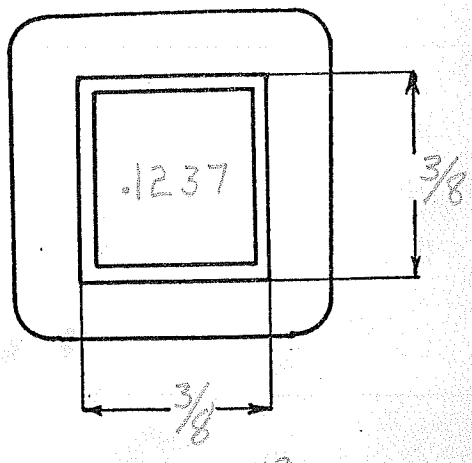
CORE 3/8 X 3/8 GA. 29 GRADE A STACK 2X2

MOUNTING D-LEADS P

$W_n = 68\%$







DESIGNED BY A.R. SHASKY

DATE 8-6-49

DESIGN AND TEST DATA

Rating: TURNS RATIO : PRI. TO SEC. = 1:2

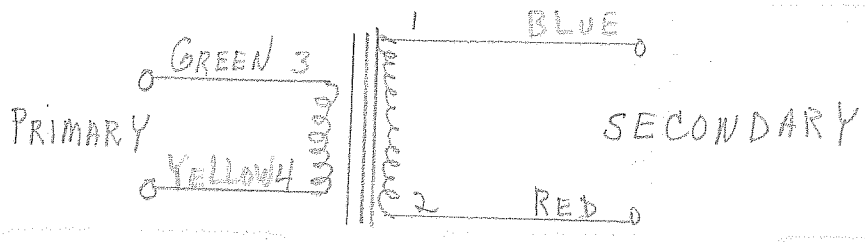
Winding	1-2 SEC	3-4 PRI.					
Mean Turn	2.22	2.82					
Resistance 25° c	10.4	6.6					
Pounds Copper	.0121	.0077					
Copper Density	—	—					
Ratio Volts open circuit	5	2.5					
Test to Ground	1500	1500					

Iron Induction 8.4 Kg @ 50 Cycles with 5 Volts on 1-2

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks: Sec. L.o.t. = 0.174 HENRY @ 2V & 1000 C.P.S.



200 w 50 w to P.P. Grids
Audio

SPEC. NO. S-523
(SIMILAR TO #7824)

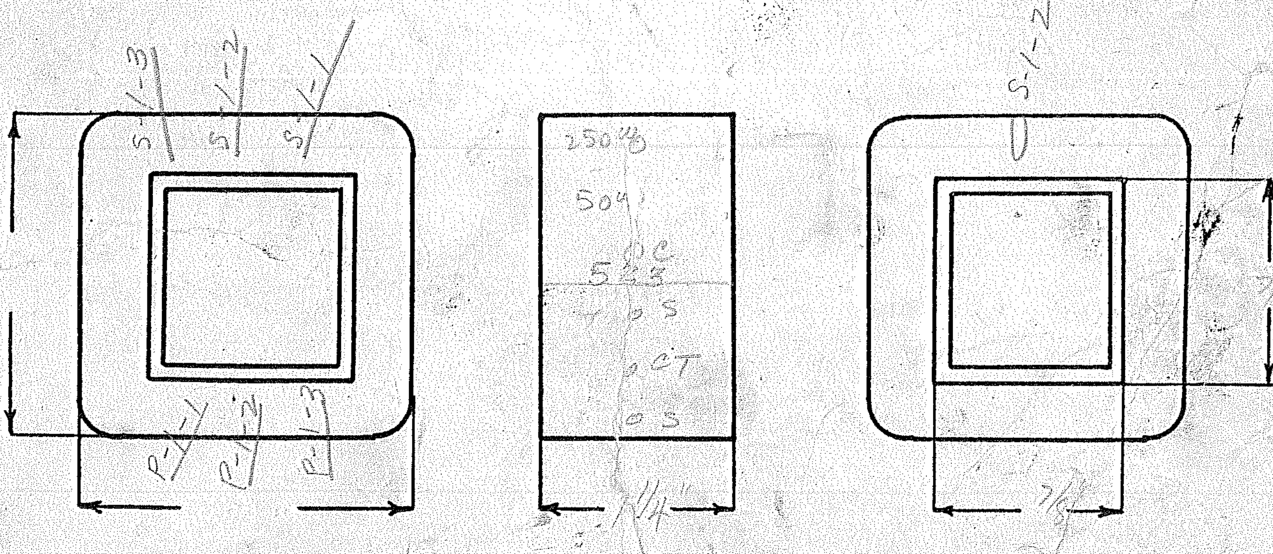
Winding	Sec		Pri				
Turns	10,640		440				
Taps	CT 5,320	CT	220				
Wind. Lgth.	1 1/16"		1 1/16"	= .606"			
Wire Size	#40		#26				
T. P. L.	280-38L		55-8L	FINISHERS			
Finish	88%		88%				
Type Lead	#22 PR BR SIL. BR.		#22 PR BR SIL. BR.	USE #22 PR BR FOR "A" MOUNTING			
Lead Lgth.	"9 "4 (out)		"9 (out) "4	USE SIL. BR. FOR "F" MOUNTING			
Layer Insul.	1L 13# B.		1L 40# G				
Test Volt.	1250		—				
	1L .005" VC		2L				
Wrapper	2-L 40-16.6		.005 GA				

TUBE	6L-.007 [illegible]	IMPREGNATION	Varnish

CORE [illegible] GA. 29 GRADE B STACK 2 x 2

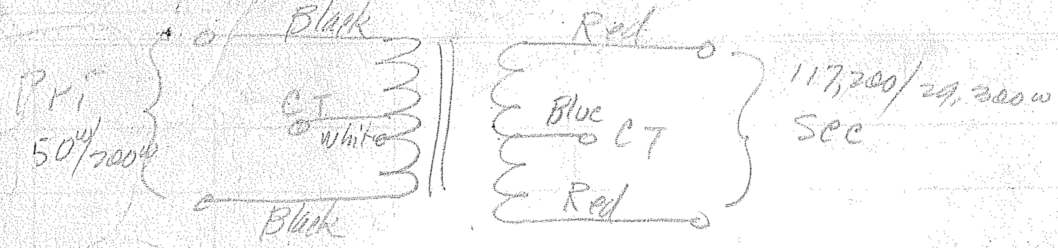
MOUNTING "A" or "F" Leads

Wire Net = 0.310 (0.303")



DESIGNED BY HLK.

DATE 10-9-41



T = 10,640 – 440

TR = 24.2 – 1

ZR = 586 – 1

Z = 117,200 – 200

$\frac{117,200}{4}$ = 29,300Ω

$\frac{200}{4}$ = 50Ω

Prim = 2.8

Sec = 330

Special Duty Television New Stock
Vertical Blocking Oscillator

SPEC. NO. T 524

Replacement for RCA 208T2 & 208T9

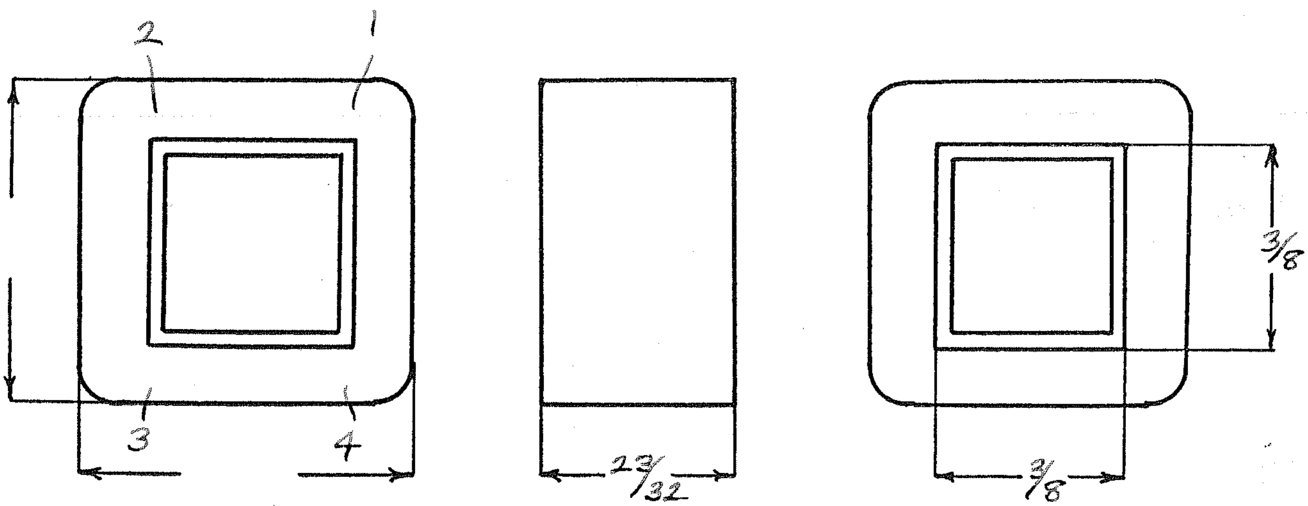
Winding	1-2 Pri	3-4 Sec					
Turns	927	3900					
Taps	—	—					
Wind. Lgth.	15/32	15/32					
Wire Size	#40	#41					
T. P. L.	116-8L	130-30L					
~~Finish~~ Pitch	87%	86%					
Type Lead	#26 audio	#26 audio					
Lead Lgth.	cut 8"	cut 8"					
Layer Insul.	12 1/2 #	12 1/2 #					
Test Volt.	2000	2000					
Wrapper	1L003CA 1L20#	1L003CA 1L007GA					

TUBE 4L010GK + 1L003CA IMPREGNATION Varnish

CORE 11/32 x 3/8 (F-12) GA. 29 GRADE A audio STACK 4 x 4

MOUNTING D-leads P— or H 2 W 1 3/8 D 1 3/8 ~~mtg studs~~ 6-32 1 15/32 center to center P or #87-1 Craft can

wn = 83%



RE-DESIGNED BY A. Hadley DATE 4-30-51

DESIGN AND TEST DATA

Pri Sec

Rating: TR 1 4.2

T 927 3900

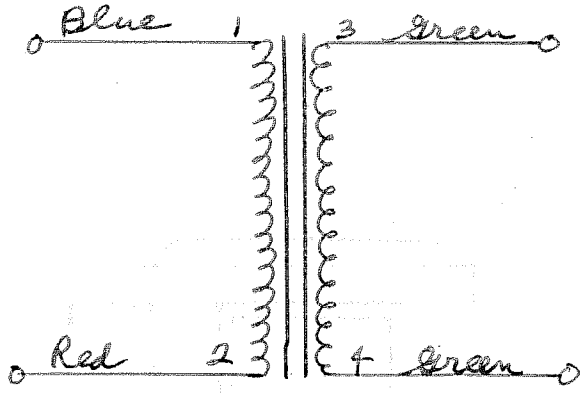
Winding	1-2 Pri	3-4 Sec					
Mean Turn	1.95	2.52					
Resistance 25° c	161.0	108.8					
Pounds Copper	.0047	0.020					
Copper Density	—	—					
Ratio Volts	21.4	90					
Test to Ground	2000	2000					

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



Special Duty Television
Vertical Blocking Oscillator

New Floor

Replacement for RCA 208T2 or 208T7 SPEC. NO. T 524

Winding	1-2 Pri	3-4 Sec					
Turns	927	3900					
Taps	—	—					
Wind. Lgth.	15/32	15/32					
Wire Size	#40	#41					
T. P. L.	116-81	130-30L					
Finish Pitch	87%	86%					
Type Lead	#26 Audio	#26 Audio					
Lead Lgth.	cut 8"	cut 8"					
Layer Insul.	12½ #	12½ #					
Test Volt.	2000	2000					
Wrapper	IL003CA IL20#	IL003CA IL007GA					

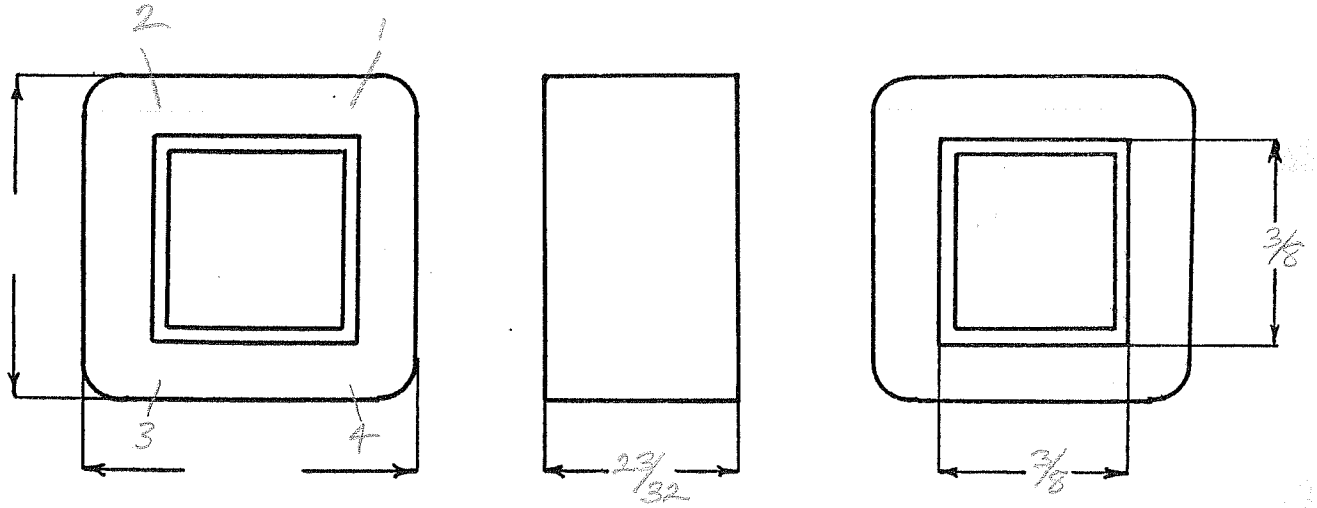
TUBE 4L010GK + IL003CA | IMPREGNATION Varnish

CORE 11/32 x 3/8 (F-12) GA. 29 GRADE A audio STACK 4 X 4

MOUNTING D-leads or H 2, W 1 3/8, D 1 3/8, Mtg studs 6-32, 1 15/32 center to center

wn = 83%

or # 87-1 Craft Cam



RE-DESIGNED BY A. Hadley DATE 4-30-51

DESIGN AND TEST DATA

Pri Sec

Rating: T_R 1 4.2

T 927 3900

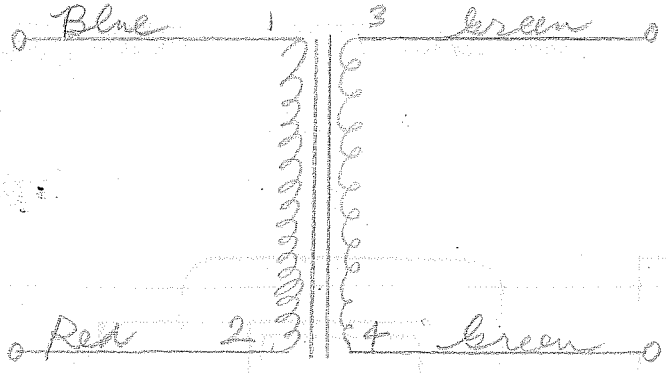
Winding	1-2 Pri	3-4 Sec					
Mean Turn	1.95	2.52					
Resistance 25° c	161.0	108.8					
Pounds Copper	.0047	0.020					
Copper Density	—	—					
Ratio Volts	21.4	90					
Test to Ground	2000	2000					

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



Special Duty Television
Vertical Blocking Oscillator

New Stock

OBSOLETE

SPEC. NO. T 524

Replacement for RCA 208 T2 or 208 T9

	1-2	3-4					
Winding	Pri	Sec					
Turns	970	4070					
Taps	—	—					
Wind. Lgth.	17/32	17/32					
Wire Size	#40	#40					
T. P. L.	139-7L	136-30L					
~~Finish~~ Pitch	92%	90%					
Type Lead	~~#22~~ P.B.	~~#22~~ P.B.					
Lead Lgth.	cut 3" ~~14"~~	cut 3" ~~14"~~					
Layer Insul.	12 #	12 #					
Test Volt.	2000	2000					
Wrapper	2L002CA ~~3L005VC~~ 1L20 #	3L005GA					

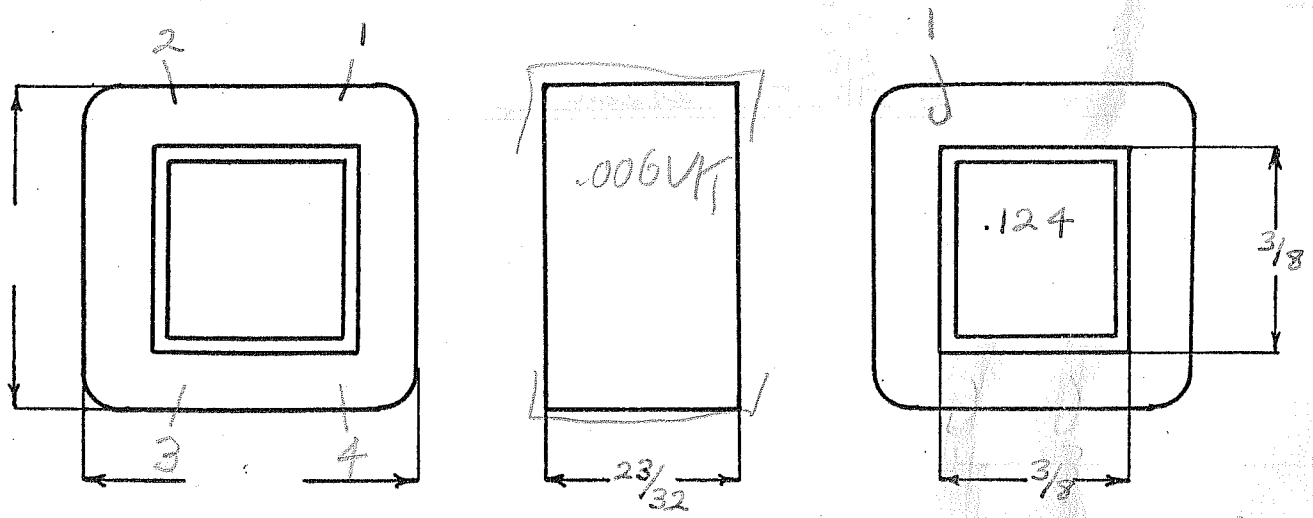
TUBE	5L010GK+1L005VC	IMPREGNATION	Varnish

CORE 3/8 x 3/8 F-12 GA. 29 GRADE A STACK 4 x 4

MOUNTING D-leads, P-leads

Craft can

wn = 76%



DESIGNED BY A. Hadley

DATE 8-6-49

DESIGN AND TEST DATA

Rating:		Pri	Sec
	T_R	1	4.2
	T	970	4070

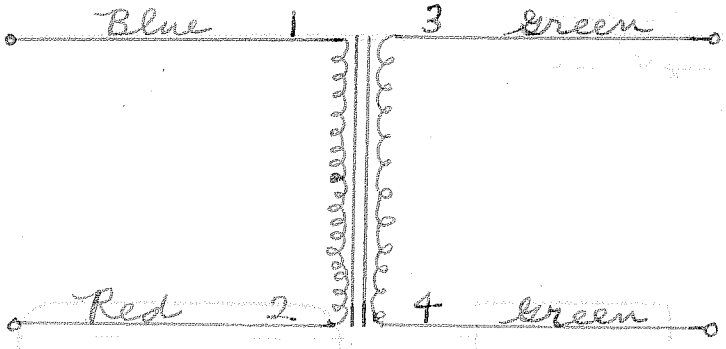
Winding	1-2 Pri	3-4 Sec					
Mean Turn	2.02	2.69					
Resistance 25° c	174.5	975					
Pounds Copper	.005	.0279					
Copper Density	—	—					
Ratio Volts open circuit	21.4	90					
Test to Ground	2000	2000					

Iron Induction 12.5 Kg @ 50 Cycles with 90 volts on 3-4

Exciting Current .0016 amperes @ 90 V. volts 60 cycles on 3-4

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

Remarks:



Pri leads

Sec leads

Audio, Modula. Output, Class AB2
Pri - 6600 w - CT (PP626 or 807)
Sec - 7500, 5000, 2500 @ 100, 150, 200 ma
Operating Level, 30 Watts

Old Stock
OK Hild

SPEC. NO. S-524

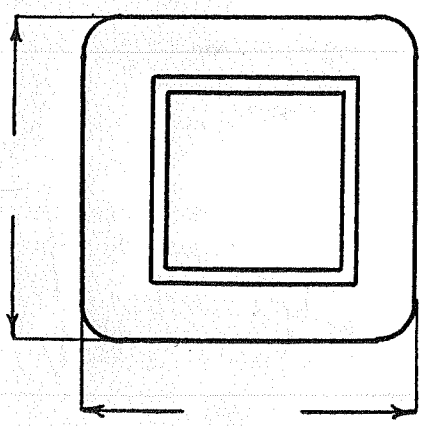
Winding	Pri		Sec		Sec		Sec
Turns	2400		1485		600		600
Taps CT	1200		—		—		—
Wind. Lgth.	1 5/8"	=1.625"	1 1/2"		1 1/2"		1 1/2"
Wire Size	#30		#28		#30		#30
T. P. L.	134-18Ω		100-15Ω		120-5Ω		120-5Ω
Finish Plate	89%		90%		86%		69%
Type Lead	W. O. Sleeve		W. O. Sleeve		W. O. Sleeve		W. O. Sleeve
Lead Lgth.	6"		6"		6"		6"
Layer Insul.	2L 20#G		1L 30#G		1L 30#G		1L 20#G
Test Volt.	2500		5000		—		—
Wrapper	3L 007VC		3L 30#G		3L 30#G		2L-007VC 2L-005GA

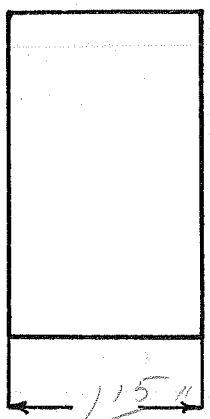
TUBE 7L-007GK+1L-007VC IMPREGNATION Double Vanish

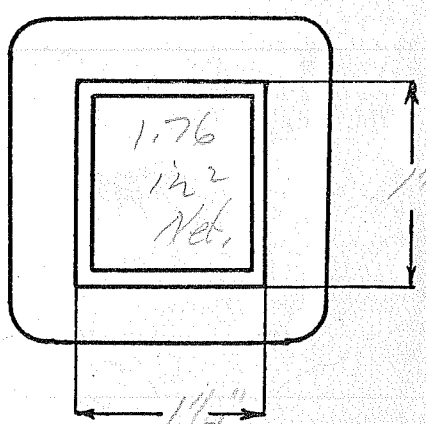
CORE 1 1/4" x 1 1/2" EVI GA. 26 GRADE D STACK Butt - .015" Gap

MOUNTING "F" - Lugs Notes: Heavy finishing, over mica. Tight winding.

Lo = 1000 @ 100ma on Pri.
Wire Net = 0.544" (0.545")
TPV = 5.4
Fe = 47.3 @ 50w, 94.6 @ 25w



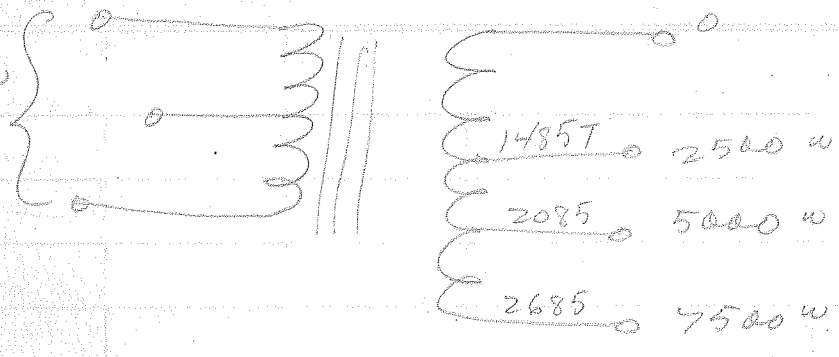




Re- DESIGNED BY HHR DATE 10-4-41

over

Pri



$Z = 7500 - 6600 - 5000 - 2500$

$Z_R = 3 - 2.64 - 2 - 1$

$T_R = 1.73 - 1.62 - 1.41 - 1$

$T = 2685 - 2420 - 2110 - 1500$

$T = 2570 - 2405 - 2093 - 1485$

MODULATION

STOCK

P-P 6L6's 6600 ohms CT
to 2500V @ 200 Ma. D.C. or
5000V @ 150 Ma. D.C., or 7500V @ 100 Ma. D.C.
30 watts

SPEC. NO. S524-F

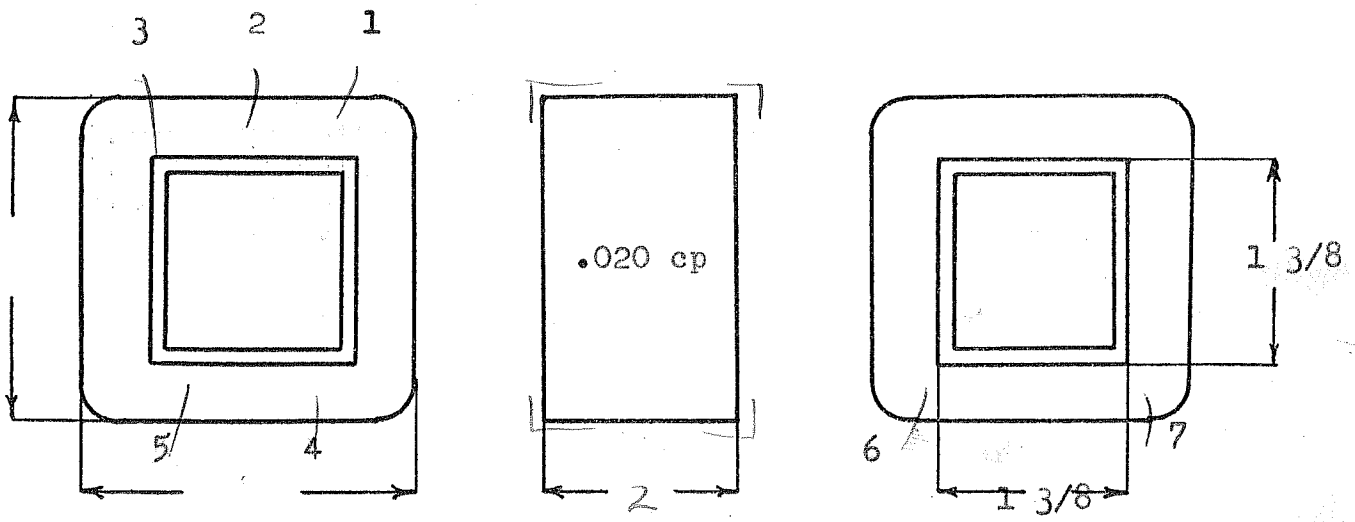
Winding		1-2-3 ~~Pri.~~		4-5-6-7 Sec.			
Turns		2100		2340			
Taps		1050		1350-1910			
Wind. Lgth.		1 5/8		1 1/2			
Wire Size		#30		#29			
T. P. L.		132-16L		113-21L			
Finish		88%		92%			
Type Lead		Silver Braid		Silver Braid Vinyl Sl.			
Lead Lgth.		6"		6"			
Layer Insul.		30#		30#			
Test Volt.		2500		5000			
Wrapper		.197 ~~2L007VG~~ ~~3L30#~~ interleaved		.288 2L007VC 2L007GA			

TUBE	7L007GK plus ~~2L003VG~~	IMPREGNATION	Varnish

CORE 1 3/8 x 1 3/8 GA. 29 GRADE B STACK Butt .005 gap

MOUNTING FF

T. P. U. —
window — .602/.688 = 87.5%



DESIGNED BY Rewritten F.F.

DATE

DESIGN AND TEST DATA

Rating:

Z - 6600 - 7500 - 5000 - 2500
Zr - 2.69 - 3 - 2 - 1
Tr - 1.655 - 1.732 - 1.414 - 1
T -

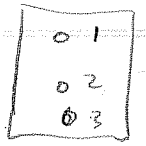
Winding		Pri.		Sec.			
Mean Turn		6.64		8.62			
Resistance 25° c		123		204			
Pounds Copper		.361		.955			
Copper Density		---		---			
Ratio Volts		67-67		86-122-199			
Test to Ground		2500		5000			

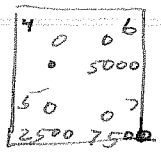
Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



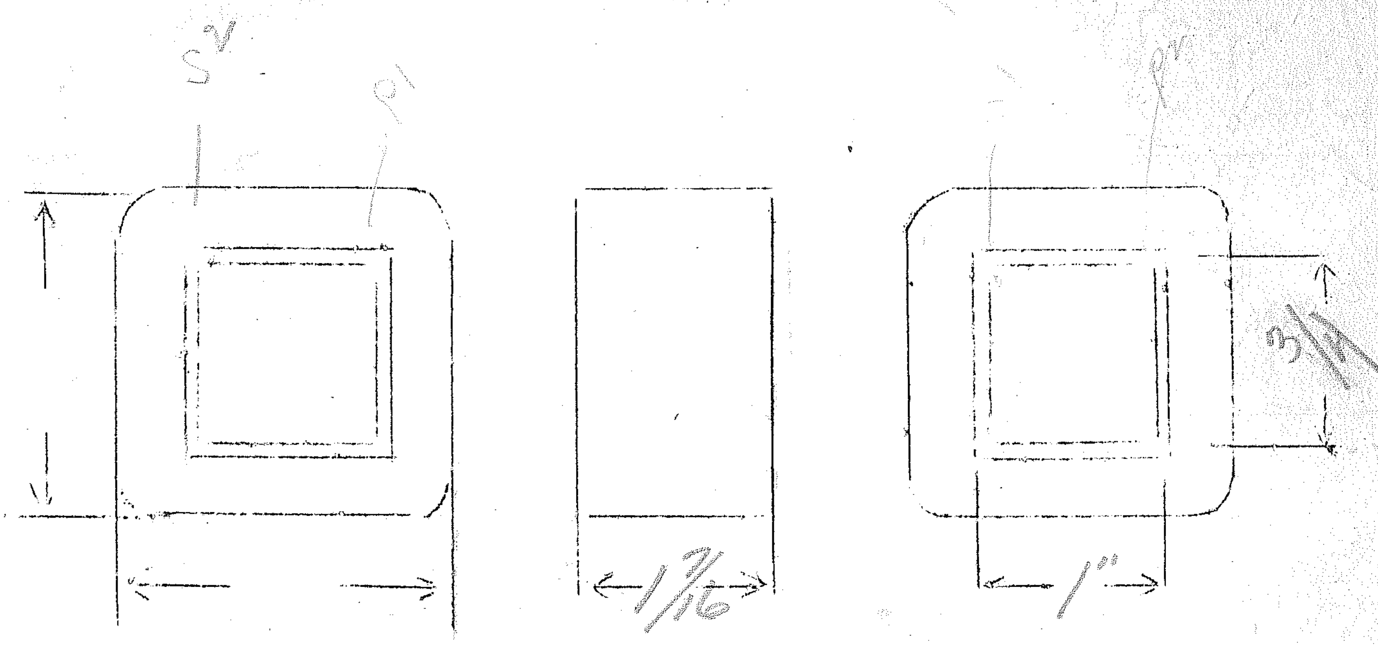


SINGLE PLATE - SINGLE GRID -3-1

SPEC. NO. 525

Winding	PRI	SEC					
Turns	3650	10950					
Taps	NONE	NONE					
Wind. Lgth.	1 1/4	1 1/4					
Wire Size	37E	37E					
T.P.L.	225-17	225-14					
Kind Term.	NO 20 PBr	NO 20 PBr					
Term. Lgth.	9"	9"					
Layer Insul	20lb GI	20lb GI					
Wrapper	21003YP	21005GB					

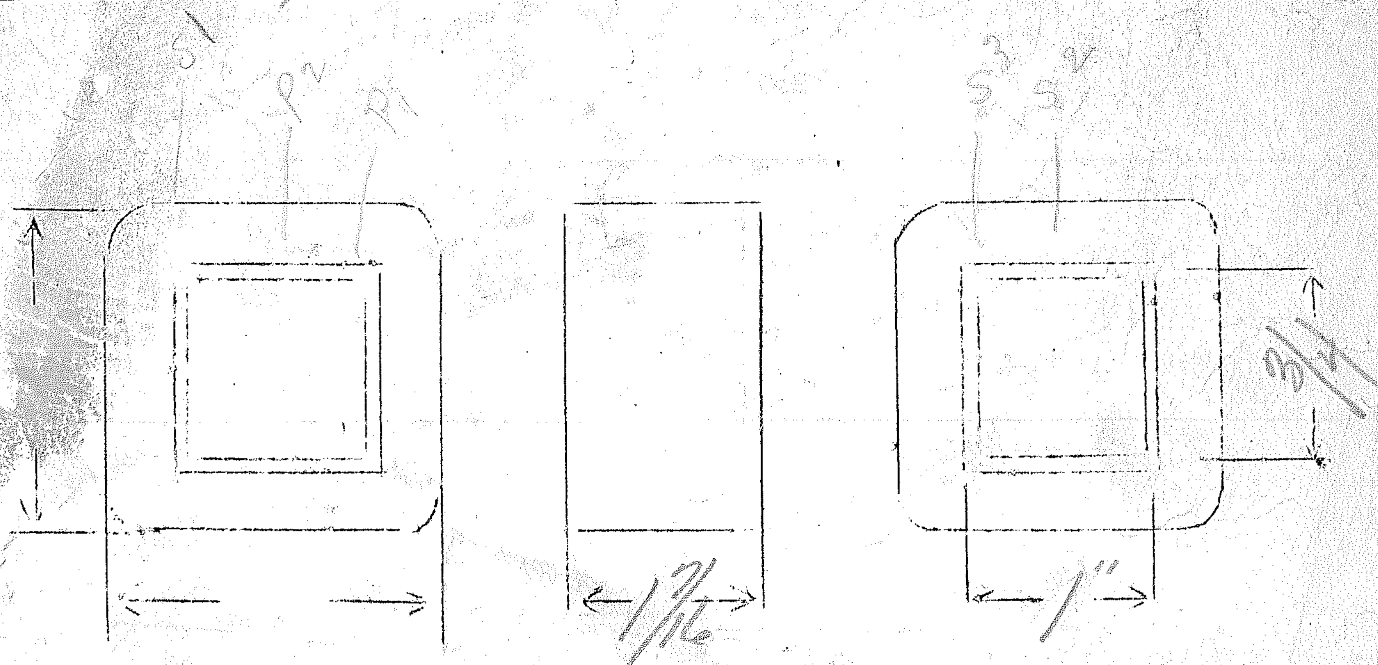
TUBE	4L007	IMPREGNATION	WAX
CURE	1" X 3/4 N.H.		



SPEC. NO. 526

Winding	PRI	SEC					
Turns	4000	12000					
Taps	NONE	6000					
Wind. Lgth.	1 1/4	1 1/4					
Wire Size	38E	38E					
T.P.L.	252-16	252-48					
Kind Term.	No 20 PBN	No 20 PBN					
Term. Lgth.	9"	9"					
Layer Insul.	2 oll CI	2 oll CI					
Wrapper	2L005VP	2L005 6A					

TUBE	2L007	IMPREGNATION	WAX
CURE	1" X 3/4 N W 24 c Blue		



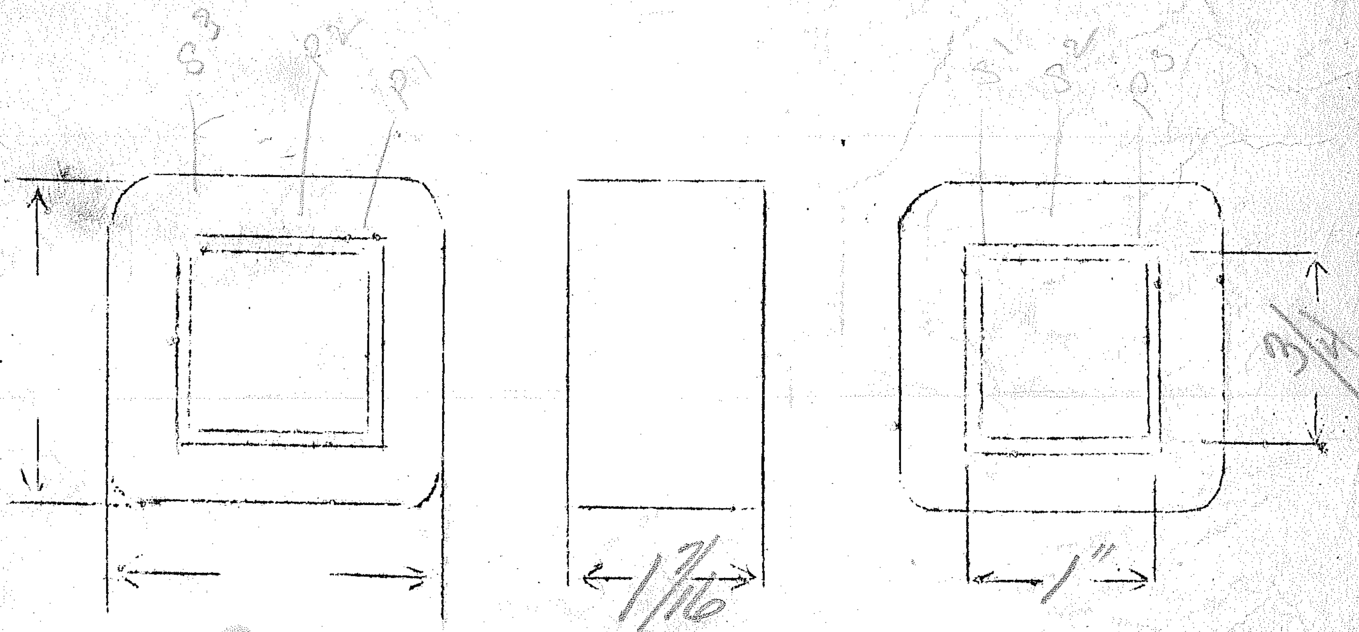
1207
9 83

P.P. PT - P.P. GR - 3-1 RATIO

SPEC. NO. 527

Winding	PRI	SEC.					
Turns	3650	10950					
Taps	1825	5475					
Wind. Lgth.	1 1/4	1 1/4					
Wire Size	37E	37E					
T.P.L.	225-17	225-49					
Kind Term.	No 20 P. BV	No 20 P.BV					
Term. Lgth.	9"	9"					
Layer Insul.	20lb. C1	20lb. C1					
Wrapper	2L003 GP	2L005 GA					

TUBE	4L 007	IMPREGNATION	WAX
CURE	1" X 3/4 DWW 2X2 29 G B Grade		

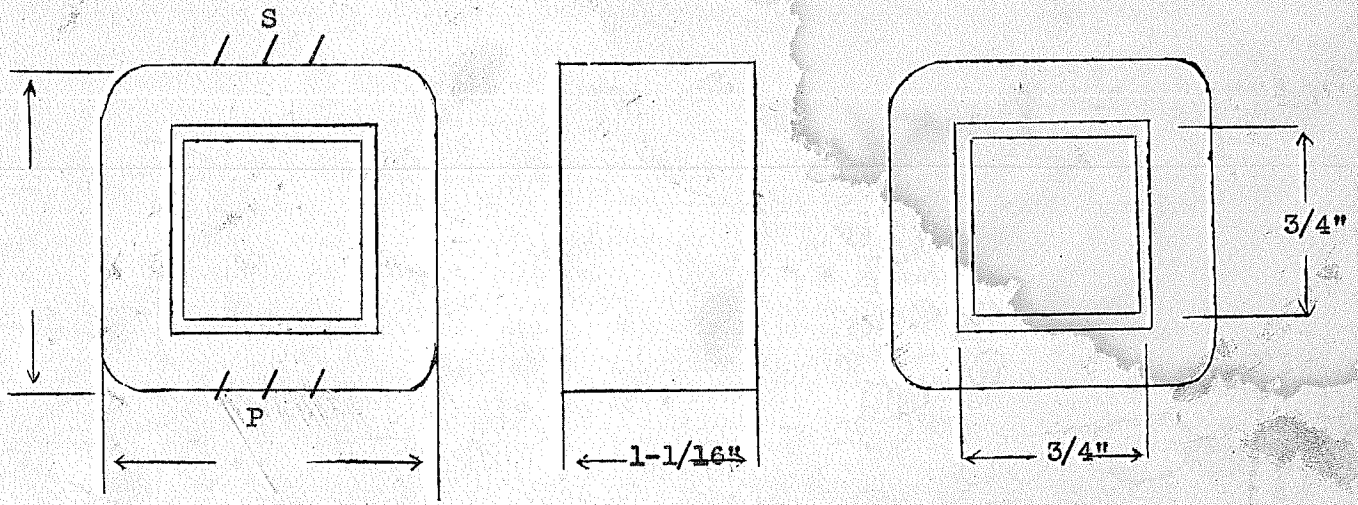


500 or 125 ohm line, or double button mike to grid

SPEC. NO. D528

Winding	Sec	Pri
Turns	8400	520
Taps	4200	260
Wind. Lgth.	15/16"	15/16"
Wire Size	#40	#29
T.P.L.	236-36 239	~~6-6~~ 637-8
Kind Term.	Sil Br	W. O.
Term. Lgth.	3"	3"
Layer Insul.	~~16#~~ 12#	30#
Test Volt.	—	—
Wrapper	1L005VP 3LG1.	1L005GA

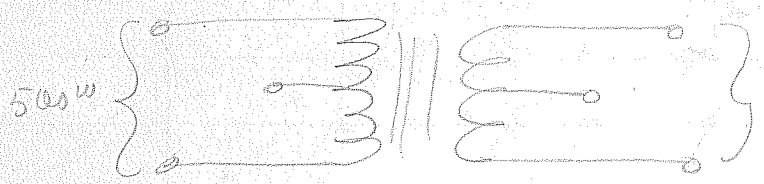
TUBE	4L007 GK	IMPREGNATION	Wax
CORE	29 Ga. B grade 2X2	PRIMARY V.A.	
MOUNTING	D		



DESIGNED BY G.W. DATE 12/28/38

Pri

Sec



$T = 8400 - 520$

$T_R = 16.1 - 1$

$Z_R = 259 - 1$

$Z = 125,000 - 500$

Audio Intestage 1/2.5
Single Plate to
Push Pull Grids

SPEC. NO. D-529

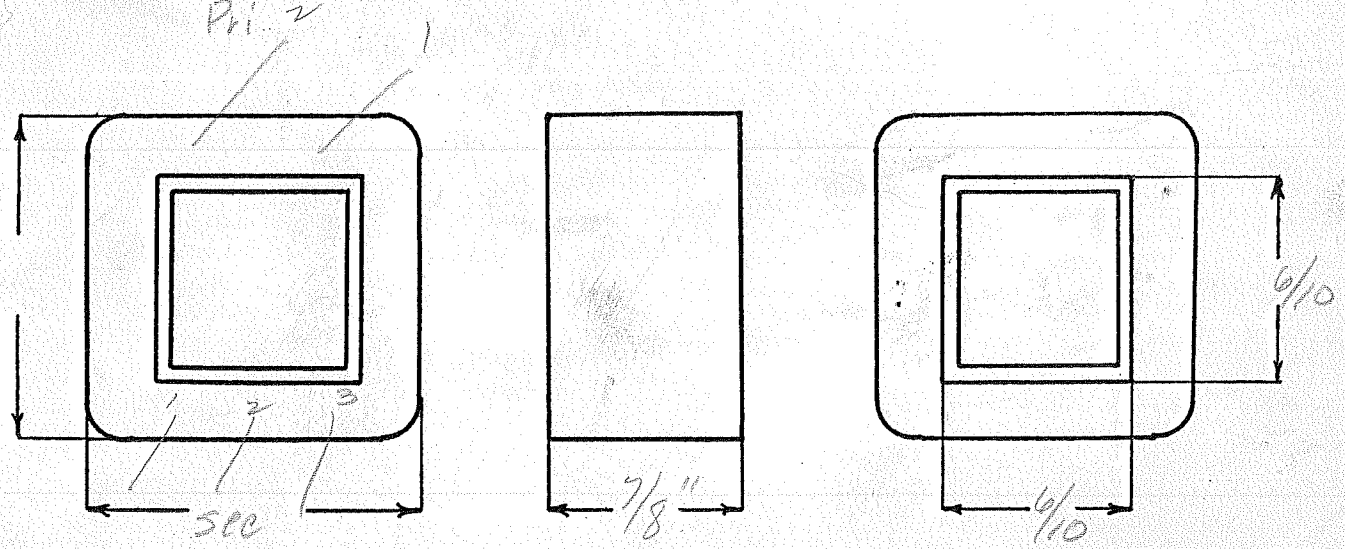
Winding	Pri		Sec.				
Turns	2050		5120				
Taps	—		2560				
Wind. Lgth.	11/16		11/16	= 0.6875"			
Wire Size	#39		#39				
T. P. L.	158-13 L.		160-32 L.				
Finish	90%		90%				
Type Lead	#22 Pri. Bk.		#22 Pri. Bk.				
Lead Lgth.	9"		9"				
Layer Insul.	1L #4 G		1L #4 G				
Test Volt.	1250 2L		2L				
Wrapper	.003" VP		.005 CA				

TUBE 4K-007" SK IMPREGNATION Varnish

CORE 6/10 x 6/10 E x I GA. 29 GRADE D Annealed STACK 2 x 2

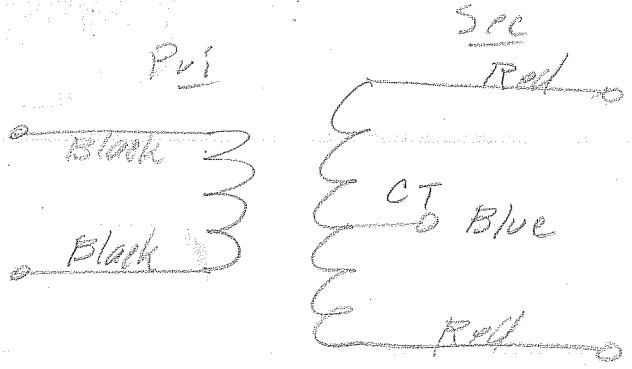
MOUNTING D - 2 units only.

Wire Mat = 0.211" (0.207")



Re-DESIGNED BY HWS DATE 8-5-41

over



$T = 5120 - 2050$

$T_R = 2.5 - 1$

$Z_R = 6.25 - 1$

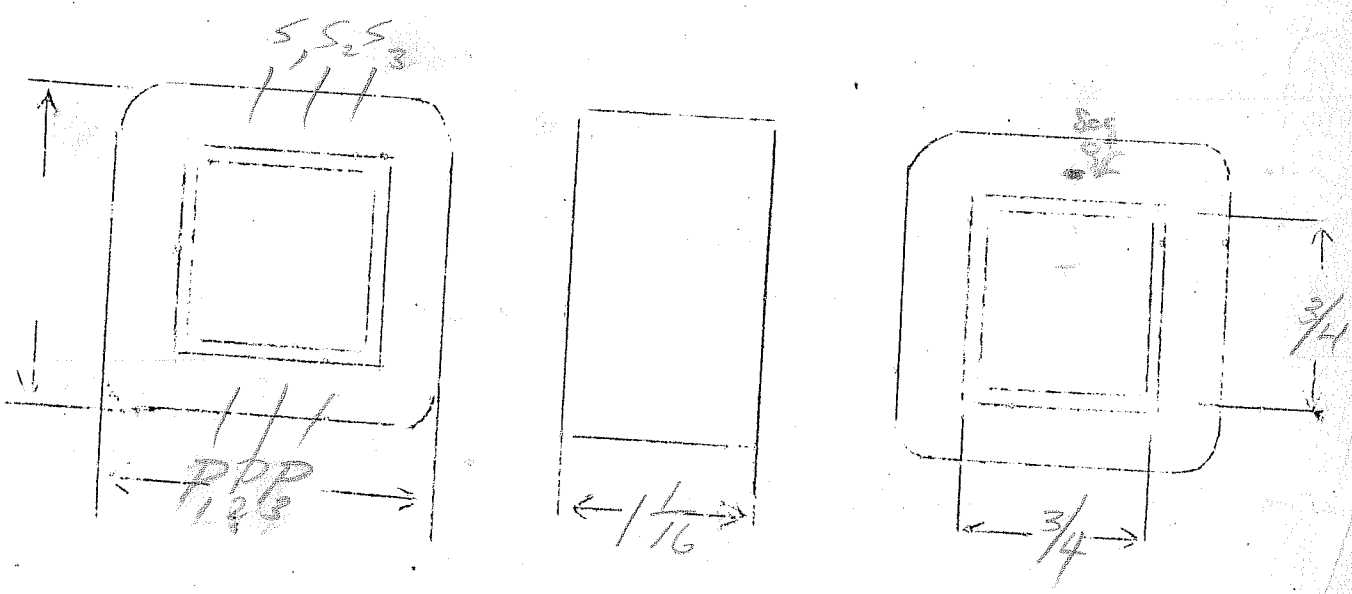
$Z = 62,500 - 10,000$

VELOCITY MIKE TO GRID

SPEC. NO. 532

Winding	SEC	PRI					
Turns	8400	28					
Taps	4200	14					
Wind. Lgth.	15/16	15/16					
Wire Size	#40E	#15					
T.P.L.	236-36	14					
Kind Term.	s/l BR	WIRE ONLY					
Term. Lgth.	3"	3"					
Layer Insul.	16 #61	GA					
Wrapper	2L005GA	2L005GA					

TUBE	4L007	IMPREGNATION	WAX
CURE	3/4 X 3/4		



OLD

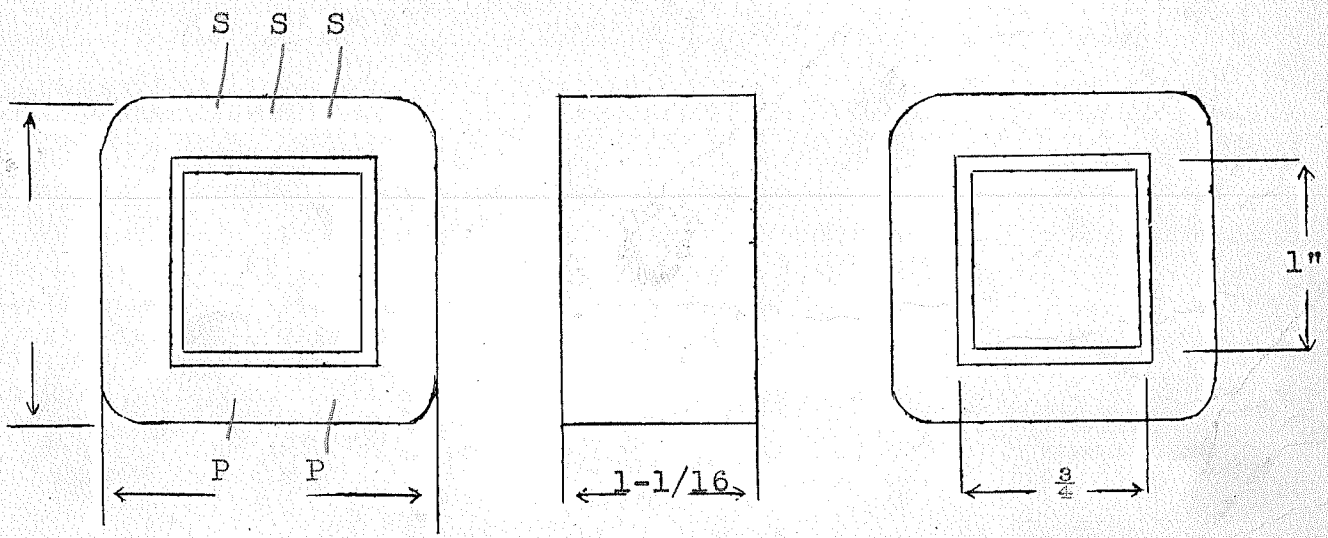
Single plate to push pull grids--heavier than
No. 544--excellent response for replacement use.

SPEC. NO. D533

Winding	PRI	SEC					
Turns	3500	9700					
Taps	NONE	4850					
Wind. Lgth.	7/8"	7/8"					
Wire Size	#39E	#39E					
T.P.L.	222-16	222-44					
Kind Term.	P.Br. Sil Br	P.Br. Sil Br					
Term. Lgth.	3"	3"					
Layer Insul.	16#	16#					
Test Volt.	1200	1250					
Wrapper	1L007VC 4L Glass, no. 2L005GA						

TUBE F.T.	7L007	IMPREGNATION	VARNISH & WAX
CORE	$\frac{3}{4}$ x 1 ($\frac{3}{4}$ NW) 29G B 2 x 2	PRIMARY V.A.	
MOUNTING	D		

Stickers under Pri.



DESIGNED BY G.W. DATE

Audio Output
Pri. - 500, 1000, 1500, 2000, & 2500 Ohm.
Sec. - 2, 4, 8, & 15 Ohm.
15 Watt

#8217

SPEC. NO. D-534

Winding		Primary		1 2	3 4 Secondary	5	NOTE — SEC LEADS
Turns		1550		1 - 43 2	3 - 4 - 5 42	6 - 7 31	2-3 GO TO SAME LUG AND 5-6 TO SAME LUG
Taps	900 - 600 - 400 - 200			-	17	-	
Wind. Lgth.		1-1/16"		1-1/16"	1-1/16"	1-1/16"	
Wire Size		#31		#20	#22	#24	
T. P. L.		100 - 16I		29 - 1½L	36 - 1½L	31 - 1L	
Finish Pitch		90%		90%	90%	90%	
Type Lead		#22 Pr. Br.		W. O.	W. O.	W. O.	
Lead Lgth.		9"	(from case)	3"	3"	3"	(from coil)
Layer Insul.		1L 30#G		1L .005" GA	←	1L .005" GA	
Test Volt.		2000V			1250V		
Wrapper		2L .005" GA		NONE — (CONTINUOUS WINDING)	NONE 1L .005 GA (1 WIND)	2L .005" GA	

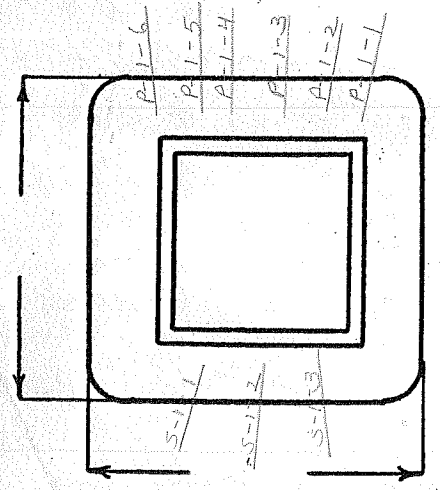
TUBE		IMPREGNATION	VARNISH
	5L - .007" GK+1L003V/P		

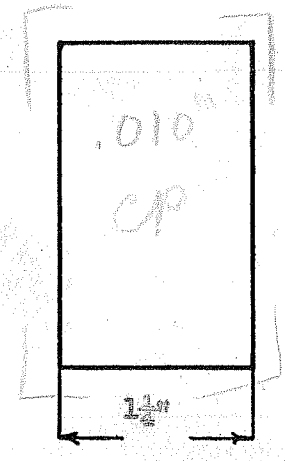
CORE 7/8" x 1" E & I GA. 29 GRADE D - Annealed STACK 2 x 2

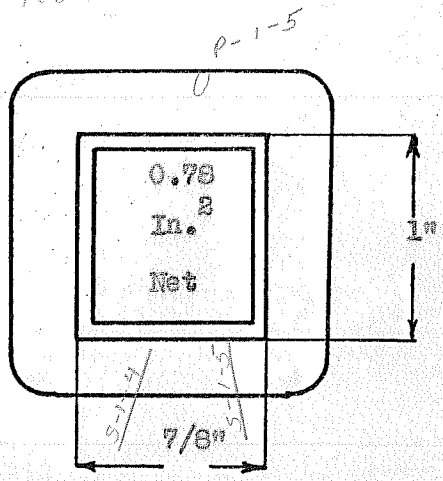
MOUNTING "D" - Leads on Primary Lugs on Secondary

NOTE: Secondary wound in same direction as Primary.

Cu =
Fe = 144 @ 35 Cy. (72 @ 50 Cy.)
TPV = 8.0 (190V across - 2500 Ohm)
Wire Net = 0.324" (0.282")







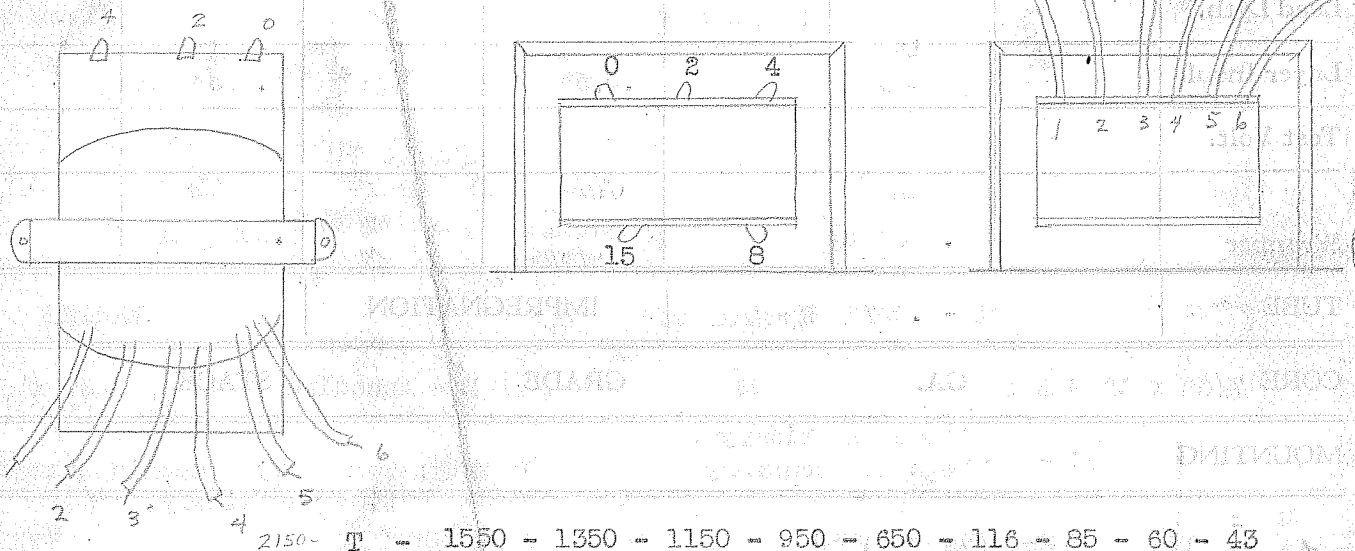
Re-DESIGNED BY HWS DATE 7-20-41

"K" MTG ONLY

2500 Ohm	P-1-1	Green-White		
2000 W	P-1-2	Black-Red 200T	116T Red	S-1-1 15 Ohm
1500 W	P-1-3	Blue-Red 400T	85T Blue	S-1-2 8 Ohm
1000 W	P-1-4	Red-Yellow 600T	60T Green	S-1-3 4 Ohm
500 W	P-1-5	Black-White 900T	43T Yellow	S-1-4 2 Ohm
	P-1-6	White 1550T	Black	S-1-5 0

2150T

Primary Leads



2150	T	=	1550	1350	1150	950	650	116	85	60	43
50	T_R	=	36	31.4	26.7	22	15.1	2.7	1.97	1.395	1
2500	Z_R	=	1300	985	713	485	228	7.29	3.88	2.79	1
5000	Z	=	2600	1970	1430	970	457	14.6	7.78	5.58	2

1 SW. 2500 2000 1500 1000 500 15 8 4 2

2500 1250 1000 750 500 250 75 4 2 1

50 39.4 31.6 27.4 22.4 15.8 2.74 2 1.41 1

670

PRI - 500 Ω
SEC - 500, 250, 167, 125 Ω

LINE MATCHING TRANS.
OLD

30 WATTS

SPEC. NO. D-535

Winding								
Turns	(500) 1250	(250)	(167)	(125)				
Taps	0 - 368 - 557 - 620							
Wind. Lgth.	1/16							
Wire Size	#27							
T.P.L.	63-204							
Kind Term.	W.O.							
Term. Lgth.	3"							
Layer Insul.	40#							
Test Volt.								
Wrapper	2L005GA							

TUBE | 5L007 | IMPREGNATION | Varnished

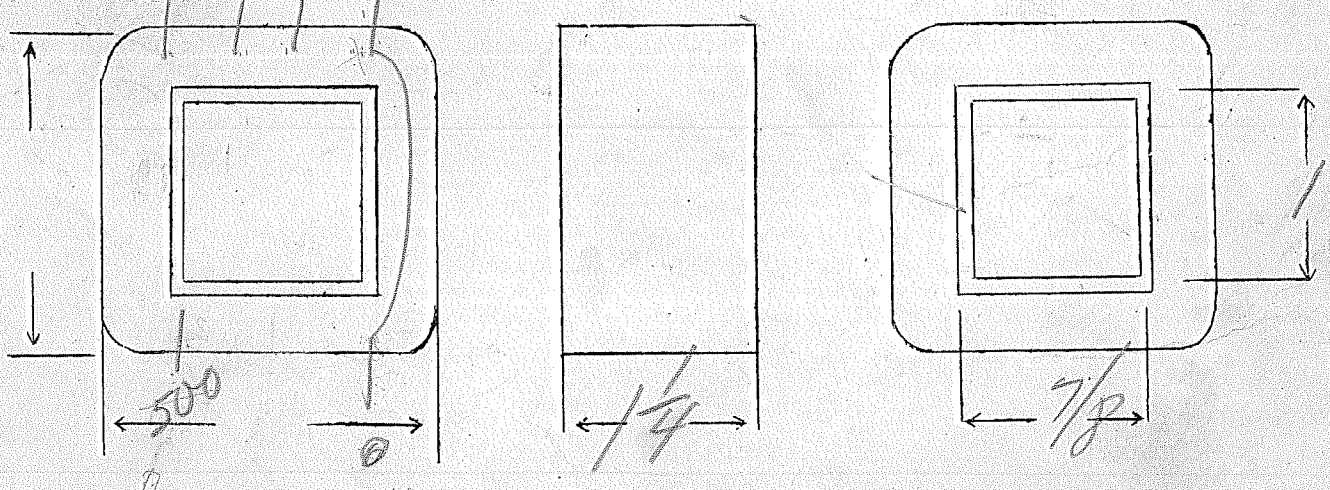
CORE | 7/8 x 1 - B - 2x2 | PRIMARY V.A. |

MOUNTING D4

End of winding is common

125 167 250 500 Sec

250 167 125 0 common



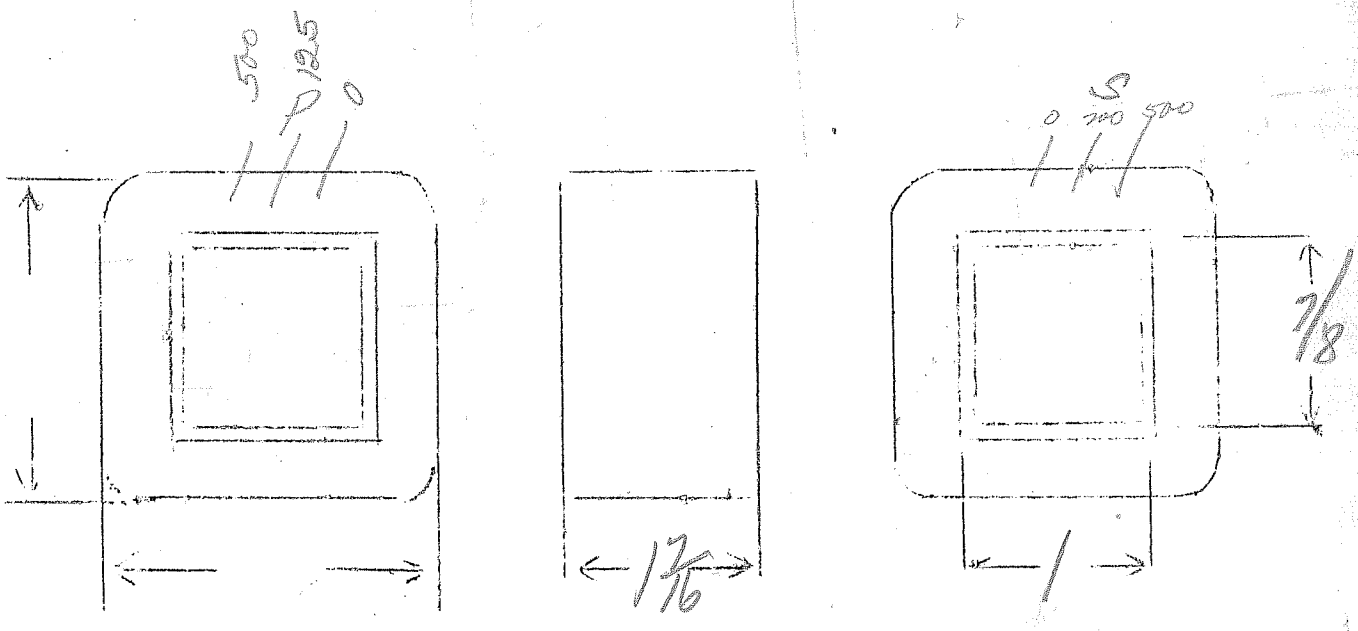
DESIGNED BY [illegible] DATE 7/15/38

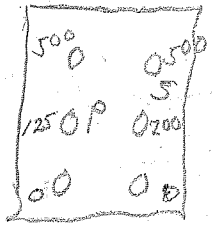
500 or 125 Ω
to 500 or 200 Ω line

SPEC. NO. 536

Winding	P	S					
Turns	850	885					
Taps	425	560					
Wind. Lgth.	1.25	1.25					
Wire Size	#28	#28					
T.P.L.	74	74					
Kind Term.	silver braid						
Term. Lgth.	6"	6"					
Layer Insul.	40#	40#					
Wrapper	L007K	L005GA					

TUBE	7L007	IMPREGNATION	VARNISH
CURE	1 X 7/8	2962X2	B Grade





RIBBON MIKE To 200 and 500-2 Line

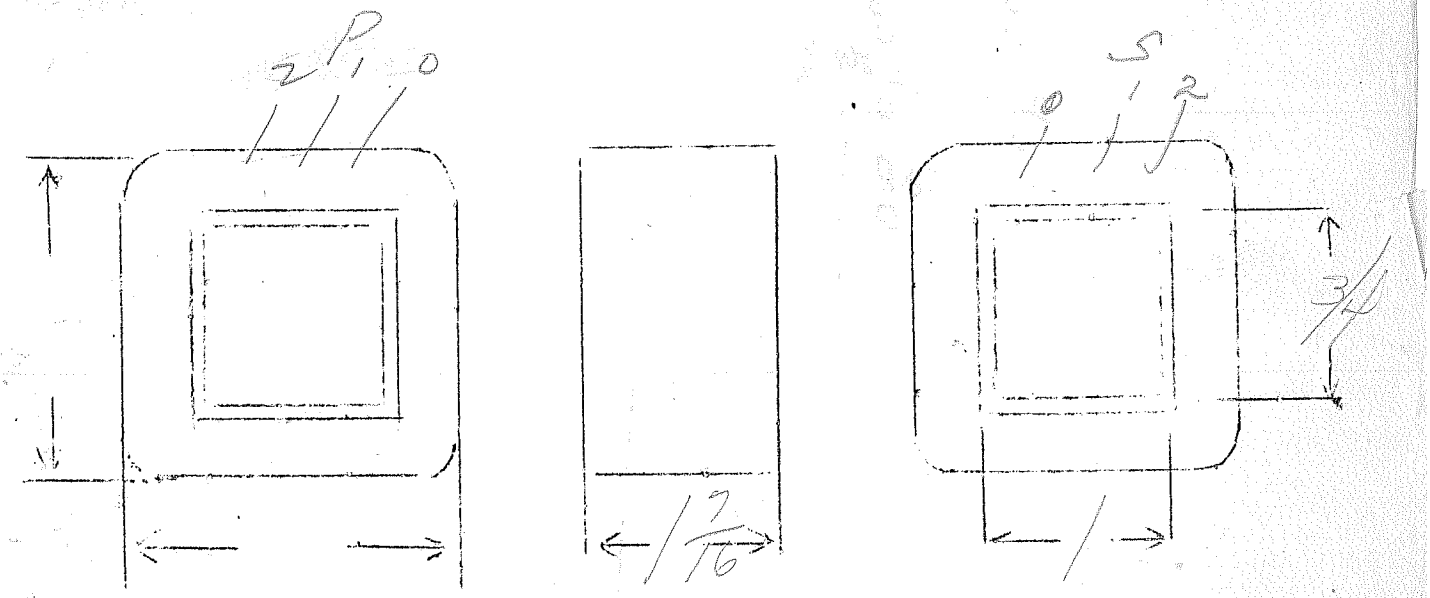
1/2 or 1/4" to

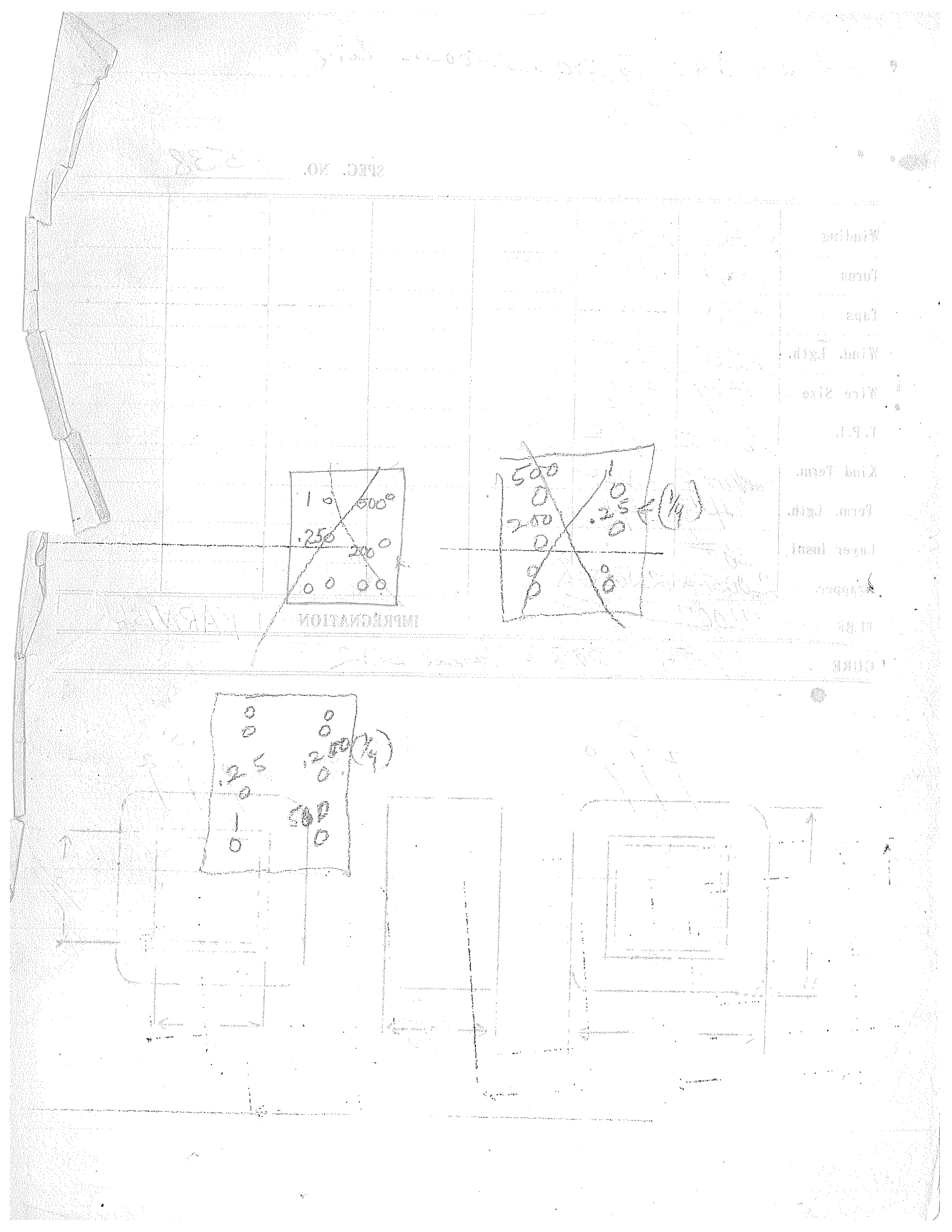
SPEC. NO. 538

Winding	SEC	PRI					
Turns	850	38					
Taps	530	19					
Wind. Lgth.	1.25	1.25					
Wire Size	#27	#16					
T.P.L.	76-12	19-2					
Kind Term.	WIRE	ONLY					
Term. Lgth.	4"	4"					
Layer Insul.	3#						
Wrapper	2005GA	2005GA					

TUBE | 7L007 | IMPREGNATION | VARNISH

CURE | 1 X 3/4 290B Grade 2x2





Audio
Single Plate to Single Grid
Voltage Ratio 2.5/1

Old Stock
Manufacturer's List

SPEC. NO. D-539
(SIMILAR TO #17891)

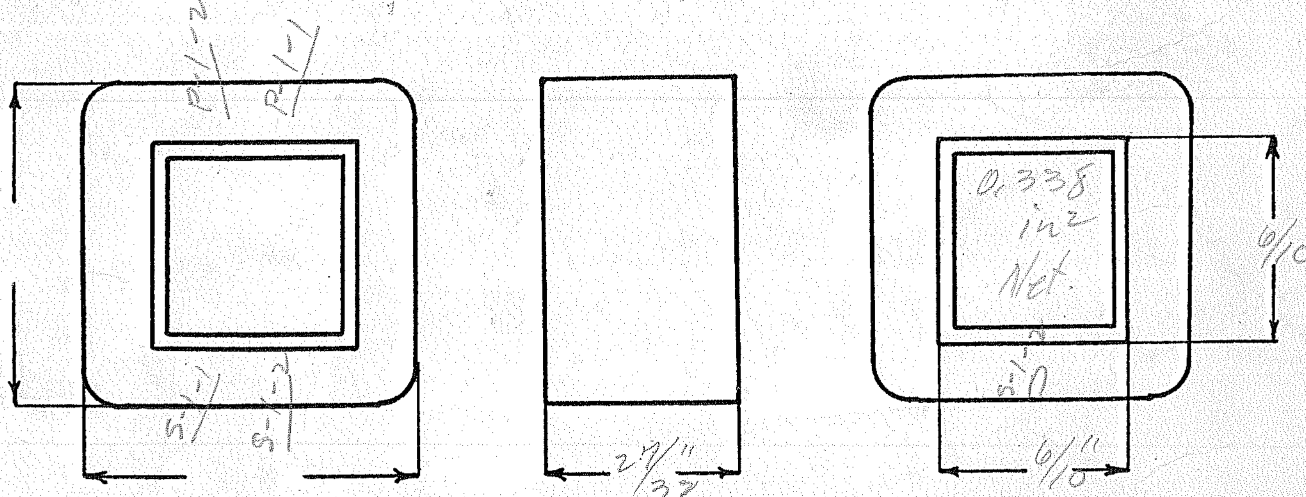
Winding		Pri		Sec			
Turns		2660		6650			
Taps		—					
Wind. Lgth.		23/32"		23/32"	= 0.718"		
Wire Size		#40		#40			
T. P. L.		190-14L		190-35L			
Finish	Pitch	90%		90%			
Type Lead		Sil. Br.		Sil. Br.			
Lead Lgth.		3"		3"			
Layer Insul.		12 12# G.		12 12# G.			
Test Volt.		—		—			
Wrapper		12 005 VC		22 0056A			

TUBE 4L-007 G/R IMPREGNATION

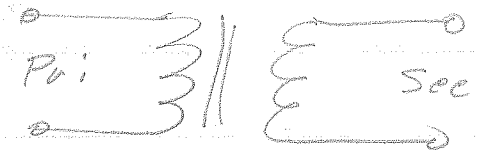
CORE 6/10 x 6/10 E+I GA. 29 GRADE B Annealed STACK Butt - no gap

MOUNTING D-2 Panel with lugs

Wire Net = 0.212" (0.200")
TPV = 26.6 (100v)
Fe = 50 @ 50v



DESIGNED BY NMR OVER DATE 1-15-42

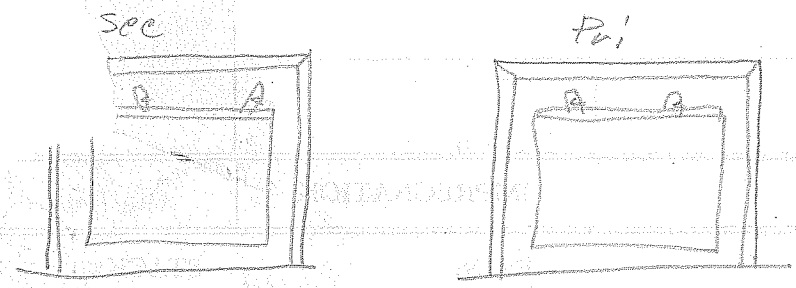


$T = 6650 - 2660$

$T_R = 2.5 - 1$

$Z_R = 6.25 - 1$

$Z = 62,500 - 10,000$



AUDIO OUTPUT

STOCK

9,000 ohms CT P.P. 6L6's Class AB1
6600 to
2-4-8-16-500 ohms
25 watts

SPEC. NO. S-540-A

Winding	1-2 Sec. #1	3-4-5 Sec #2	6-7-8 - 9 - 10 Pri.			11-12-13 Sec #3	sing befo
Turns	484	53	2,500			53	
Taps	--	31	160 = 1,250 - 2340			15	SING IN
Wind. Lgth.	1 3/8	1 3/8	1 3/8			1 1/4	DIRE SEC
Wire Size	#29	#20	#32			#18	
T. P. L.	97-5L	31-2L	139-20L			27-2L	
Finish	86%	75%	88%			90%	
Type Lead	#22 Pr. Br.	#20 Pr. Br.	#22 Dulac			#18 Pr. Br.	
Lead Lgth.	9" cut 15"	9" cut 15"	9" cut 15"			9" cut 15"	
Layer Insul.	830#	Double 30#	30#			1L005GA	
Test Volt.	1250		2000		1250	1250	
Wrapper	.069 4L30#	.077 1L007VC	.186 2L005GA			.089 2L005GA	

TUBE 9L007GK plus 1L003VC

IMPREGNATION

CORE 1 1/16 x 1 1/2 GA. 29

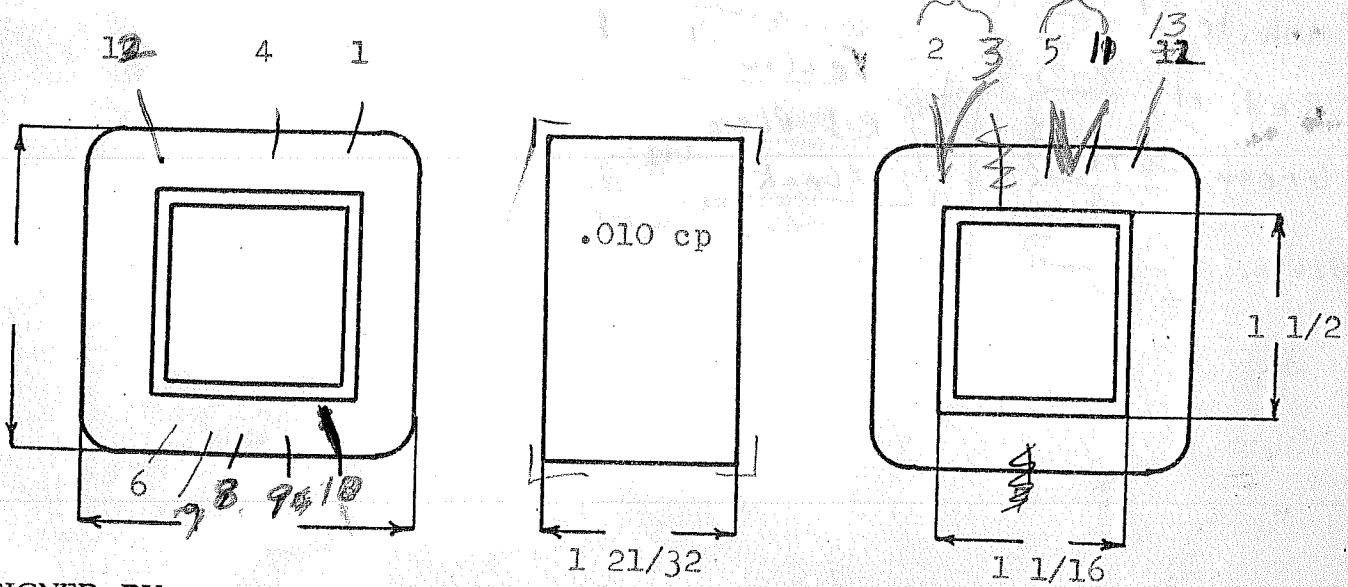
GRADE B

STACK Butt no Gap
armite keeper

MOUNTING AA

T. P. V. —
Window - 530/652 = 81%

FINISH AS ONE LEAD



DESIGNED BY S. B. rewritten

DATE

DESIGN AND TEST DATA

OBSOLETE

Rating:

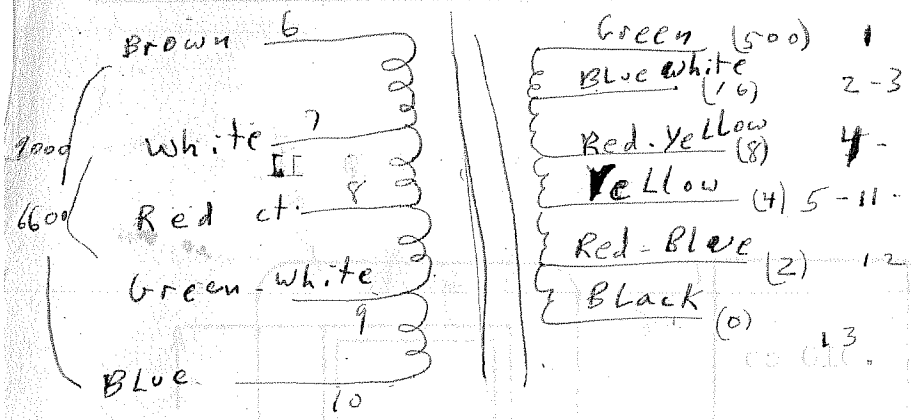
Winding	1-2 Sec. #1	3-4-5 Sec. #2		6-7-8 Pri.		9-10-11 Sec. #3	
Mean Turn	5.87	6.455		7.475		8.475	
Resistance 25° c	19.8	3.05		263.0		.25	
Pounds Copper	.093	.925		.304		.191	
Copper Density							
Ratio Volts	21.3	2.33 1.33		110 55		2.33 .66	
Test to Ground	1250			2000		1250	

Iron Induction _____ @ _____ Cycles

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



UNIVERSAL CLASS AB or B DRIVERS

15 WATTS

P/P 5 - 2.0 - 2.4 - 2.9 - 3.5 - 4.2 - 4.6 - 5.0 - 6.5

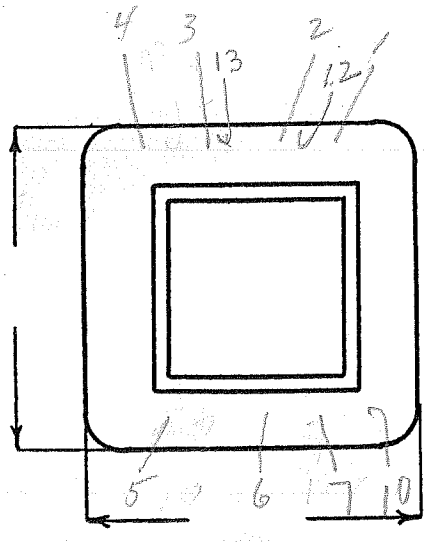
SPEC. NO. S-541

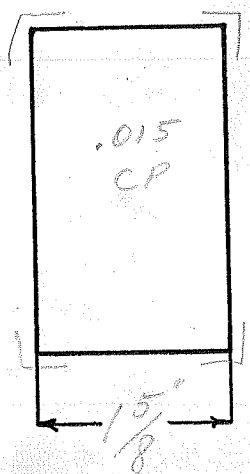
	1-2-3-4		5-6-7	8-9-10		11-12-13-14	
Winding	Sec		Pri	Pri		Sec	
Turns	1000		1200	1200		1000	
Taps	310-521		1000	200		479-690	
Wind. Lgth.	1 7/16		1 7/16	1 7/16		1 7/16	
Wire Size	#29		#32	#32		#29	
T. P. L.	106-10L		147-9L	147-9L		106-10L	
Finish							
Type Lead	22 DuLAC		DuLAC	DuLAC		DuLAC	
Lead Lgth.	Cut 14"						
Layer Insul.	#30		#30	#30		#30	
Test Volt.	2500		2500			2500	
Wrapper	2L005VC		2L005VC	2L00VC		2L007GA	

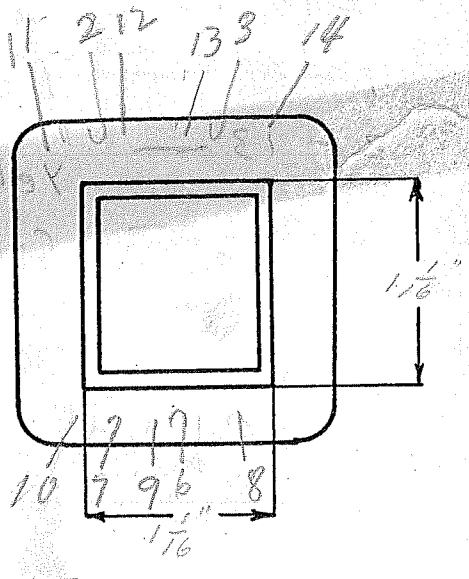
TUBE 2L007GK + 2L003VP IMPREGNATION VARNISH

CORE 1/16 x 1 1/16 GA. 29 GRADE B STACK Butt No Gap

MOUNTING AA







DESIGNED BY

DATE

DESIGN AND TEST DATA

Rating:

Winding	1-2-3-4 Sec		5-6-7 Pri	8-9-10 Pri		11-12-13-14 Sec	
Mean Turn	5.14		6.06	6.79		7.68	
Resistance 25° c	35.8		101.5	114		53.3	
Pounds Copper	.1675		.118	.132		.25	
Copper Density							
Ratio Volts	30-60-90		110	110		30-60-90	
Test to Ground	2500		— 2500 —			2500	

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

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

AUDIO OUTPUT

STOCK

9,000 ohms CT P.P. 6L6's Class AB1
6600 to
2-4-8-16-500 ohms
25 watts

SPEC. NO. S-540-A

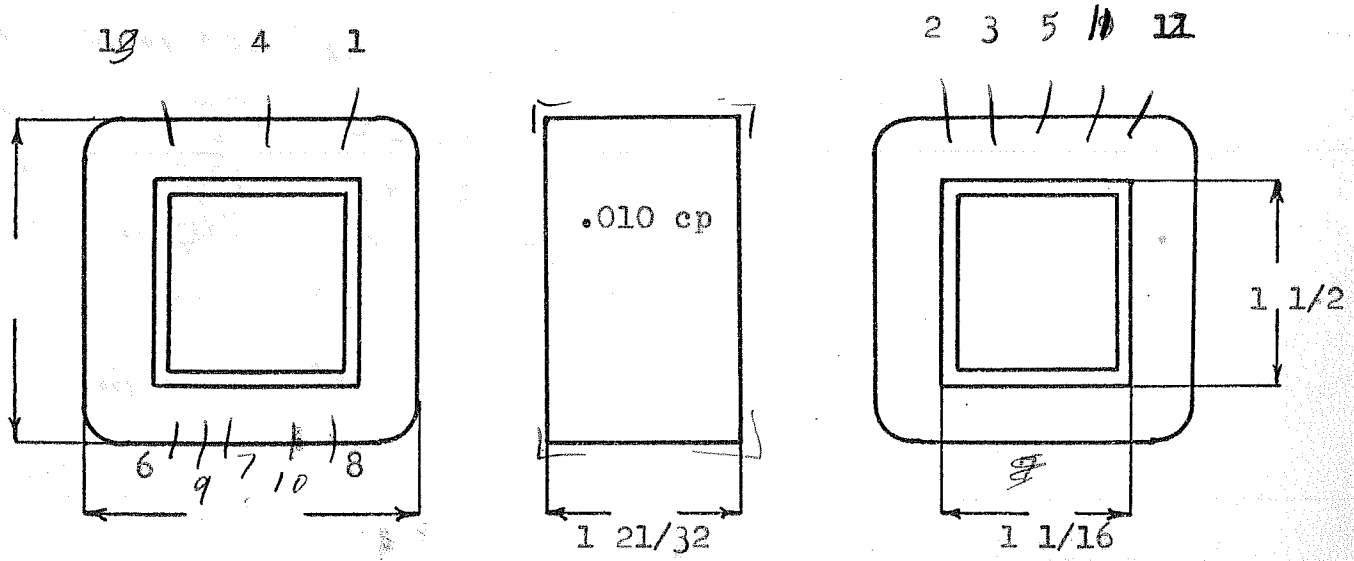
Winding	1-2 Sec. #1	3-4-5 Sec #2	6-7-8 - 9 -10 Pri.			11-12-13 Sec #3	single wind before finishing
Turns	484	53	2,500			53	
Taps	--	31	160-1,250-2340			15	
Wind. Lgth.	1 3/8	1 3/8	1 3/8			1 1/4	
Wire Size	#29	#20	#32			#18	
T. P. L.	97-5L	31-2L	139-20L			27-2L	
Finish	86%	75%	89%			90%	
Type Lead	#22 Pr. Br.	#20 Pr. Br.	#22 Dulac			#18 Pr. Br.	
Lead Lgth.	9" cut 15"	9" cut 15"	9" cut 15"			9" cut 15"	
Layer Insul.	30#	Double 30#	30#			1L005GA	
Test Volt.	1250		2000			1250	
Wrapper	.069 4L30#	.077 1L007VC	.186 2L005GA			.089 2L005GA	

TUBE	9L007GK plus 1L003VG	IMPREGNATION	

CORE 1 1/16 x 1 1/2 GA. 29 GRADE B STACK Butt no Gap ~~armito keepers~~

MOUNTING AA

T. P. V. —
Window - .530/.656 = 81%



DESIGNED BY E.B. rewritten

DATE

DESIGN AND TEST DATA

Rating:

Winding	1-2 Sec. #1	3-4-5 Sec. #2		6-7-8 Pri.		9-10-11 Sec. #3	
Mean Turn	5.87	6.455		7.475		8.475	
Resistance 25° c	19.8	3.05		263.0		.25	
Pounds Copper	.093	.925		.304		.191	
Copper Density							
Ratio Volts	21.3	2.33 1.33		110 55		2.33 .66	
Test to Ground	1250			2000		1250	

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

$Z_T = 9000 - 6600 - 500 - 16 - 8 - 4 - 2$

$Z_R = 4500 - 3300 - 250 - 8 - 4 - 2 - 1$

$T_R = 67.1 - 57.4 - 15.8 - 2.83 - 2 - 1.4$

$T = 2500 - 2180 - 540 - 106 - 75 - 53.3$

$E = \sqrt{25 \times 9000} = 474\ V.$

$I_s\ 2\Omega = \sqrt{\frac{25}{2}} = 3.53\ a$

$I_s\ 4\Omega = \sqrt{\frac{25}{4}} = 2.5\ a$

$I_s\ 8\Omega = \sqrt{\frac{25}{8}} = 1.77\ a$

$I_s\ 16\Omega = \sqrt{\frac{25}{16}} = 1.25\ a$

$I_s\ 500\ \Omega = \sqrt{\frac{25}{500}} = 224\ ma.$

MODULATION OUTPUT
PRI - 2000 Ω - PP PAR 6L6, 807 - CLASS AB2
SEC - 10000, 7000, 4000 @ 120 watts

Continuous

SPEC. NO. 5541

Winding	PRI	SEC					
Turns	1200	2700					
Taps	600	1750 - 2300					
Wind. Lgth.	2 1/4	1 7/8					
Wire Size	#26	#27					
T.P.L.	120-10	110-25					
Kind Term.	WIRE ONLY						
Term. Lgth.	6"	6"					
Layer Insul.	double 30#						
Test Volt.	5000	6500					
Wrapper	3200 TVC 4L GL	3200 TVC 2600 SGA					

TUBE | 9L007 + 2L007 VC | IMPREGNATION | VARNISH

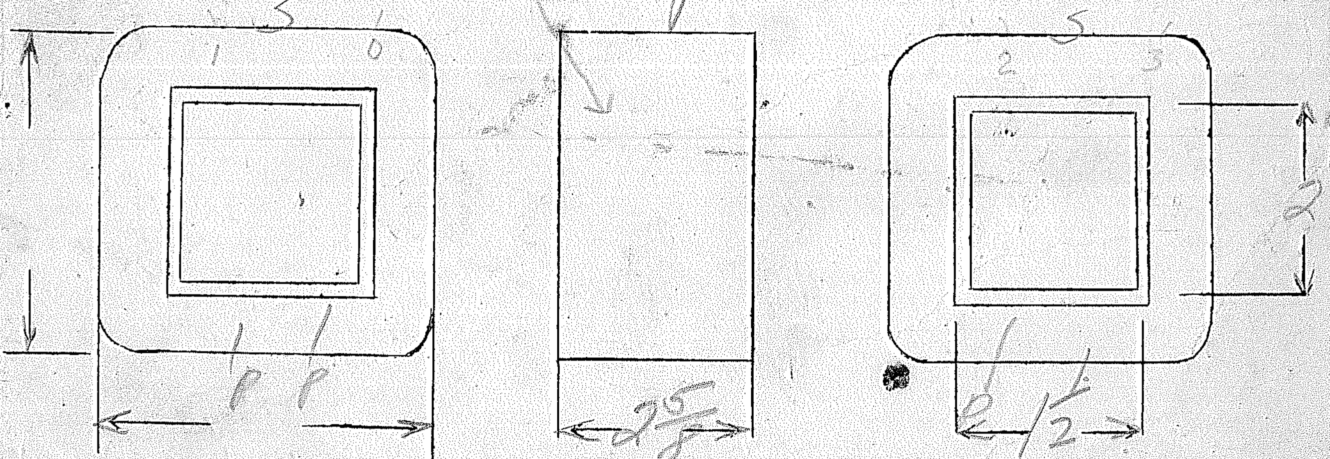
CORE | 24 Ga - .020" gap | PRIMARY V.A.

MOUNTING J

8 : 365
8 : 480
8 : 556

576

(use name plate with spec no only
for test over



DESIGNED BY GW DATE 6/29/38

UNIVERSAL CLASS AB OR B DRIVERS

STOCK

15 watts

P/$\frac{1}{2}$S = 2.0-2.4-2.9-3.5-4.2-4.6-5.0-6.5

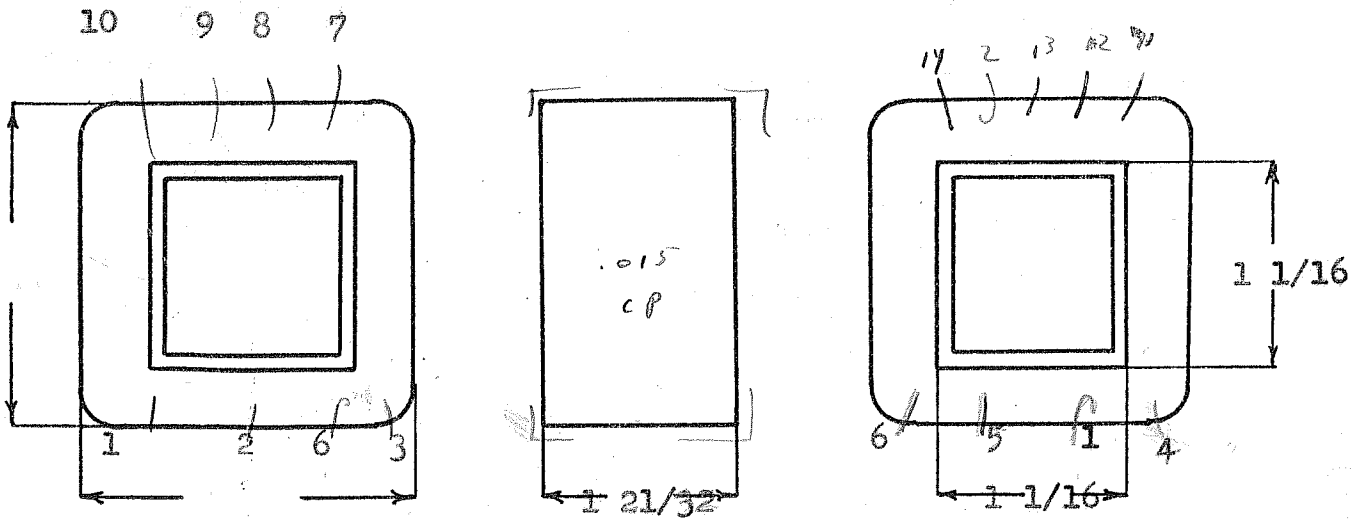
SPEC. NO. S-541-F

Winding	7-8-9-10		1-2-3	4-5-6		11-12-13-14	
Turns	1000		1200	1200		1000	
Taps	310-521		1000	200		479-690	
Wind. Lgth.	1 7/16					→	
Wire Size	#29		#32	#32		#29	
T. P. L.	106-10L		147-9	147-9L		106-10L	
Finish							
Type Lead	Sil. Br. Vinyl SL.		Sil. Br.	Sil. Br.		→	
Lead Lgth.	6		6	6		6	
Layer Insul.	30#		30#	30#		30#	
Test Volt.	2500		2500			2500	
Wrapper	2L005VC		1L005VC	2L005VC		2L007Ga	

TUBE	7L007GK & 1L003VP	IMPREGNATION	Varnish.

CORE 1 1/16 x 1 1/16GA. 29 GRADE B STACK Butt no gap

MOUNTING ET AA



DESIGNED BY F. Frazee

DATE

DESIGN AND TEST DATA

Rating:

Winding							
Mean Turn	5.14		6.06	6.79		7.68	
Resistance 25° c	35.8		101.5	114		53.3	
Pounds Copper	.1675		.118	.132		.25	
Copper Density							
Ratio Volts							
Test to Ground	2500		2500			2500	

Iron Induction ______ @ ______ Cycles ______

Exciting Current ______ amperes @ ______ volts 60 cycles on ______

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

Remarks: 2 - 2A3' PP 3000 Ω

$L = \frac{3.18 \times 10^{-8} \times (2000)^2 \times 1.129}{.004 + \frac{7.14}{1200}} = 14.4$ Hy

2 db dn $X_p = \frac{3000}{.77} = 3900$

freq 2 db dn $= \frac{3900}{2\pi\ 14.4} = 43.2$

High

$L_{sc} = \frac{.72 \times 6.34 \times (2400)^2}{1.438} \times$

$\left[.010 + .010 + \frac{.137 + .191 + ...}{3}\right]$

$L_{sc} = .032$

2 db dn $X_s = .77 \times 3000 = 2310$

freq 2 db dn $= \frac{2310}{2\pi \times .032} = 11{,}500$ ~

0-0
1-1
2-2
3-3
4-4
5-5
6-6
6
5
4
3
30 60 90

Audio Interstage
Single Plate TO
Single Grid
3:1 Ratio

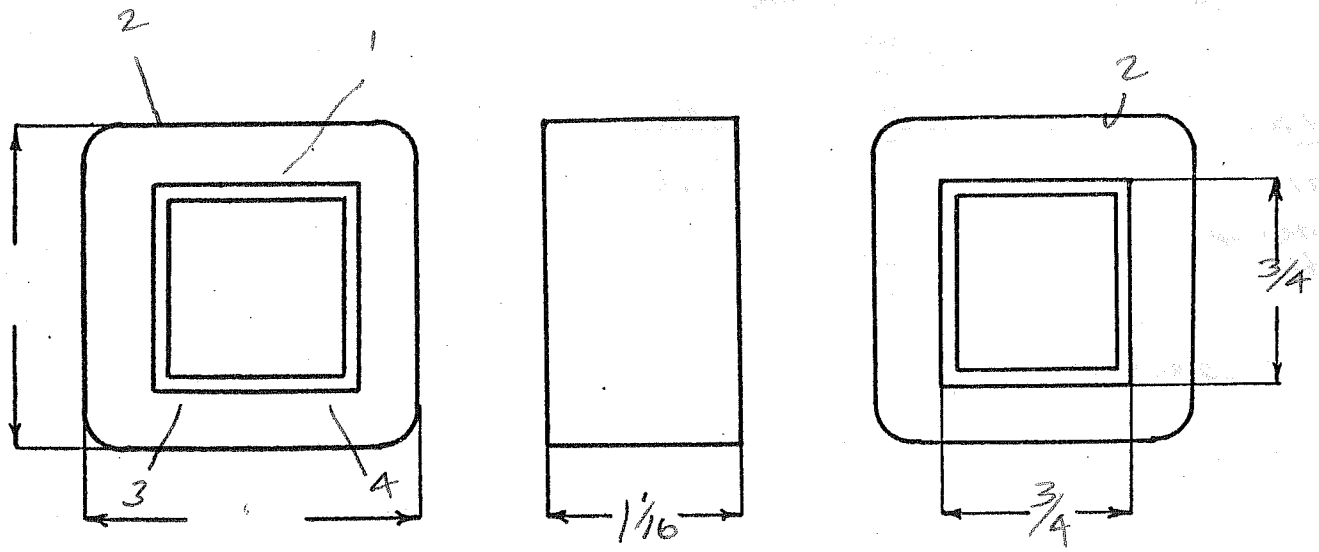
SPEC. NO. D-542-D

		1-2		3-4			
Winding		PRI		SEC			
Turns		3000		9000			
Taps		—		—			
Wind. Lgth.		7/8		7/8			
Wire Size		#39		#39			
T. P. L.		205-15L		205-44L			
Finish		89%		89%			
Type Lead		#22 Pr. Br.		#22 Pr. Br.			
Lead Lgth.		6"		6"			
Layer Insul.		14#		14#			
Test Volt.		1250		1250			
Wrapper		12005UC		12005GA			

TUBE 5L0076A + 12003UP | IMPREGNATION VARNISH

CORE 3/4 x 3/4 | GA. 29 | GRADE B | STACK 2 x 2

MOUNTING D - Leads



Redesigned
DESIGNED BY F. Frazee

DATE 5-5-47

DESIGN AND TEST DATA

g:

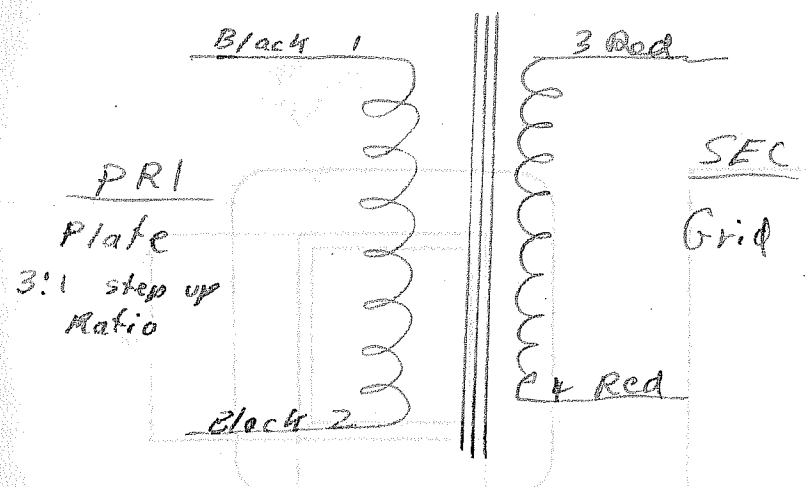
Winding		1-2 PRI		3-4 SEC.			
Mean Turn		3.54		4.56			
Resistance 25° c		750		2900			
Pounds Copper		.034		.133			
Copper Density		—		—			
Ratio Volts		38.4		115			
Test to Ground		1250		1250			

Iron Induction _____ @ _____ Cycles

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



Audio

Single Plate to
Push Pull Grids
Voltage Ratio 3/1

Old Stock

Manufacturer's List

DUPLICATE
5-11-42

SPEC. NO. D-543

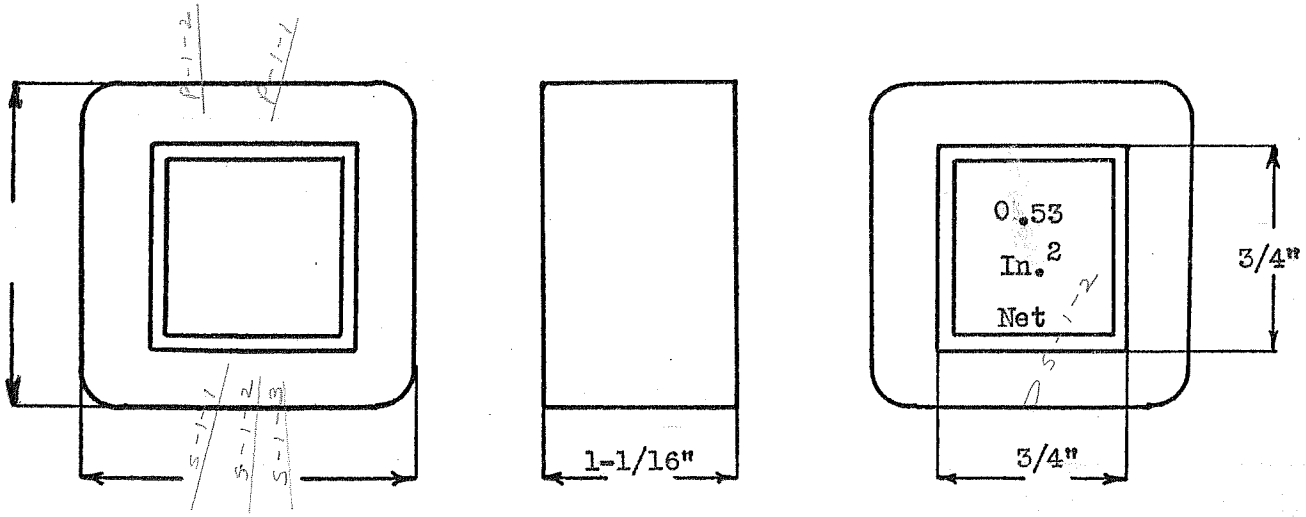
Winding		Primary		Secondary			
Turns		3090		9300			
Taps		-		4650			
Wind. Lgth.		27/32"		27/32" =	0.844"		
Wire Size		#40		#40			
T. P. L.		221 - 14L		221 - 42L			
~~Finish~~ Pitch		89%		89%			
Type Lead		Sil. Br.		Sil. Br.			
Lead Lgth.		3"	=	3"			
Layer Insul.		1L 14#G	=	1L 14#G			
Test Volt.		-		-			
Wrapper		1L .005" VC		1L .005" GA			

TUBE	5L - .007" GK ≠ 1L - .003" VP	IMPREGNATION	VARNISH

CORE $\frac{3}{4}$" x $\frac{3}{4}$" E & I GA. 29 GRADE B - Annealed STACK Butt - No Gap

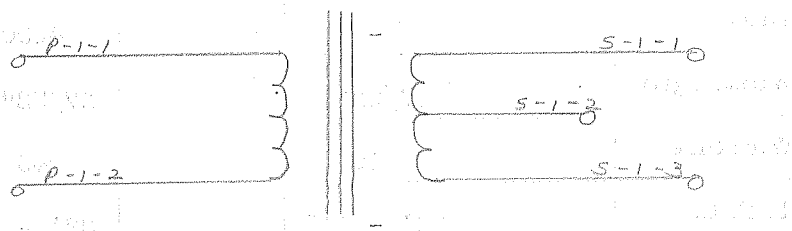
MOUNTING D-3 Panel with Lugs

Wire Net = 0.273" (0.230")
TPV = 30.9 @ 100V
Fe = 27.5 @ 50 Cycle



DESIGNED BY

DATE 5-11-42 (copied)



$T = 9300 - 3090$

$T_R = 3 - 1$

$Z_R = 9 - 1$

$Z = 90{,}000 - 10{,}000$

INTERSTAGE

STOCK

10,000 ohms single plate @ 8 Ma.
to
P-P Grids 90,000 ohms

SPEC. NO. D-544

Winding		1-2 Pri.		3-4-5 Sec.			
Turns		3000		9000	CONTINUOUS		WINDING
Taps		-----		4500			
Wind. Lgth.		7/8		7/8			
Wire Size		#39		#39			
T. P. L.	214	~~205~~ 1/4L	1/4L.	205-44L			
Finish		90%		90%			
Type Lead		Silver Braid		Silver Braid			
Lead Lgth.		6"		6"			
Layer Insul.		~~1 mil~~ #1/2		~~1 mil~~ #1/2			
Test Volt.		1500		1000			
Wrapper	1L005VC			2L005GA			

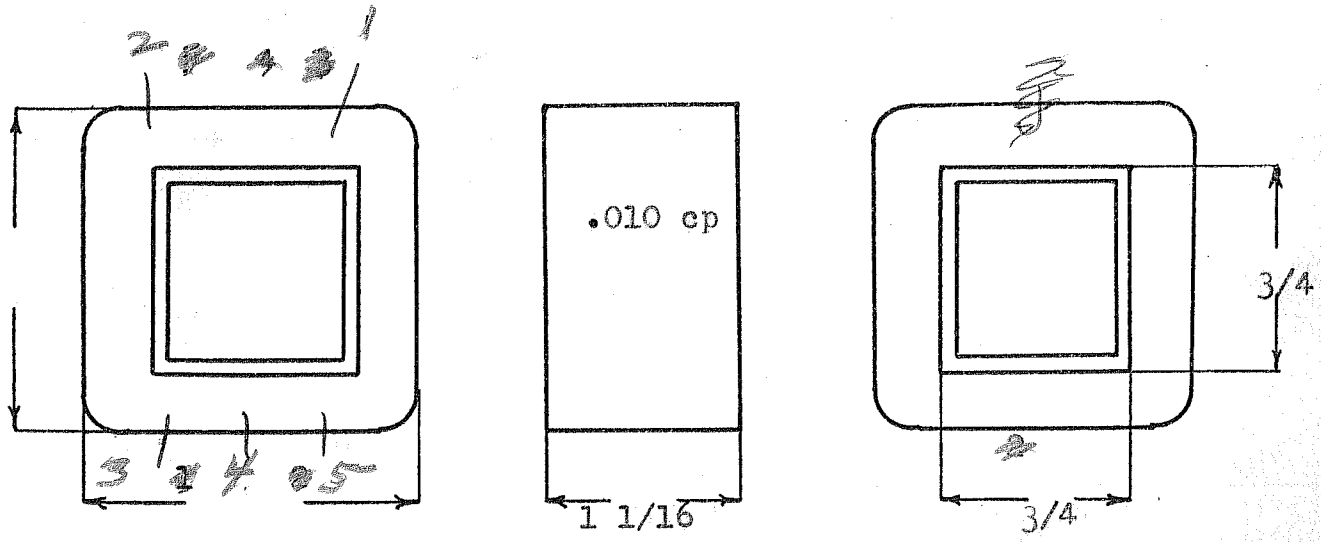
TUBE	5L007GK plus 1L003VC	IMPREGNATION	

CORE 3/4 x 3/4 GA. 29 GRADE B STACK Butt No Gap

MOUNTING D

T. P. V. —

Window — .1320/.375 = 85.4%



DESIGNED BY

DATE

DESIGN AND TEST DATA

Rating:

Winding		Pri.		Sec.			
Mean Turn		3.533		5.65			
Resistance 25° c		748.0		3600.0			
Pounds Copper		.034		.164			
Copper Density							
Ratio Volts		110		330			
Test to Ground		1500		1000			

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

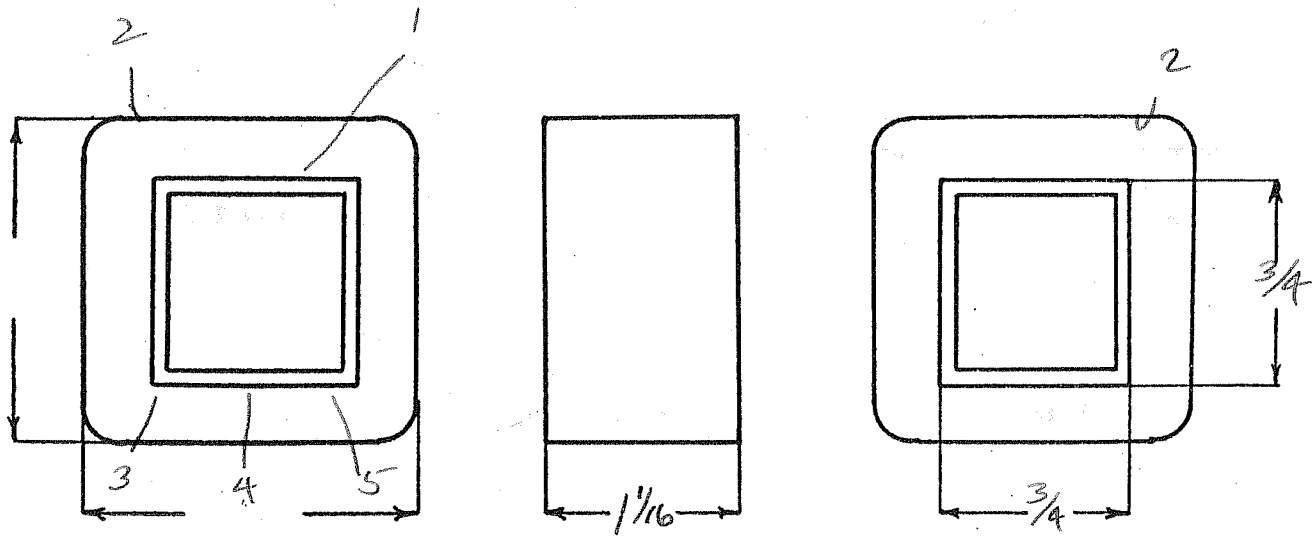
Audio Interstage
Single Plate TO
P-P Grids
3:1 overall Ratio

SPEC. NO. D-544-D

Winding		1-2 PRI		3-4-5 SEC			
Turns		3000		9000			
Taps		—		4500			
Wind. Lgth.		7/8		7/8			
Wire Size		#39		#39			
T. P. L.		205-15L		205-44L			
Finish		89%		89%			
Type Lead		#22 Pr. Br.		#22 Pr. Br.			
Lead Lgth.		6"		6"			
Layer Insul.		14#		14#			
Test Volt.		1250		1250			
Wrapper		1L005VC		2L005GA			

TUBE	5L0076A + 1L003VP	IMPREGNATION	VARNISH		
CORE	3/4 x 3/4	GA.	29	GRADE	B
STACK	2 X 2				

MOUNTING D-Leads



Redesigned
~~DESIGNED~~ BY F. Frazier

DATE 5-5-47

DESIGN AND TEST DATA

Rating:

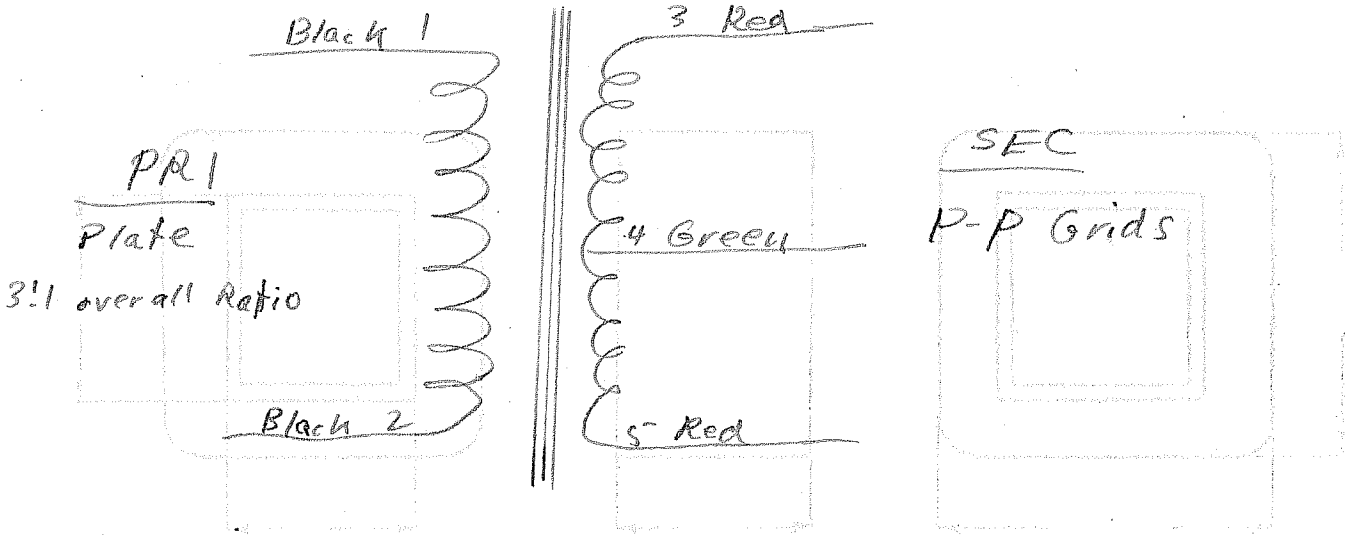
Winding		1-2 PRI		3-4-5 SEC			
Mean Turn		3.54		4.56			
Resistance 25° c		750		2900			
Pounds Copper		.034		.133			
Copper Density		—		—			
Ratio Volts		40.0		60-60			
Test to Ground		1250		1250			

Iron Induction _____ @ _____ Cycles

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:



10,000 ohm plate to single grid, ratio 3½ to 1

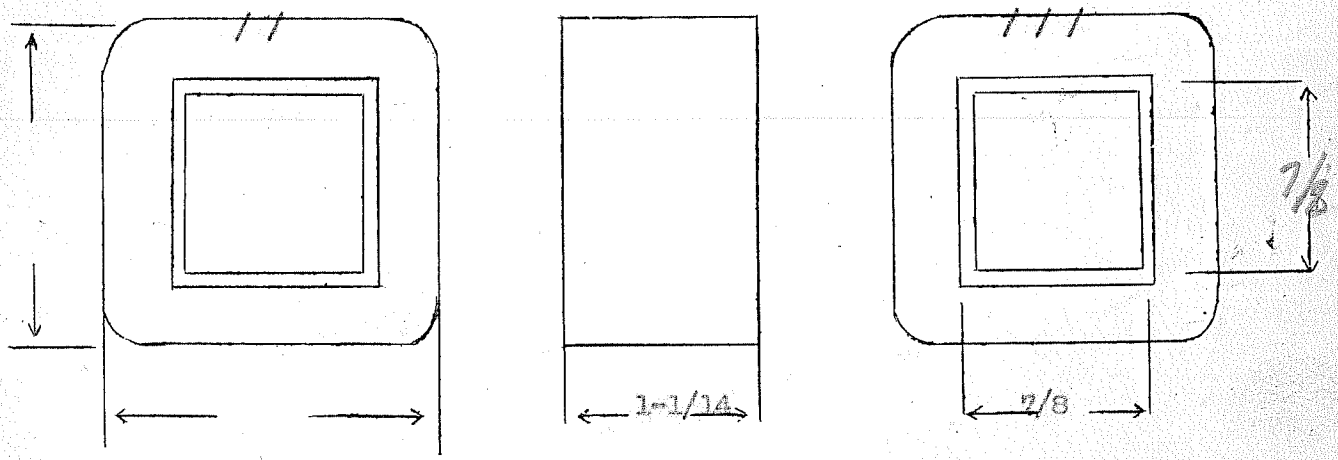
SPEC. NO. 8545

Winding	P	S					
Turns	4000	14000					
Taps							
Wind. Lgth.	1-1/16						
Wire Size	#39	#39					
T.P.L.	250-16	250-56					
Kind Term.	#20 Par Pr.						
Term. Lgth.	9"	9"					
Layer Insul.	14#	14#					
Test Volt.							
Wrapper	1L005VP	1L005SA					

TUBE 7L007 | IMPREGNATION WAX.

CORE 29 G-B- 2 x 2 | PRIMARY V.A.

MOUNTING A or F



DESIGNED BY G.W. DATE 6/1/38

10,000 ohm plate to push pull grids--split secondary.
Overall ratio 3½ to 1.

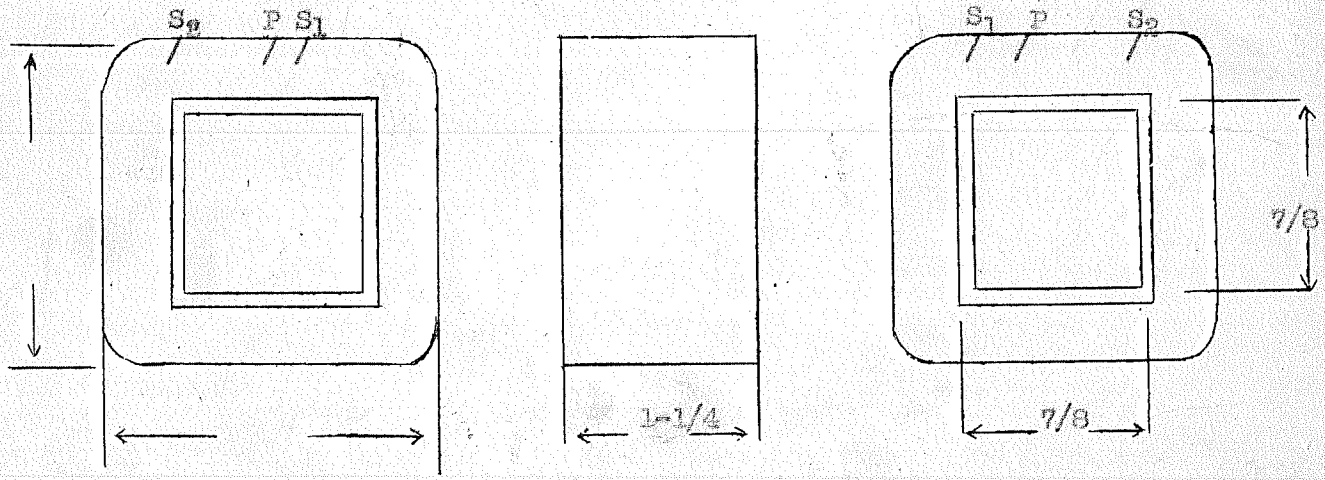
SPEC. NO. 8546

Winding	Start Red Finish Blue SEC.	Black PRI.	Start Blue Finish Red SEC.				
Turns	6300	3600	6300				
Taps	—	—	—				
Wind. Lgth.	1-1/16	1-1/16	1-1/16				
Wire Size	#30	#30	#30				
T.P.L.	253		253				
Kind Term.	#20 Par Braid or silver braid						
Term. Lgth.	9" or 3"						
Layer Insul.	16#	16#	16#				
Test Volt.							
Wrapper	1L007VC 4LCL.	1L007VC 4LCL.	2L0056a				

TUBE 2T007 - 1L005VC | IMPREGNATION WAX.

CORE 7/8 x 7/8 - 290a "B" Grade 2 x 2 | PRIMARY V.A.

MOUNTING A



DESIGNED BY G.W. DATE 6/7/37

10,000 ohm plate to push pull grids--split secondary.
Ratio 1 to 1

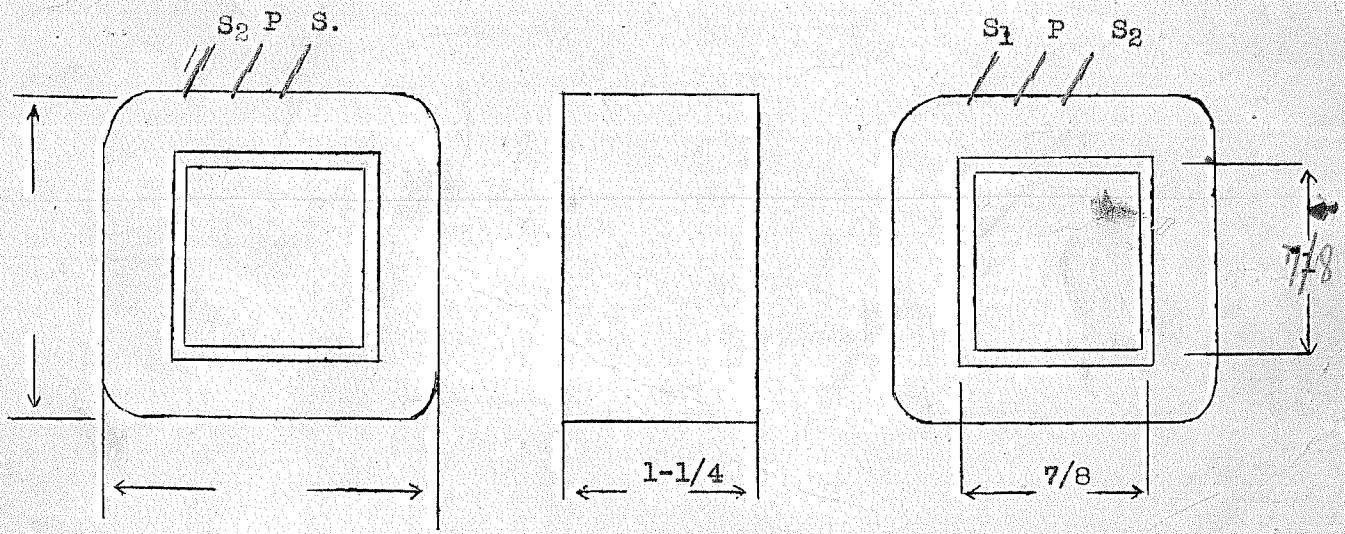
SPEC. NO. S547

Winding	SEC.	PRI.	SEC.				
Turns	5000	5000	5000				
Taps	—	—	—				
Wind. Lgth.	1-1/16						
Wire Size	#39	#39	#39				
T.P.L.	240-21	240-21	240-21				
Kind Term.	#20 Par Br	✓	✓				
Term. Lgth.	9"	9"	9"				
Layer Insul.	14#						
Test Volt.							
Wrapper	1L005VP 41GL	1L00SVP 4LGL	1LGL 2L005GA				

TUBE | 7L007 | IMPREGNATION | Wax

CORE | 7/8 x 1 - 29 Ga B - 2 x 2 | PRIMARY V.A.

MOUNTING A or F



DESIGNED BY G.W. DATE 3/18/38

INTERSTAGE

STOCK

Single Plate 10,000 ohms @ 8 Ma.
to
P-P Grids 62500 ohms
overall ratio 1:2.5

SPEC. NO. S-547-A

Winding	1-2 Sec #1		3-4 Pri		5-6 Sec #2		
Turns	6250		5000		6250		
Taps							
Wind. Lgth.	1 1/16		1 1/16		1 1/16		
Wire Size	#39		#39		#39		
T. P. L.	250-25L		250-20L		250-25L		
Finish	89%		89%		89%		
Type Lead	#22 Pr. Br.		#22 Pri. Br.		#22 Pr. Br.		
Lead Lgth.	9" Cut 13½		9" Cut 13½		9" Cut 13½		
Layer Insul.	14#		14#		14#		
Test Volt.	1000		1500		1000		
Wrapper	1L007VG		1L007VG		2L005GA		

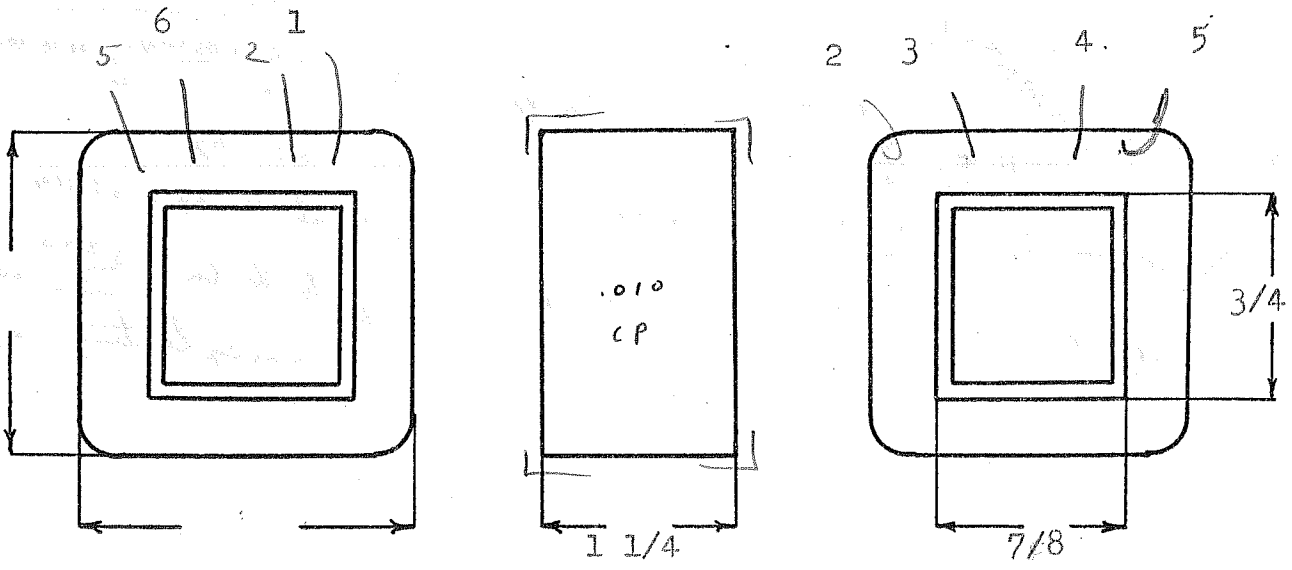
TUBE	6L007GK plus 1L003VG	IMPREGNATION	Varnish

CORE 7/8 x 3/4 GA. 29 GRADE B STACK Butt no gap
Armite keepers

MOUNTING A

T. P. V. —
window - .395/.4375 = 90.3%

E = .707 × .008 × 10.000 = 56.5 V max.



DESIGNED BY

DATE

DESIGN AND TEST DATA

Rating:

Winding	1-2 Sec. #1		3-4 Pri.		5-6 Sec #2		
Mean Turn	4.00		4.80		5.60		
Resistance 25° c	1768		1695		2475		
Pounds Copper	.081		.077		.113		
Copper Density							
Ratio Volts	137.5		110		137.5		
Test to Ground	1000		1500		1000		

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

R_L = 10,000 Ω @ 8 ma

$B_{ac} = \frac{34.8 \times 10^{-5} \times 36.5}{50 \times .617 \times 5000} = 1280$

$B_{DC} = \frac{.495 \times 5000 \times .008}{.004} = 4950$ H = .6

μ_D = 1,000 half of audio A

$L = \frac{3.18 \times 10^{-8} \times .617 \times (5000)^2}{.004 + \frac{5\%}{1,000}} = 5-3.0$ Hy

1½ db down $X_p = \frac{10000}{.64} = 15,600$

freq 1½ db down = $\frac{15600}{2\pi \times 53.0} = 47.0$ ~

Z = 62,500 - 10,000
Zr = 6.25 - 1
Tr = 2.5 - 1
T = 12,500 - 5,000

High End

$L = \frac{.72 \times 4.80 \times (5000)^2}{1.063} \sqrt{.007^2 + .007^2 + \frac{.113 + .090 + .113}{3}}$

L = .097 Hy

1½ db down $X_p = .6 \times 10,000 = 6400$

freq 1½ db down = $\frac{6400}{2\pi \times .097} = 10,500$ ~

neglecting capacitance

Push Pull 10,000 ohm plates to push pull grids.
1.5 to 1 overall ratio

Old Stock

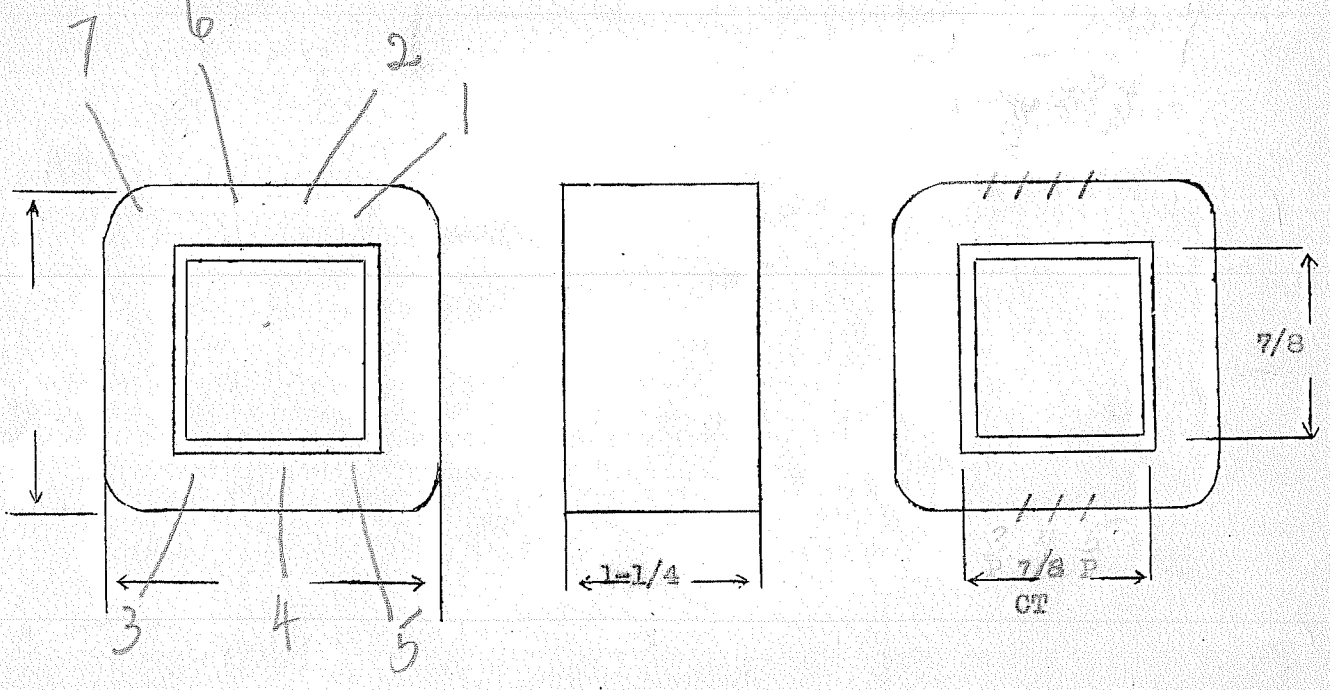
SPEC. NO. S548

	Red St. 1-2 Blue Fin. SEC.	3-4-5 PRI.	Blue St. 6-7 Red Fin SEC.				
Winding							
Turns	4500	6000	4500				
Taps		3000					
Wind. Lgth.	1-1/16	✓	✓				
Wire Size	#39	#39	#39				
T.P.L.	250-18	250-24	250-18				
Kind Term.	#30 Par Braid						
Term. Lgth.	9"	9"	9"				
Layer Insul.	16#	16#	16#				
Test Volt.							
Wrapper	4LGL 1L005VC	4LGL 1L005VC	2L005Ga				

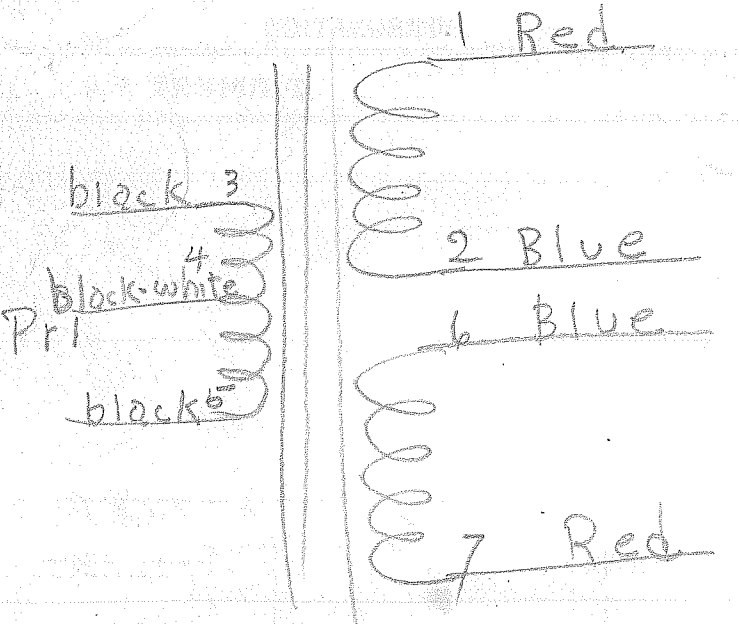
TUBE | 7L007 | IMPREGNATION | WAX.

CORE | 7/8 x 7/8 - 29 Ga P - 3 x 3 | PRIMARY V.A.

MOUNTING [redacted] D



DESIGNED BY G.W. DATE 4/13/37

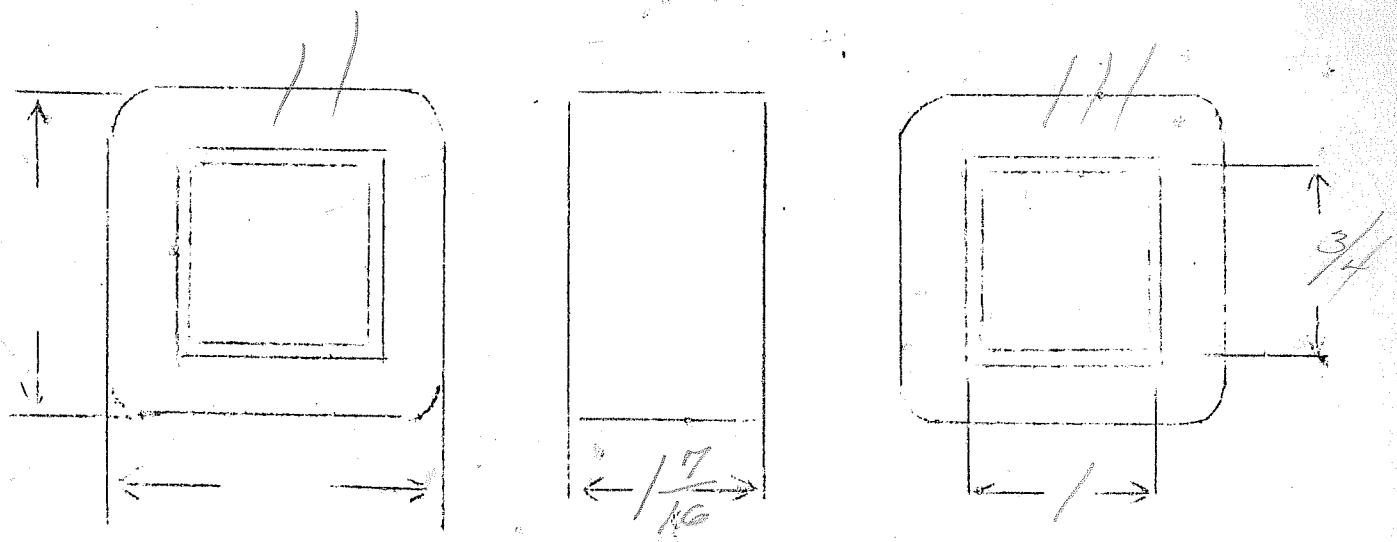

1 Red
black 3
2 Blue
4
black-white
Pri
6 Blue
black 5
7 Red

2000 or 1000 n to grid

SPEC. NO. 549

Winding	SEC	PRI					
Turns	12000	1690					
Taps	—	1200					
Wind. Lgth.	1.25	1.25					
Wire Size	#39	#32					
T.P.L.	280-14	130-14					
Kind Term.	#30 PBraid	#30 PBraid					
Term. Lgth.	9"	9"					
Layer Insul.	1/2 #	3 #					
Wrapper	2007VC	2007VC					

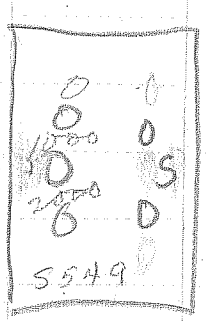
TUBE	2007	IMPREGNATION	WAX
CURE	1X3/4	29 Ga "B" GRADE	2X2

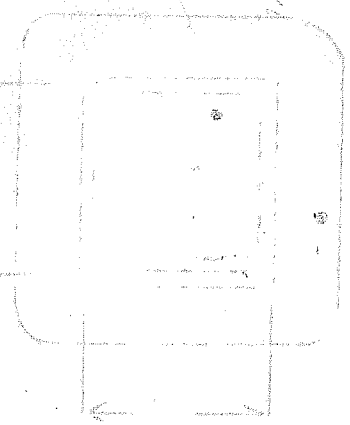


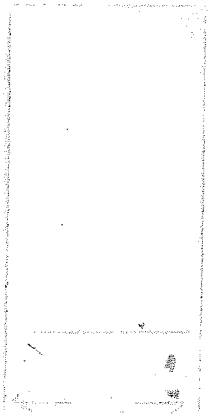
$\frac{100000}{2000} = 50$ $\frac{N_1}{N_2} = 5:1$

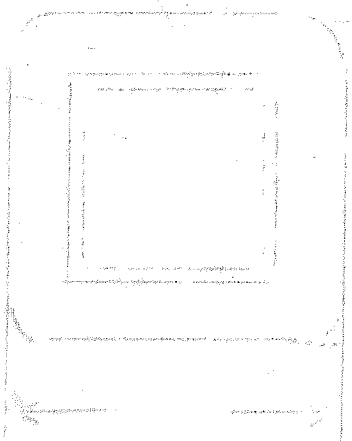
$\frac{100000}{1000} = 100$ $\frac{N_1}{N_2} = 10$

Primary Color Code		Secondary Color Code	
Start	White	Start	Red
Top	Black	C. T.	Blue
Finish	Yellow	Finish	Red









AUDIO OUTPUT TRANSFORMER

STOCK

7000 - 4 Ohm
4 Watts

SPEC. NO. D-550-D

Winding		Primary		Secondary			
Turns		2500		60			
Taps		-		-			
Wind. Lgth.		3/4"		3/4"			
Wire Size		#37		#21			
T. P. L.		139 - 18L		20 - 3L			
~~Finish~~ Pitch							
Type Lead		#22 Pr. Br.		#22 Pr. Br.			
Lead Lgth.		7"		7"			
Layer Insul.		1L 20#G		1L 50#G			
Test Volt.		1500		-			
Wrapper		1L .007" VC		2L .005" GA			

TUBE	4L - .007" GK	IMPREGNATION	VARNISH

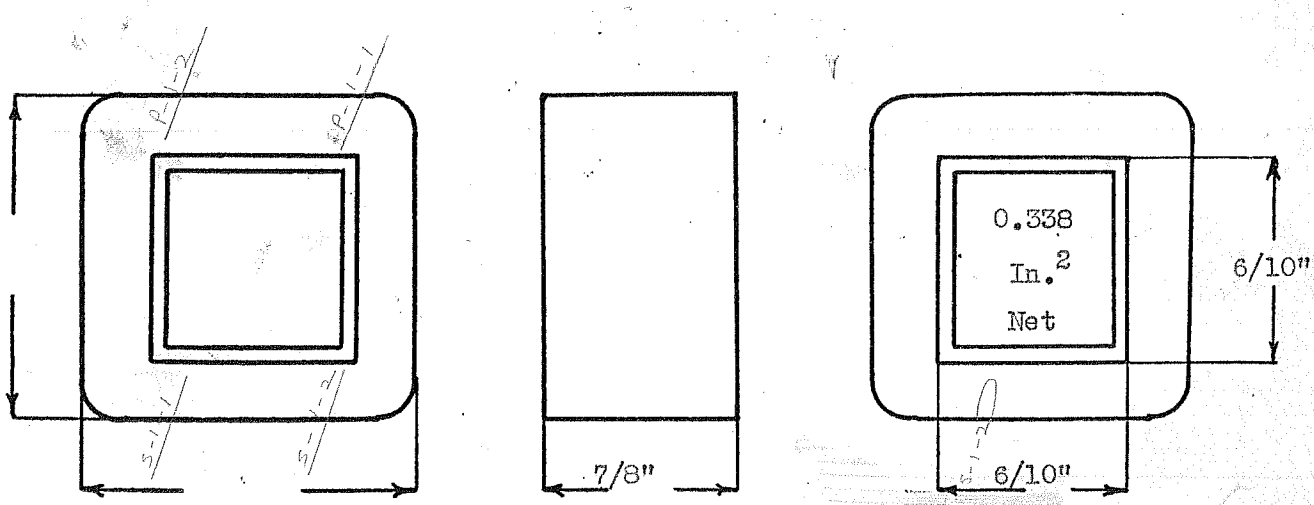
CORE 6/10 x 6/10 E & I GA. 29 GRADE D - Annealed STACK Butt - .005 Gap

MOUNTING "D" - Leads Only

NOTE: All multiple-wound.

Wire Net = 0.207" (0.200")
Cu = 496 @ 40 Ma.
TPV = 15
Fe = 89 @ 50 Cycle

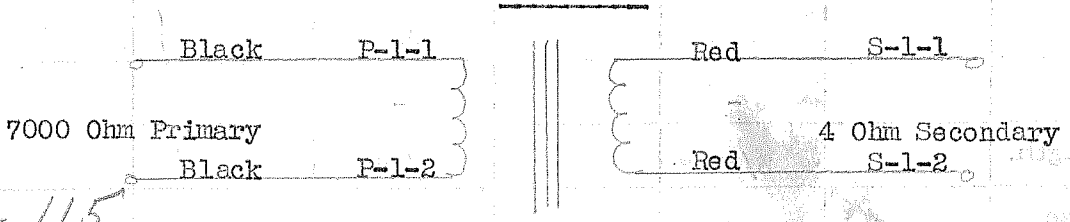
NOTE: Stamp coils before impregnating.



Re-DESIGNED BY HWS

DATE 7-29-41

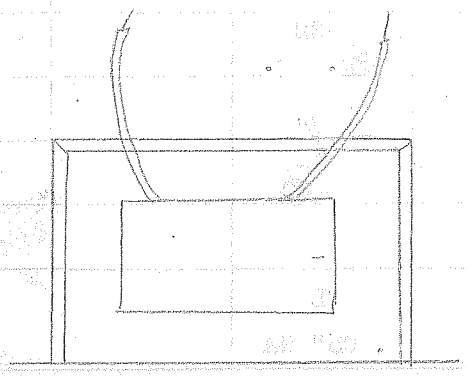
D-550-D

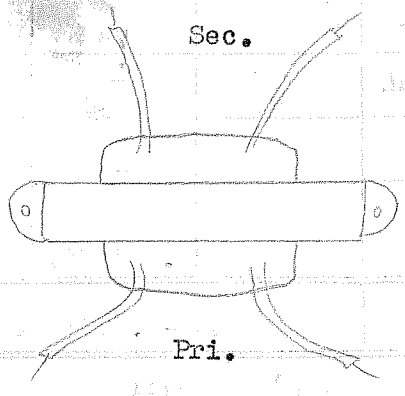


Prim V = 115

Sec V = 2.5

Sec. I = 70 ma





$Z = 7000 - 4$

$Z_R = 1750 - 1$

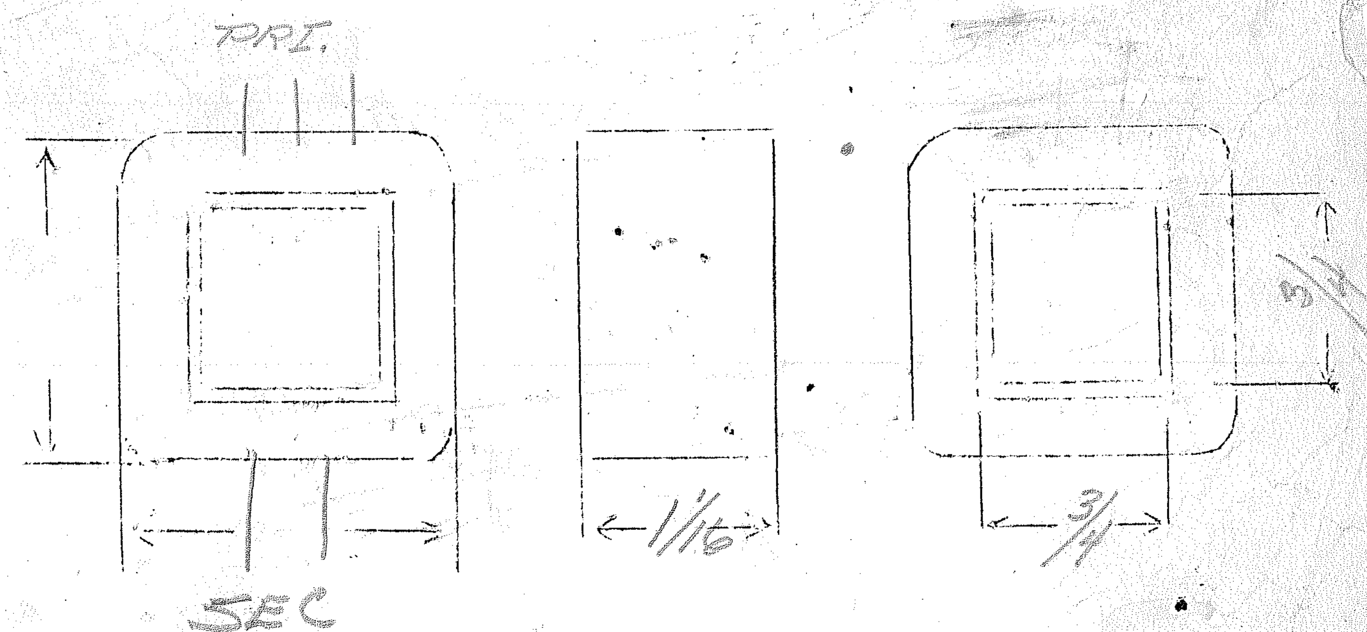
$T_R = 41.7 - 1$

$T = 2500 - 60$

4.8n VC SPEC. NO. 0537

Winding	PRI	SEC.					
Turns	4000	72					
Taps	2000	NONE					
Wind. Lgth.	7/8	7/8					
Wire Size	36 E	22 E					
T.P.L.	145	21					
Kind Term.	S.L. BL	WIRE ONLY					
Term. Lgth.	3"	3"					
Layer Insul.	20 & 61	.005					
Wrapper	2L00569	2L00569					

TUBE	SL007	IMPREGNATION	WAX
CURE	3/4 X 3/4 HEM 2X2 - 2990		

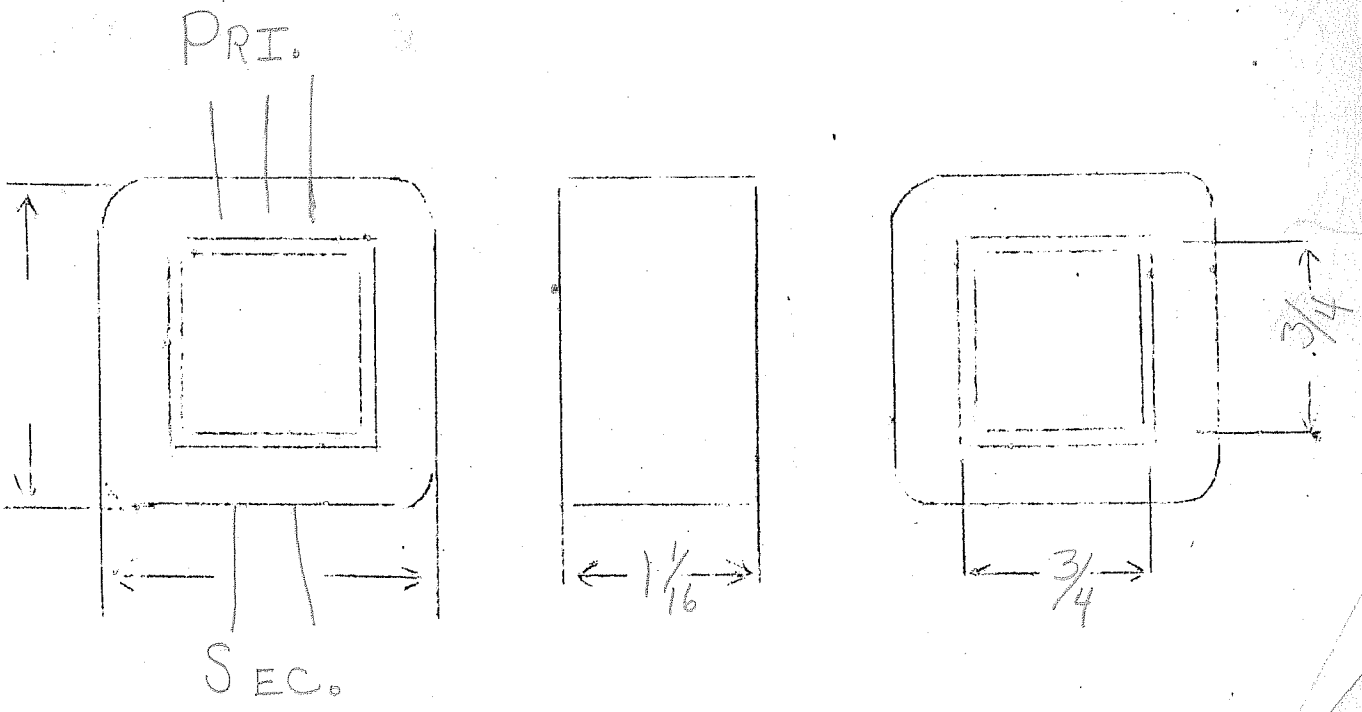


9 Ω VOICE COIL SPEC. NO. 552

Winding	PRI	SEC.					
Turns	3000	64					
Taps	1500	NONE					
Wind. Lgth.	7/8	7/8					
Wire Size	35E	21E					
T.P.L.	125	22					
Kind Term.	Sil. Br.	WIRE ONLY					
Term. Lgth.	3"	3"					
Layer Insul.	16 lb. GL	005 GA					
Wrapper	2L005GA	2L005GA					

TUBE | 4L007 | IMPREGNATION | WAX

CURE | 3/4 x 3/4 NW 2XC



Universal Output

STOCK

2 Watts

SPEC. NO. D-553-D

Winding	Primary		Secondary				
Turns	2400		60 - 3	= EXACT			
Taps	-		21 - 42 - 2	- EXACT			
Wind. Lgth.	9/16"		9/16"	= 0.5625"			
Wire Size	#38		#23				
T. P. L.	115 - 21L		21 - 3L		NOTE:	MULTIPLE-WINDERS ALLOW ONE TURN AT FIRST LAYER AND SECOND LAYER FOR FIRST AND SECOND TAPS.	
~~Finish~~ PITCH	90%		89%				
Type Lead	#22 Pr. Br.		W. O. to Lugs				
Lead Lgth.	9"		9"				
Layer Insul.	1L 20#G		1L 50#G				
Test Volt.	1500V		-				
Wrapper	1L .007" VC		2L .005" GA				

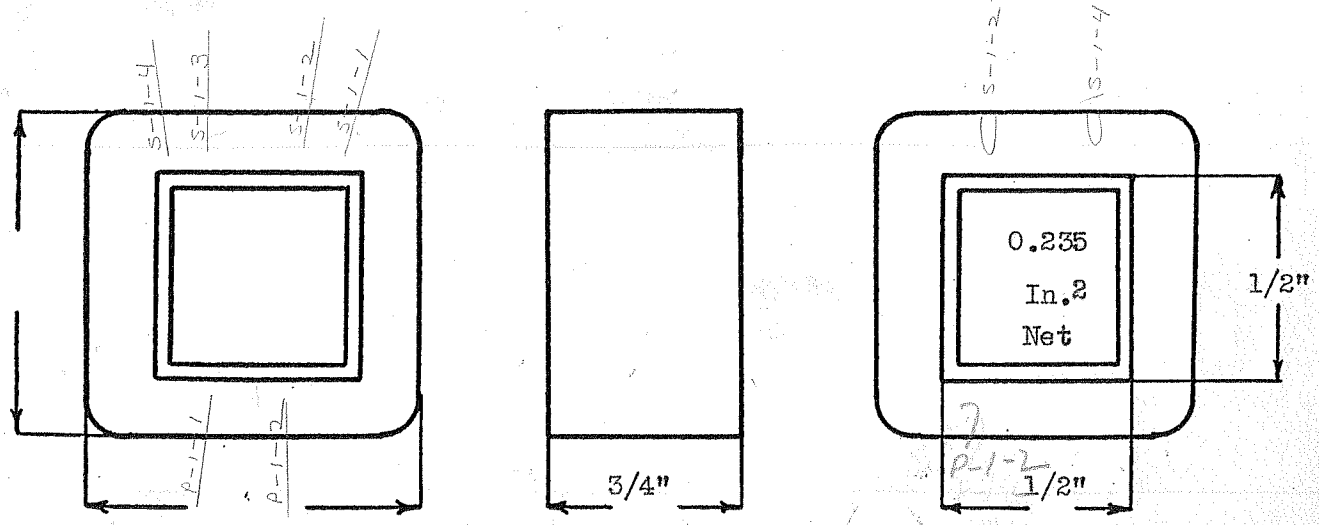
TUBE	4L - .007" GK	IMPREGNATION	VARNISH

CORE 1/2" x 1/2" E & I GA. 29 GRADE D - Annealed STACK Butt - No Gap

MOUNTING "D" - Primary - Leads
Secondary - ~~Lugs~~ Leads.

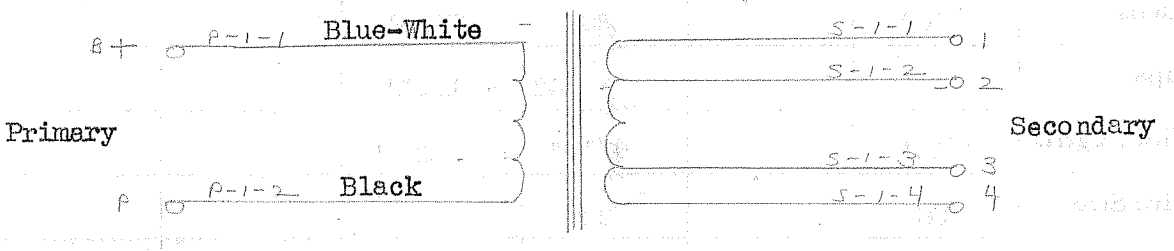
NOTE: ALL MULTIPLE-WOUND

Cu = 410 (38 Ma. DC) - 727 (0.7 Amp.)
Fe = 104 M Max. @ 50 Cycle
TPV = 18.4
WN = 0.196" (0.192")



RE DESIGNED BY H. W. S. DATE 8-6-41

#D-553-D



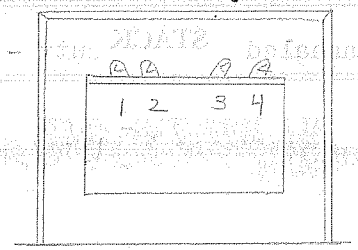
T = 2400 - 60 - 42 - 21

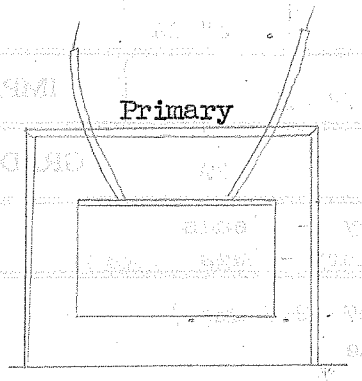
T_R = 114 - 2.85 - 2 - 1

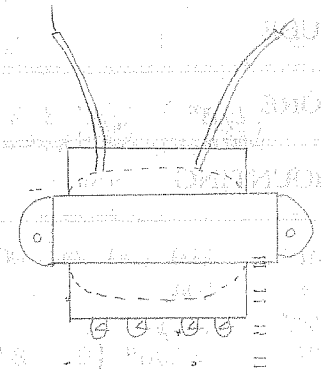
Z_R = 13,000 - 8.15 - 4 - 1

Z = 7,000 - 4.4 - 2.15 - 0.54

Z = 6.3 - 3.1 - 0.77







Universal Output

5 ~~4~~ Watt

SPEC. NO. D-554

Winding	Primary		Secondary				
Turns	2640		69				
Taps	1320		69 - 45 - 32 Exact!				
Wind. Lgth.	23/32"		23/32" =	0.718"			
Wire Size	#38		#33				
T. P. L.	147 - 181		23 - 4L				
~~Finish~~ Pitch	90%		76%				
Type Lead	#22 Dulac		W. O.				
Lead Lgth.	9"		5"				
Layer Insul.	1L 16/0		1L .005" GA				
Test Volt.	1250V		-				
Wrapper	1L .005" VO		2L .005" GA				

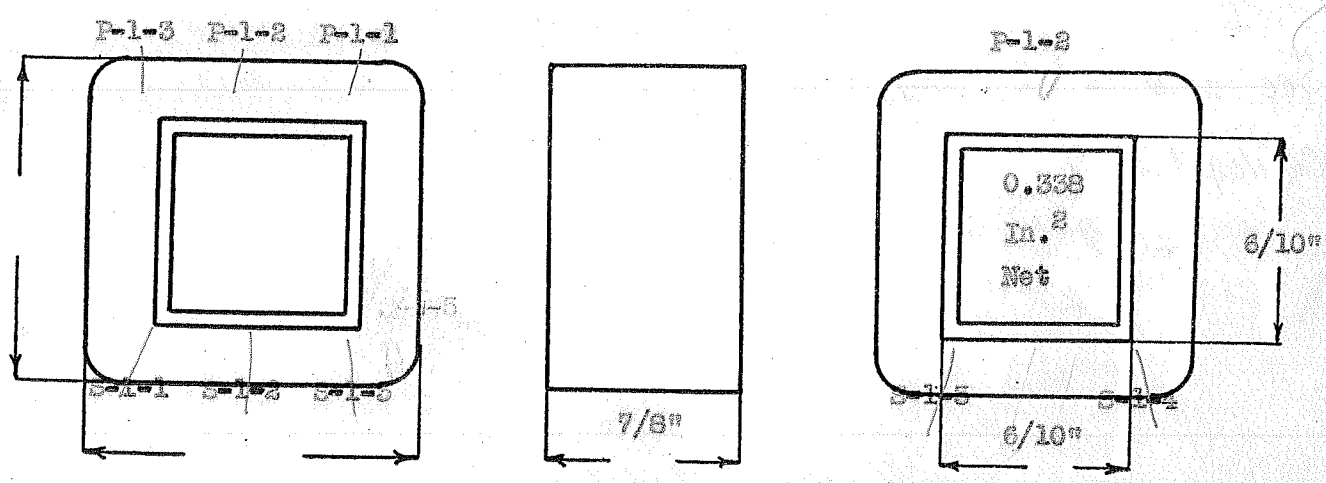
TUBE	4L - .007" GK	IMPREGNATION	VARNISH

CORE 6/10" x 6/10" E & I GA. 29 GRADE "B" STACK Butt - No Gap

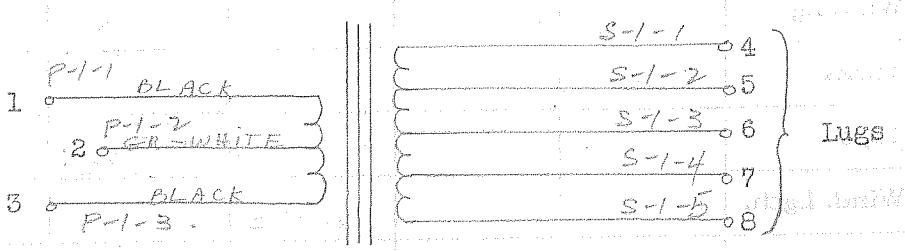
MOUNTING "D" - Leads on Primary, ~~Lugs~~ Leads on Secondary. NOTE: Multi-Wind Primary Single-Wind Secondary

Cu = 410 (38 Ma. DC) - 500 @ 1 Amp.
Fe = 25.2 @ 50 Cycle
TPV = 50.6
Wire Net = 0.212" (0.204")

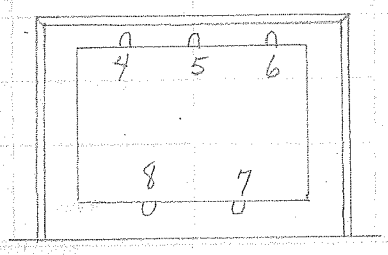
$\sqrt{7000 \times 4} = 52V$

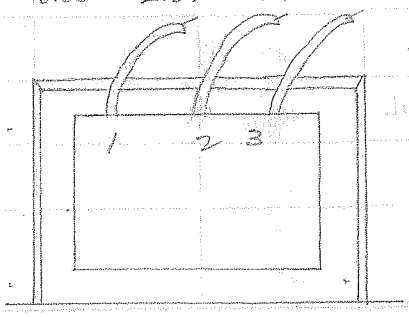


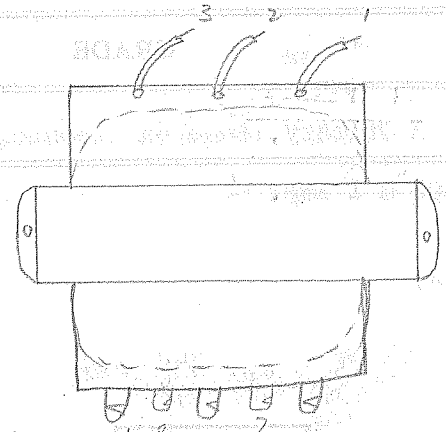
Re- DESIGNED BY H.W.S. DATE 12 - 23 - 41



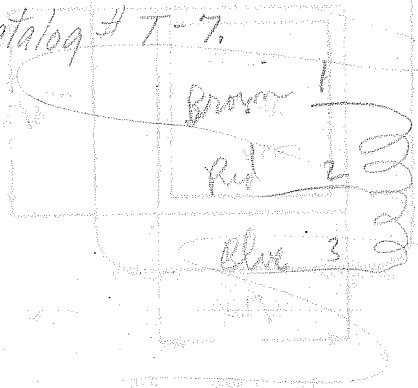
		1-3	4-8	4-9	4-6	4-5
Z	=	7000	- 7.6	- 4.5	- 1.97	- 0.984
		2000	- 2.25	1.33	.582	.291
Z_R	=	6880	- 7.74	- 4.58	- 2.00	- 1
T_R	=	83	- 2.78	- 2.14	- 1.414	- 1
T	=	2640	- 89	- 69	- 45	- 32
Z	=	10,000	- 11.07	- 6.55	- 2.87	- 1.453







See chart #2, page 6,
catalog # T-7.

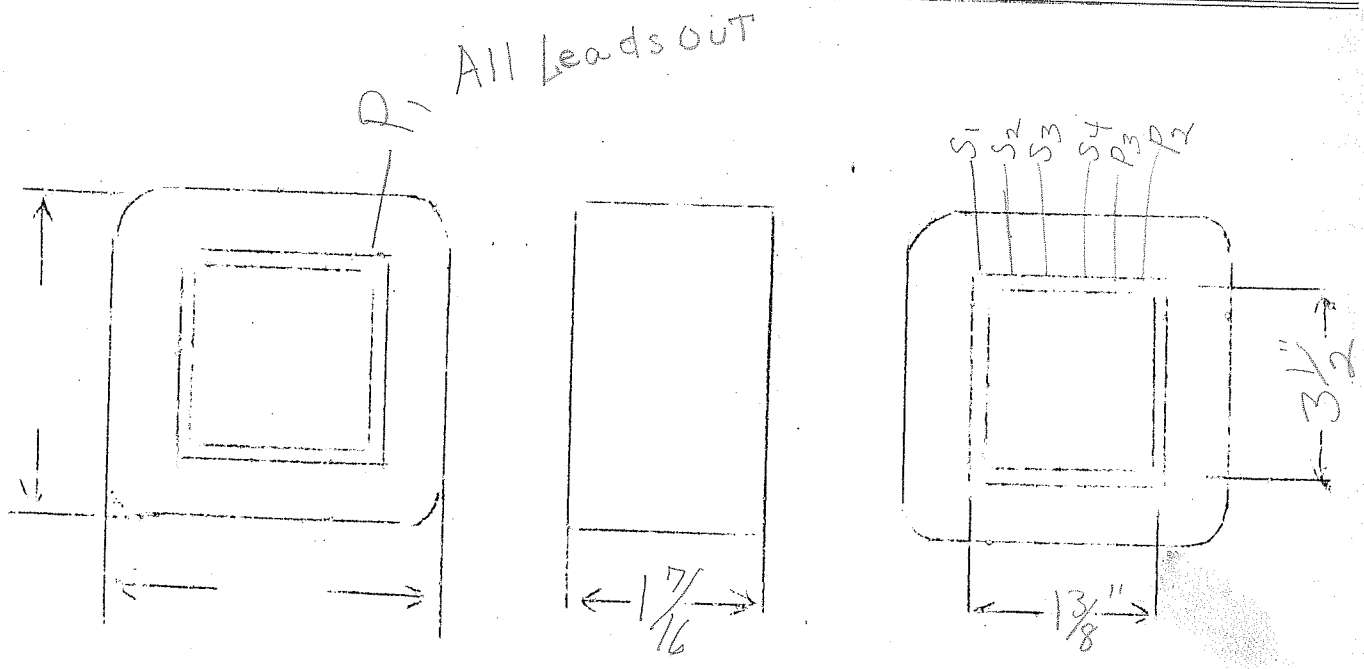


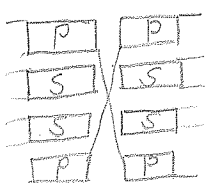
SPEC. NO. 555

Winding	PRI	SEC.					
Turns	1250	1000					
Taps	—	—					
Wind. Lgth.	1⅛	1⅛					
Wire Size	#29E	#29E					
T.P.L.	86	86					
Kind Term.	#20 P.T.B.	#20 P.T.B.					
Term. Lgth.	10"	10"					
Layer Insul.	50#	50#					
Wrapper	5L 50#GL. 2L 005 V.G.	5L 50#GL. 2L 005 V.G.	-OUTSIDE-	2L 005 GA			

TUBE | 2L 007 | IMPREGNATION | VARNISH

CURE | 1⅜ X 3½ (1¼ X 3) WINDOW





PRI.—4 COILS 1250 Each.
SEC.—4 COILS 1000 Each.

Universal Output

PP or Single to
Variable Voice Coil
8 Watt Rating

SPEC. NO. D-556

Winding		Primary		Secondary			
Turns		3300		119			
Taps		1650		41 - 62 - 95		Two turns for taps.	
Wind. Lgth.		13/16"		13/16"	= 0.8125"	EXACT.	
Wire Size		#37		#23			
T. P. L.		150 - 22L		32 - 5L			
~~Finish~~ Pitch		90%		93%			
Type Lead		#22 Pr. Rr.		W. O.			
Lead Lgth.		9"		3"			
Layer Insul.		1L 20#G		1L 50#G			
Test Volt.		1250		-			
Wrapper		1L - .005 VC 2L - ~~#50~~ G		2L .005" GA			

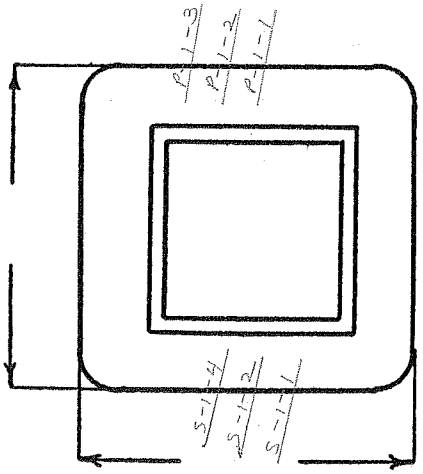
TUBE	4L - .007" GK	IMPREGNATION	VARNISH

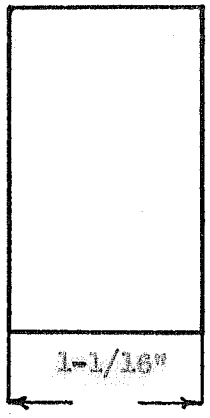
CORE 3/4" x 3/4" E & I GA. 29 GRADE D - Annealed STACK Butt - No Gap

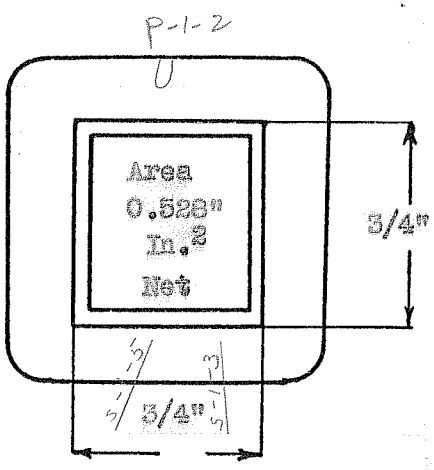
MOUNTING "D" Leads on Primary
Lugs on Secondary

NOTE: ALL MULTIPLE WOUND

Cu = 495 (40 Mn. D. C.) - 500 @ 1 Amp.
Fe = 96.7 @ 50 Cycle
TPV = 8.8 (375V)
Wire Net = 0.280" (0.261")



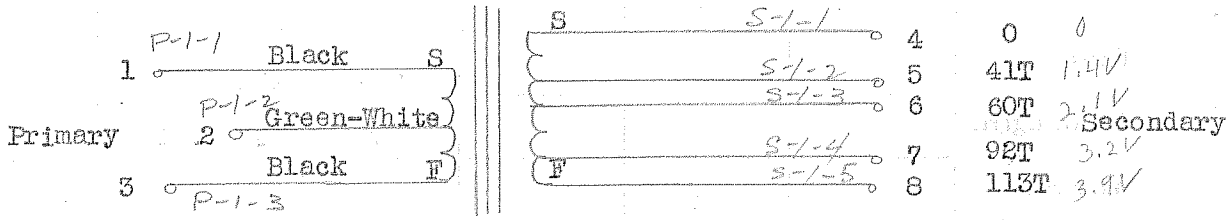




Re

DESIGNED BY NWS DATE 7-30-41

38



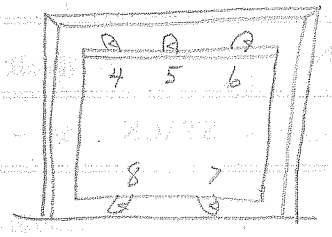
T = 3300 - 113 - 92 - 60 - 41

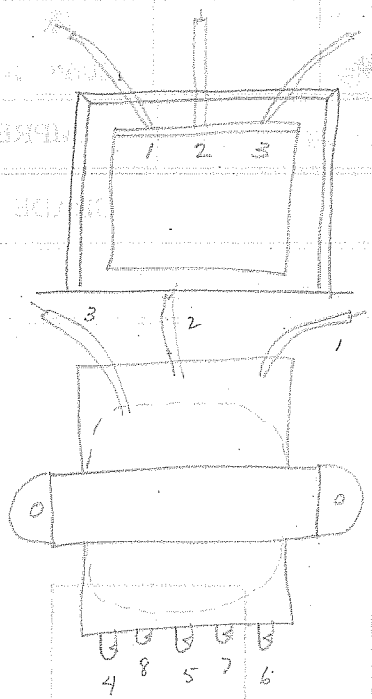
T_R = 80.5 - 2.76 - 2.24 - 1.46 - 1

Z_R = 6480 - 7.62 - 5.02 - 2.13 - 1

Z = 14,000 - 16.7 - 10.8 - 4.6 - 2.16

43 - 65 - 97 - 121T (Total)





See chart #2, page 6, catalog T-7

UNIVERSAL OUTPUT

STOCK

P-P or single plate to variable voice coil
10 ~~8~~ watts

SPEC. NO. ~~D-556-D~~

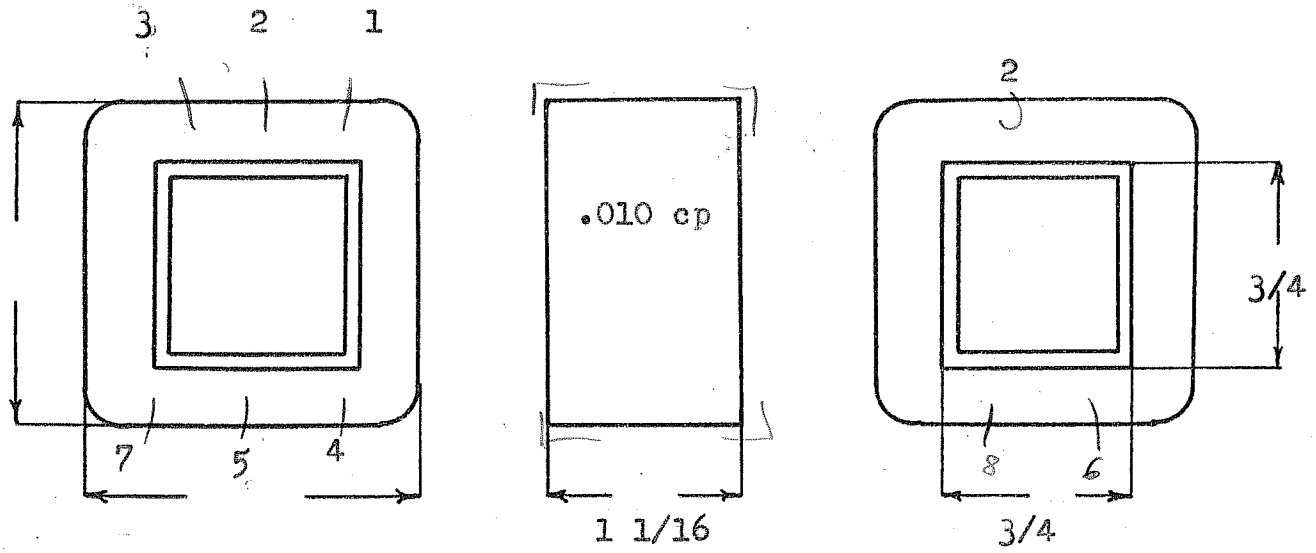
Winding		1-2-3 Pri.		4-5-6-7-8 Sec.			
Turns		3300		113			
Taps		1650		41-60-92			
Wind. Lgth.		13/16		13/16			
Wire Size		#37		#23			
T. P. L.		150-22L		32-5L			
Finish		90½%		93%			
Type Lead		#22 Parafin Braid		W.O. to Lugs			
Lead Lgth.		9"		3"			
Layer Insul.		20#		50#			
Test Volt.		1250		1000			
Wrapper		1L005VC 2L 50#		2L005GA			

TUBE	5L007GK plus 1L003VC	IMPREGNATION	Varnish

CORE 3/4 x 3/4 GA. 29 GRADE B STACK Butt no gap

MOUNTING D - ~~Lugs~~ & leads

T. P. V. —
window — .332/.375 = 88.5%



DESIGNED BY Rewritten F.F.

DATE

DESIGN AND TEST DATA

Rating:

Winding		1-2-3 Pri.		4-5-6-7-8 Sec.			
Mean Turn		3.77		4.81			
Resistance 25° c		554		.99			
Pounds Copper		.064		.056			
Copper Density							
Ratio Volts		115-115		2.86-4.19 6.42-7.88			
Test to Ground		1250		1000			

Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

UNIVERSAL OUTPUT

STOCK

P-P or single plate to variable voice coil
8 watts

SPEC. NO. D-556-D

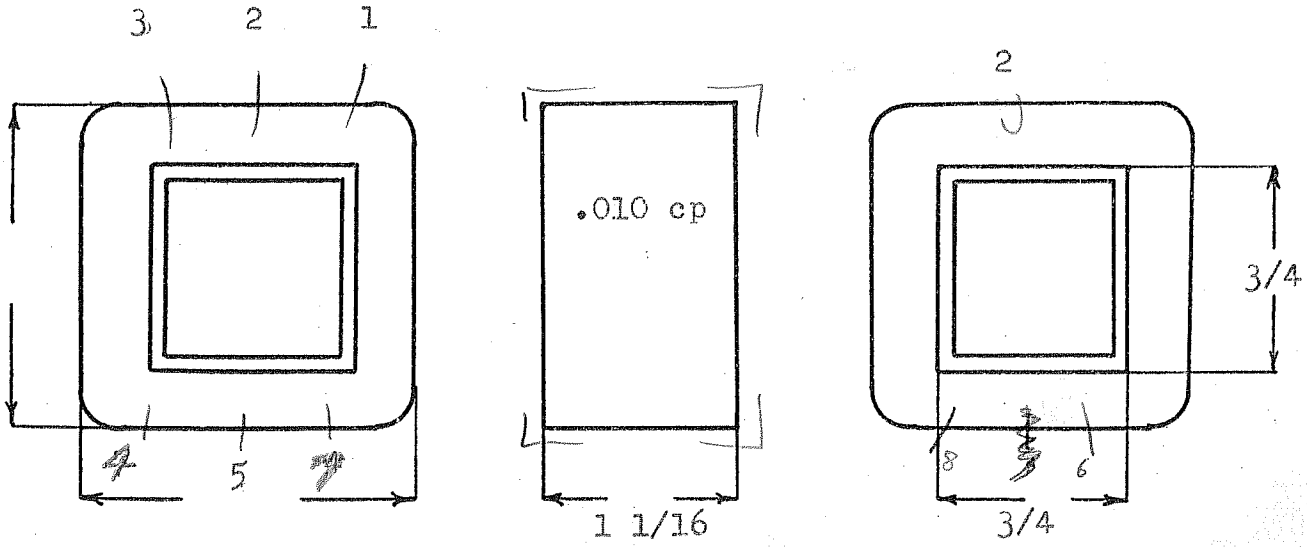
Winding		1-2-3 Pri.		4-5-6-7-8 Sec.			
Turns		3300		113			
Taps		1650		41-60-92			
Wind. Lgth.		13/16		13/16			
Wire Size		#37		#23			
T. P. L.		150-22L		32-5L			
Finish		90½%		93%			
Type Lead		#22 Parafin Braid		W.O. to Lugs			
Lead Lgth.		9"		3"			
Layer Insul.		20#		50#			
Test Volt.		1250		1000			
Wrapper		1L005VC 2L 50#		2L005GA			

TUBE	5L007GK plus 1L003VC	IMPREGNATION	Varnish

CORE 3/4 x 3/4 GA. 29 GRADE B STACK Butt no gap

MOUNTING D - ~~Lugs~~ & leads

T.P.V. —
window - .333/.375 = 88.5%



DESIGNED BY Rewritten F.F.

DATE

DESIGN AND TEST DATA

Rating:

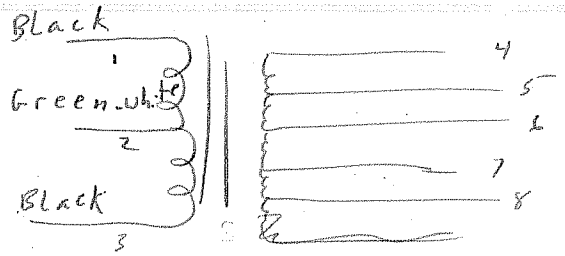
Winding		1-2-3 Pri.		4-5-6-7-8 Sec.			
Mean Turn		3.77		4.81			
Resistance 25° c		554		.99			
Pounds Copper		.064		.056			
Copper Density							
Ratio Volts		115-115		2.86-4.19 6.42-7.88			
Test to Ground		1250		1000			

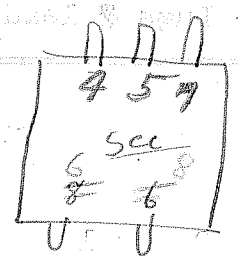
Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:





Universal Audio Output

15 Watts

SPEC. NO. D-557

Winding		Primary		Secondary			
Turns		4000		135			
Taps	CT - 2000		113 - 79 - 43				
Wind. Lgth.		1-1/32"		1-1/32" ± 1.03"			
Wire Size		#35		#32			
T. P. L.		154 - 26L		34 - 4L		NOTE: SINGLE WIND	
Finish Pitch		91%		88%		SECONDARY - EXACT	
Type Lead		#32 Pr. Br.		W.D. SLEEVE		TURNS; SAME DIRECTION	
Lead Lgth.		9"		9"		OF WINDING AS PRIMARY	
Layer Insul.		1L 20#G		1L .005" GA			
Test Volt.		1500 ✓		1500 ✓			
Wrapper		1L .007" VC		2L .005" GA			

TUBE	6L - .007" GK	IMPREGNATION	VARNISH

CORE 7/8" x 7/8" E & I GA. 29 GRADE B STACK Butt - No Gap

MOUNTING D-4, Leads on Primary, Leads on Secondary

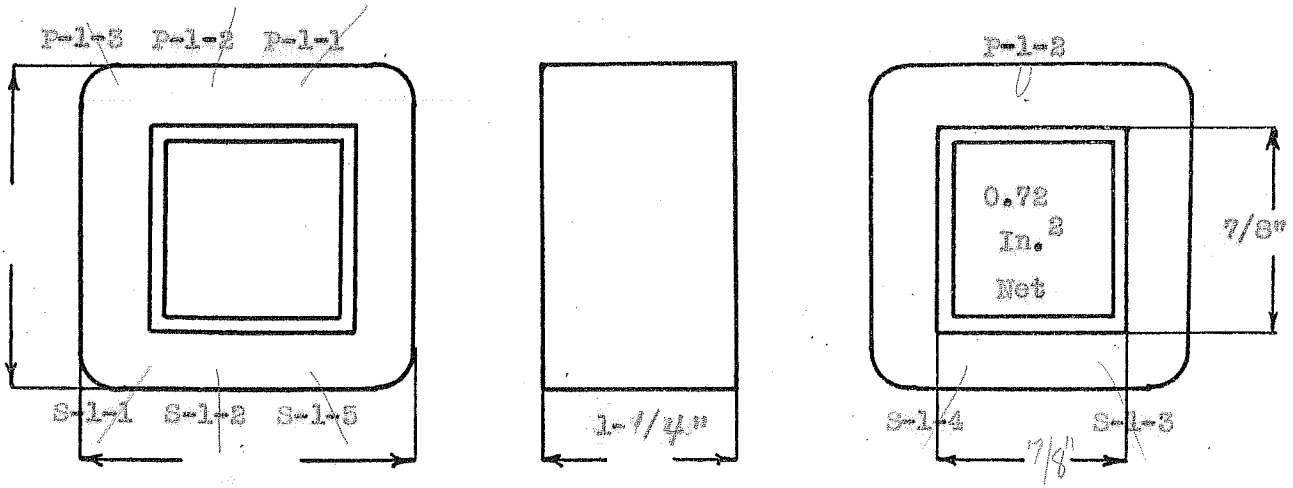
Cu = 787 (40 Ma. DC) - 642 @ 1 Amp.

Fe = 71.4 @ 50 Cycle

TPV = 8.75 (457V)

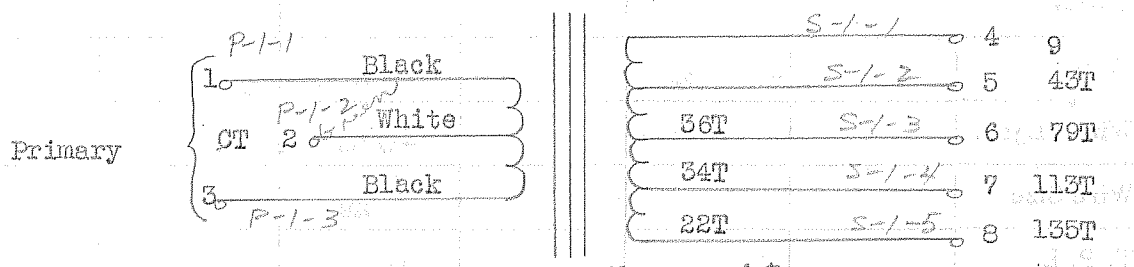
Wire Net = 0.317" (0.305")

$\sqrt{15 \times 14{,}000} = 457V$

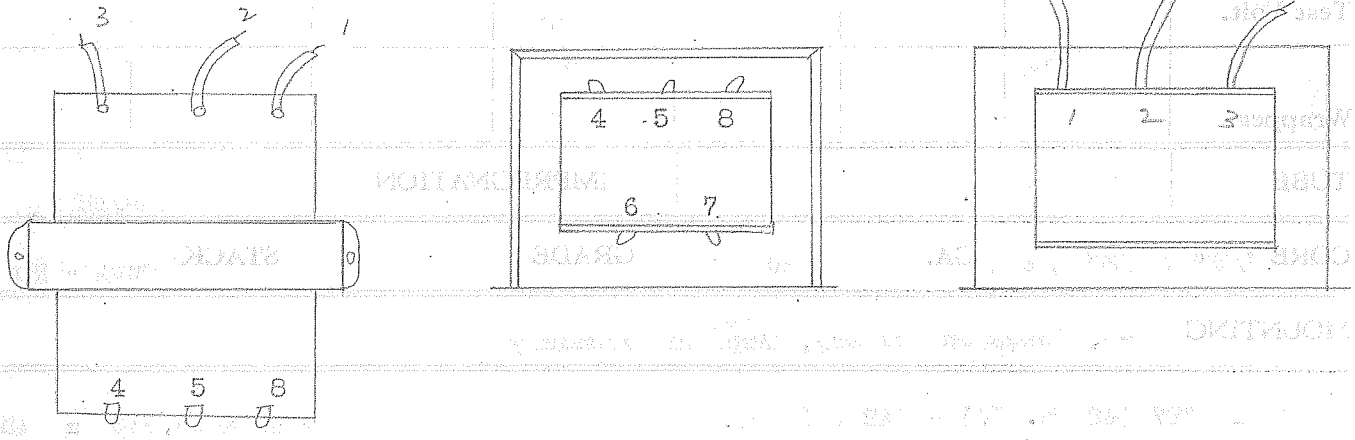


DESIGNED BY H. W. S.

DATE 1 - 16 - 42



		4-8	4-7	5-8	4-6	5-7	4-5	6-8	7-8
T	=	4000	135	113	92	79	70	43	34	22
T_R	=	182	6.14	5.14	4.18	3.59	3.18	1.95	1.55	1
Z_R	=	33,100	37.7	26.4	17.5	14.3	10.1	3.8	2.4	1
Z	=	10,000	11.4	7.98	5.3	4.32	3.05	1.15	0.725	0.302
	=	2,000	2.28	1.60	1.06	0.865	0.611	0.23	0.141	0.0605



See chart #2, page 6, catalog T-7.

Audio Output (Low Level)

10,000 Ohm Plate to 500, 200, &125 Ohm

SPEC. NO. S-537

Winding	Pri. #1		Sec.		Pri. #2		
Turns	1900		650 - 12		1900		
Taps	-		539 - 435		-		
Wind. Lgth.	1-1/16"		1-1/16"		1-1/16" =	1.06"	
Wire Size	#38		#29		#38		
T. P. L.	212 - 9L		78 - 12L		212 - 9L		
~~Finish~~ Pitch	90%		89%		90%		
Type Lead	#22 Pr. Br.		#22 Pr. Br.		#22 Pr. Br.		
Lead Lgth.	9"		9"		9"		
Layer Insul.	1L 16#G		1L 30#G		1L 16#G		
Test Volt.	1250						
Wrapper	1L .005" VC		1L .005" VC		2L .005" GA		

TUBE	5L - .007" GK	IMPREGNATION	VARNISH

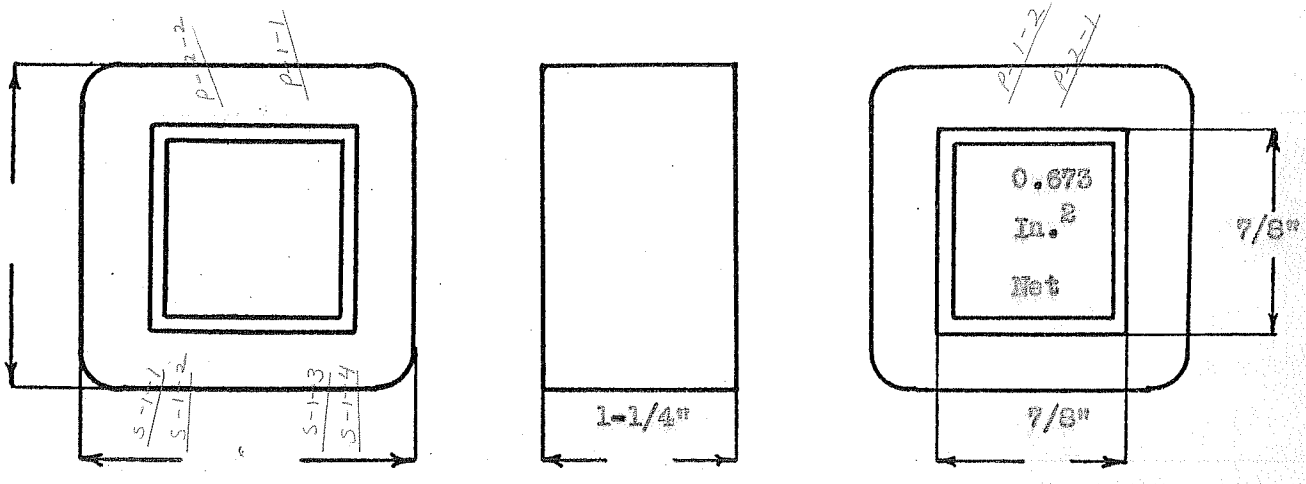
CORE 7/8" x 7/8" E & I GA. 29 GRADE D - Annealed STACK 1 x 1

MOUNTING "AA" - Leads

NOTE: ALL MULTIPLE WOUND.

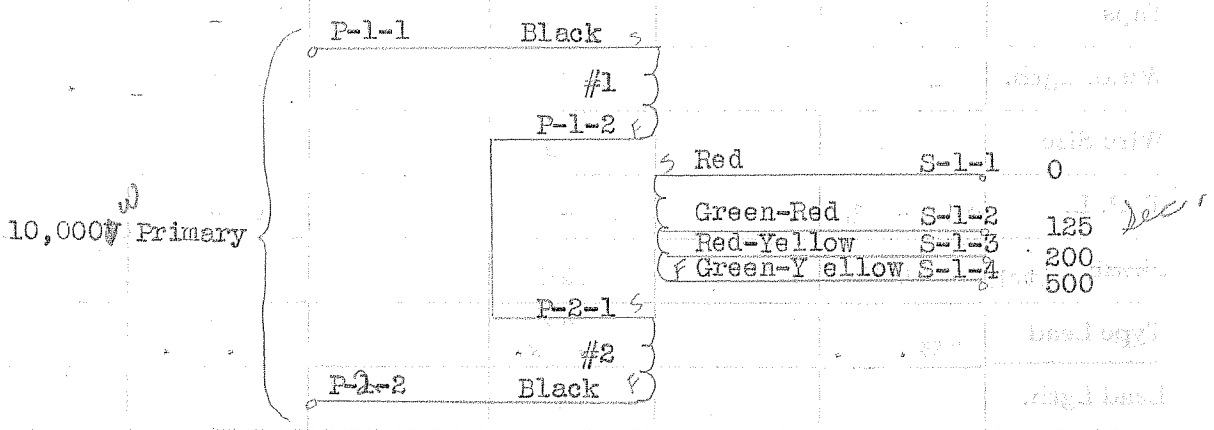
Cu = 1570 @ 10 Ma.
Wire Net = 0.324" (0.269")
TPV = 58.0
Fe = 35.2 @ 25 Cycle

100V on Primary (Assumed)



Re-DESIGNED BY HWS

DATE 7-31-41
1-20-42



$T = 3800 - 850 - 539 - 425$

$T_R = 8.95 - 2 - 1.27 - 1$

$Z_R = 80.2 - 4 - 1.61 - 1$

$Z = 10{,}000 - 500 - 201 - 125$

NOTE to Finishers: P-1-2 and P-2-1 are brazed and joined together and buried. No lead soldered to this connection.

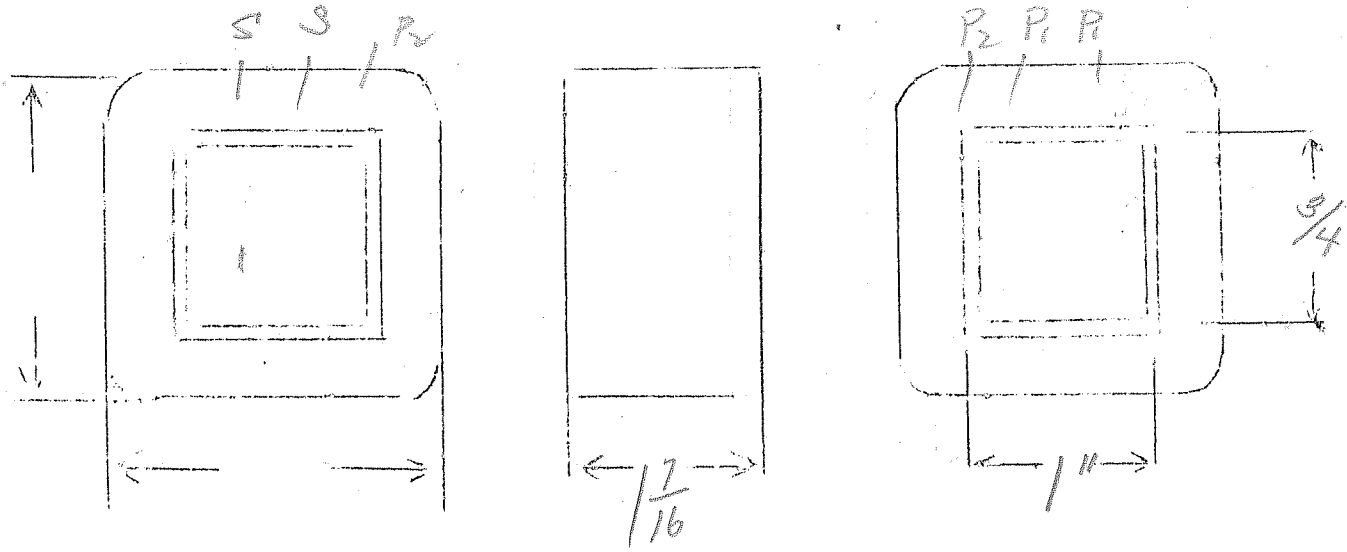
TRANSCEIVER — INPUT
20,000 ~ — 100,000 ~
200 ~ — 100,000

SPEC. NO. 558

Winding	PRI.	SEC	PRI.				
Turns	2140	7540	340				
Taps	NONE	NONE	NONE				
Wind. Lgth.	1.25	1.25	1.25				
Wire Size	#38	#38	#28				
T.P.L.	290.8	290-26	68-5				
Kind Term.	#22 PBR	#22 P.BR (RED)	#20 P.BR Black				
Term. Lgth.	9"	9"	9"				
Layer Insul.	.16 #	.16 #	.30 #				
Wrapper	N.005 VC	1.005 VC	2.005 BA				

TUBE | 4L007 | IMPREGNATION | VARNISH

CURE | 1 X 3/4 NW - 2+2



8000Ω — 2500Ω

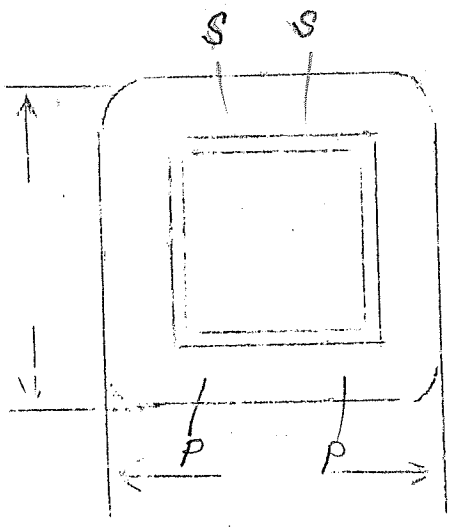
PRI — 15 MA

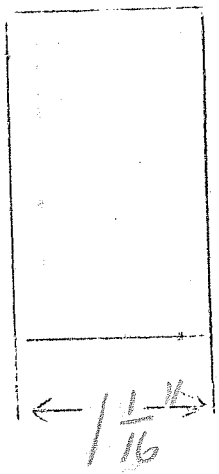
SPEC. NO. 559

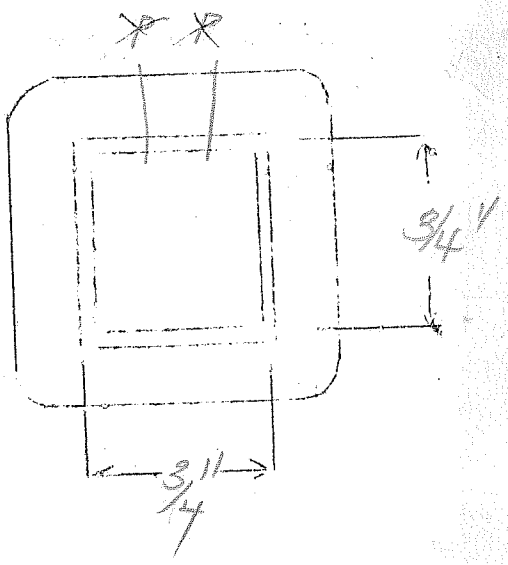
Winding	PRI	SEC					
Turns	4100	2300					
Taps	NONE	NONE					
Wind. Lgth.	7/8	7/8					
Wire Size	#38	#36					
T.P.L.	205-20	144-16					
Kind Term.	SIL BR	SIL BR					
Term. Lgth.	3"	3"					
Layer Insul.	.16 #	.20 #					
Wrapper	KL005VC	KL005CA					

TUBE | 4L007 | IMPREGNATION | VARNISH

CURE | 3/4" 3/4 NW — BUTT STACK







.5000 Ω to 25Ω

PRI - 40 Ma - INTERCOM

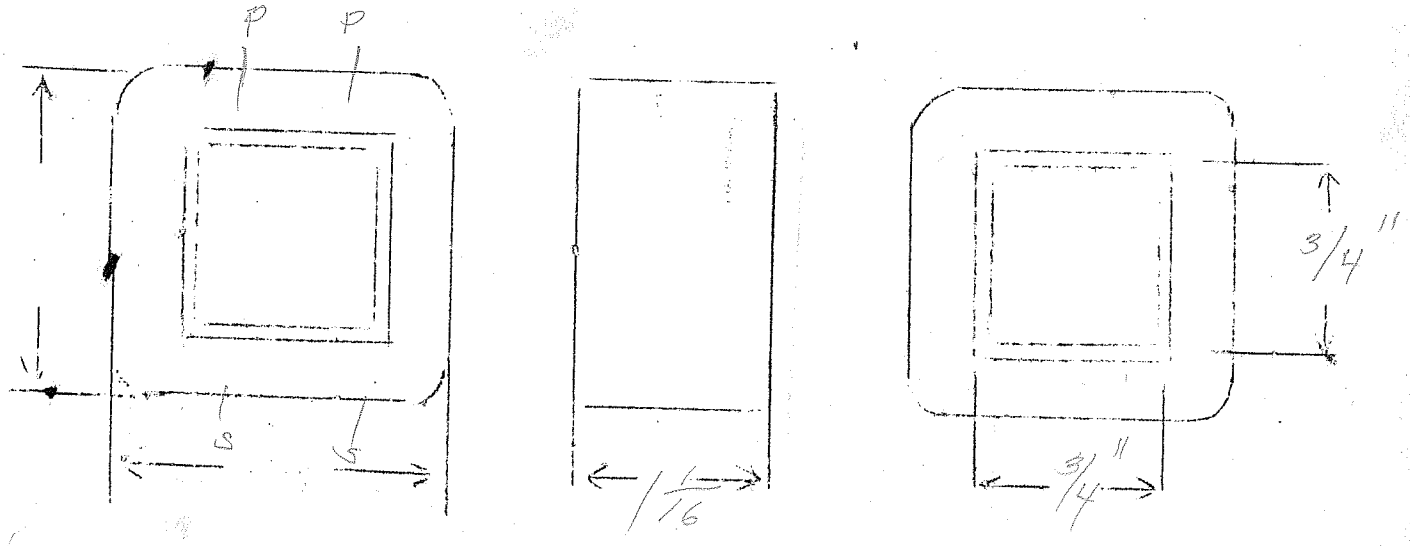
5672
#25

SPEC. NO. 560

Winding	PRI	SEC					
Turns	5700	125					
Taps	NONE	NONE					
Wind. Lgth.	7/8"	7/8"					
Wire Size	#36E	#24E					
T.P.L.	145	41-3					
Kind Term.	511 BR	WIRE ONLY					
Term. Lgth.	3"	3"					
Layer Insul.	16#						
Wrapper	1L005 VC	1L005 GA					

TUBE | 4L007 | IMPREGNATION | VARNISH

CURE | 3/4 x 3/4 audio - STACK WITH .005 GAP.



500-200-2 to 125000-2 CT

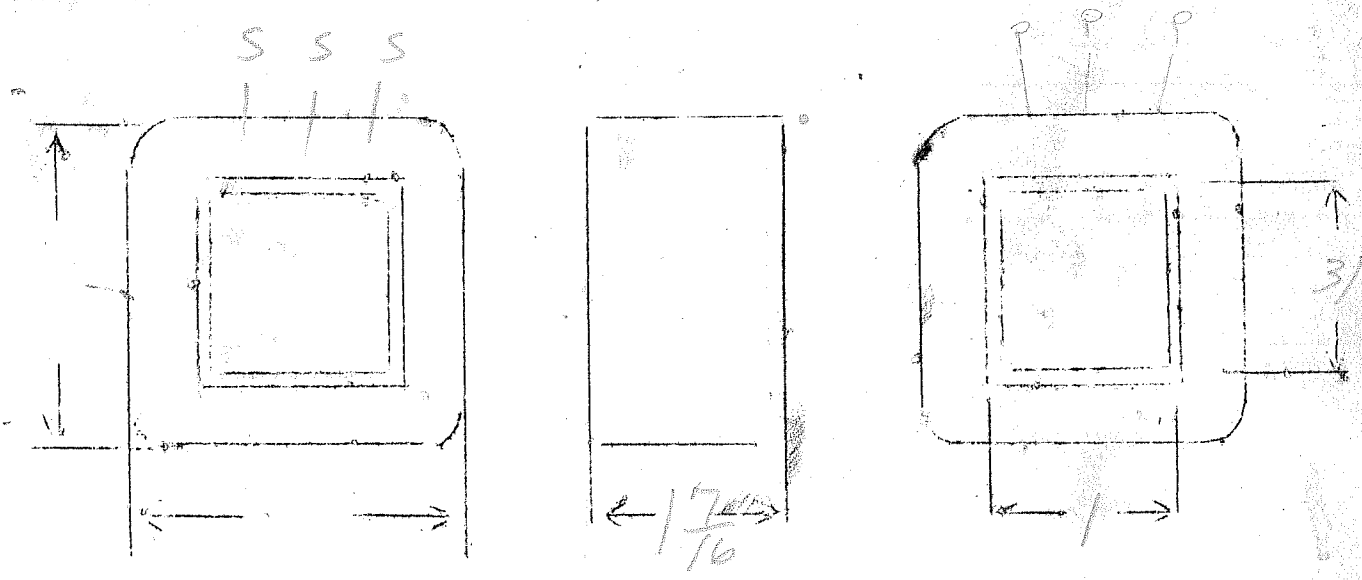
SPEC. NO. 561

Winding	SEC	PRI					
Turns	12000	760					
Taps	6000	480	← This is not CT (2104)				
Wind. Lgth.	1.25	1.25					
Wire Size	#38	#28					
T.P.L.	252-48	76-10					
Kind Term.	#20 BR.	#20 BR					
Term. Lgth.	9"	9"					
Layer Insul.	20#	30#					
Wrapper	KOOSVC	2L0050A					

TUBE | 4E007 | IMPREGNATION | VARNISH + WAX

CURE | 1 X 3/4 290 AUDIO 2 X 2 Blade

FOR "AA" Mount - finish 3" S1 BR

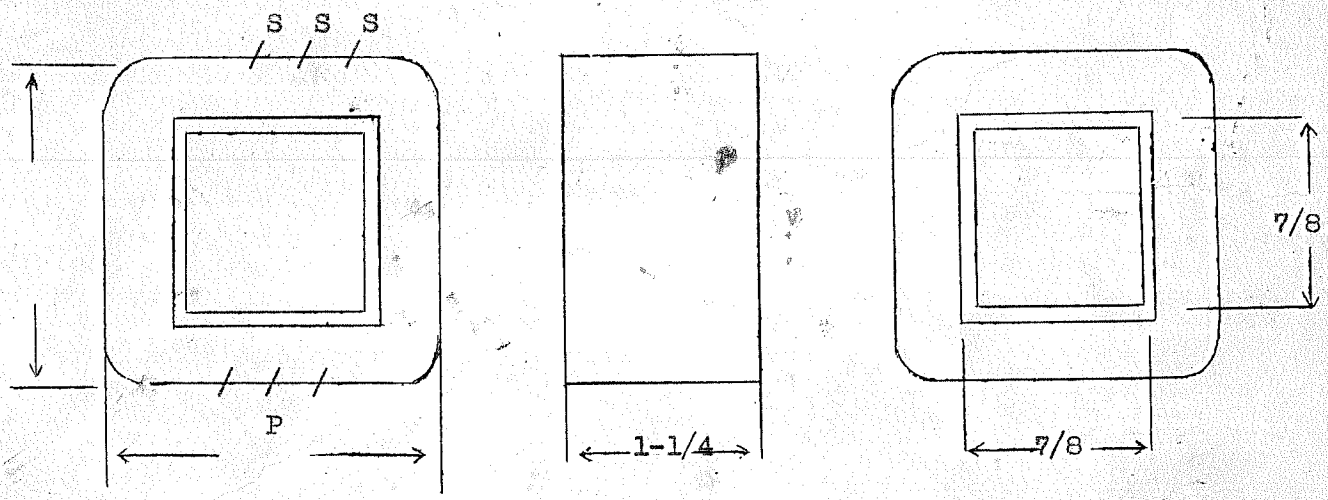


500 or 125 ohm line or double botton mike to
single or push pull grids

SPEC. NO. S562

Winding	SEC	PRI					
Turns	10,000	630					
Taps	5,000	315					
Wind. Lgth.	1-1/16	1-1/16					
Wire Size	#39	#29					
T.P.L.	250-40	80-8					
Kind Term.	Sil Braid or #20 Par Br						
Term. Lgth.	3" or 9"						
Layer Insul.	12#	30#					
Test Volt.	none						
Wrapper	3L003VP	2L005GA					

TUBE	7L007	IMPREGNATION	WAX
CORE	7/8 x 7/8 - 29 Ga B Grade 2 x 2	PRIMARY V.A.	
MOUNTING	A or F		



Revised-
DESIGNED BY G. W. DATE 5/5/37

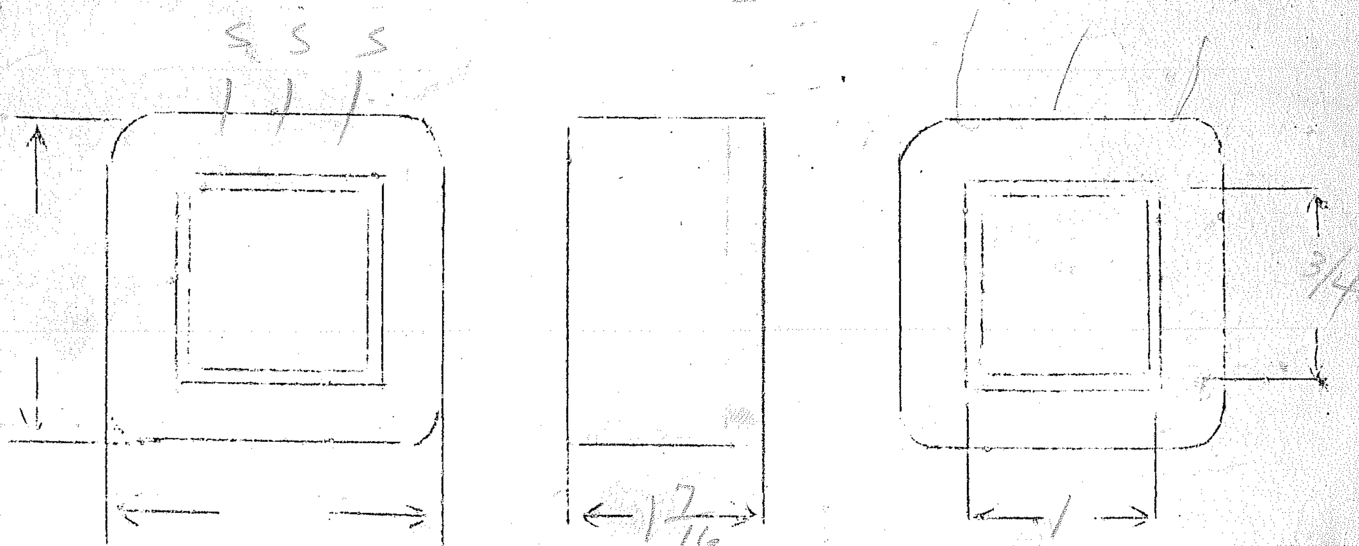
RIBBON MIKE – GRID

SPEC. NO. 563

Winding	SEC	Black PRI					
Turns	12000	38					
Taps	6000	19					
Wind. Lgth.	1.25	1.25					
Wire Size	#38	#16					
T.P.L.	252-48	19-2					
Kind Term.	#20 PBL	WIRE					
Term. Lgth.	9"	9"					
Layer Insul.	20#						
Wrapper	1L005VC	2L005GA					

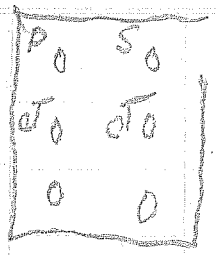
TUBE	4L007	IMPREGNATION	VARNISH + WAX
CURE	1 X 3/4 AUDIO 296 2X2 B.Gale		

FOR "AA" MOUNT FINISH 3" sil BR



5

Primary Color Code			Secondary Color Code		
Start	—	Black	Start	—	Red
C. T.	—	White	C. T.	—	Blue
Finish	—	Black	Finish	—	Red



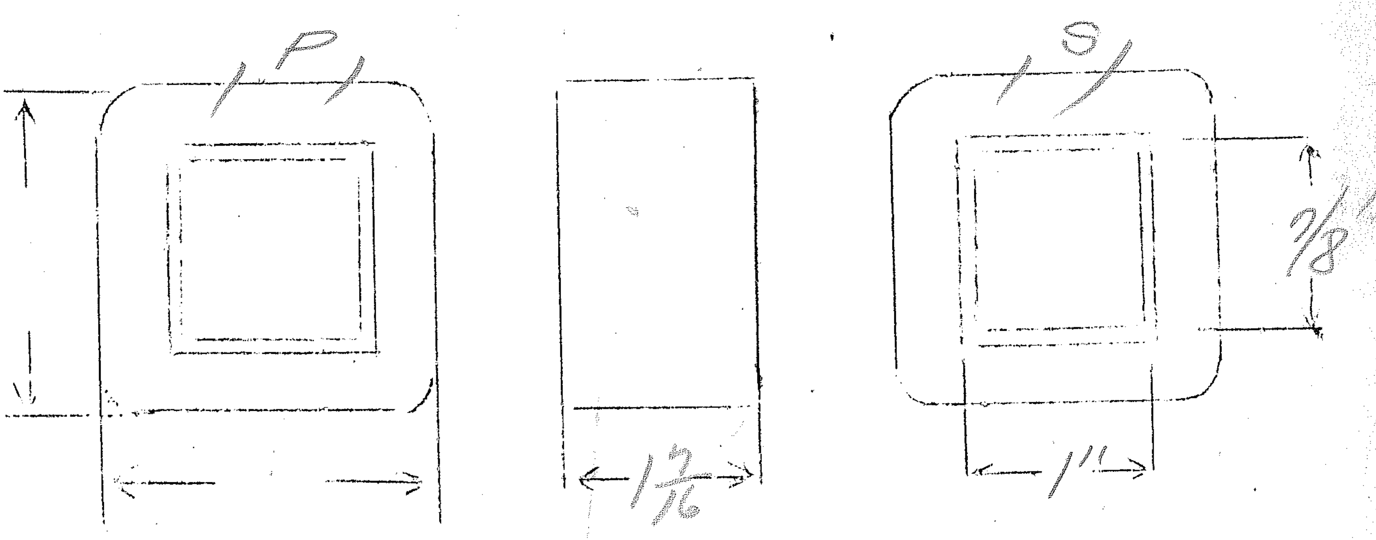
Class B input 46, 59, 89 to Class B 46 59 89

SPEC. NO. 364

Winding	PRI	SEC					
Turns	4400	3600					
Taps	—	—					
Wind. Lgth.	1.25	1.25					
Wire Size	#36	#36					
T.P.L.	210	210					
Kind Term.	#20 PBr	#20 PBr					
Term. Lgth.	9	9"					
Layer Insul.	20#	20#					
Wrapper	1L007VC	2L0050A					

TUBE | 7L007 | IMPREGNATION | VARNISH

CURE | 1 x 7/8 NW 29 Gauge iron stack



46, 59 Class A to P.P. Class B 46's or 59's.

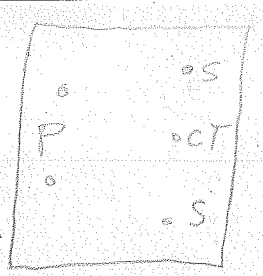
OLD

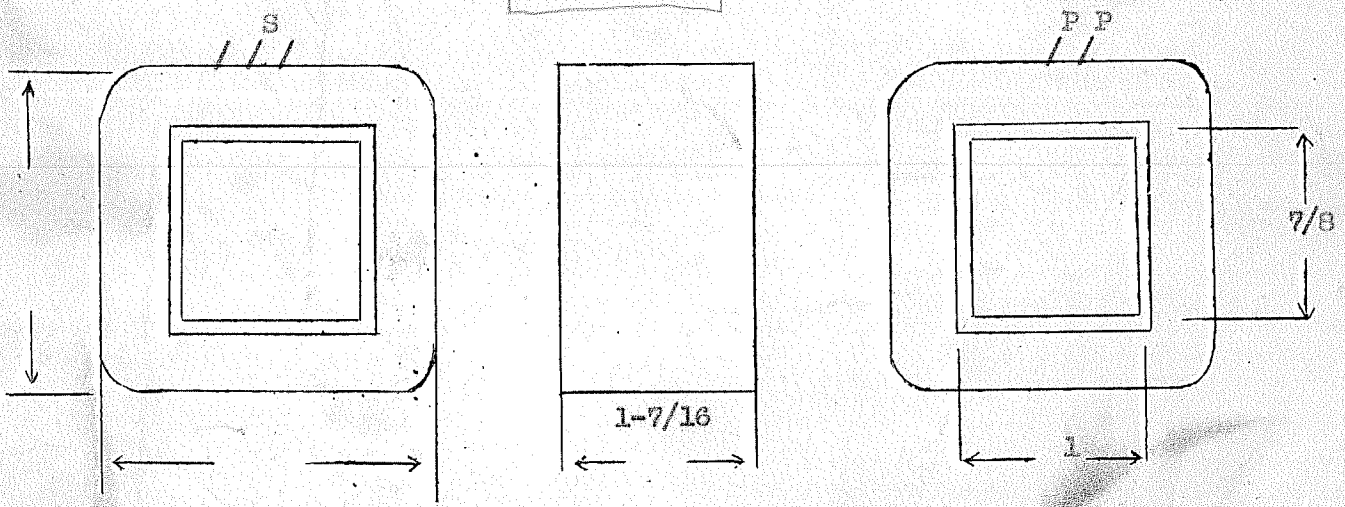
P/1/2 5 = 2.2

SPEC. NO. S565

Winding	P	S					
Turns	4000	3620					
Taps	--	1810					
Wind. Lgth.	1.25	1.25					
Wire Size	#36	#33					
T.P.L.	202-20	145-26					
Kind Term.	#20 Par	Braid					
Term. Lgth.	9	9					
Layer Insul.	20#	20#					
Test Volt.							
Wrapper	1L007WC	2L005GA	or kraft				

TUBE	7L007	IMPREGNATION	Varnish
CORE	1 x 7/8 29 Ga. B Gap. .005"	PRIMARY V.A.	
MOUNTING	A or F		





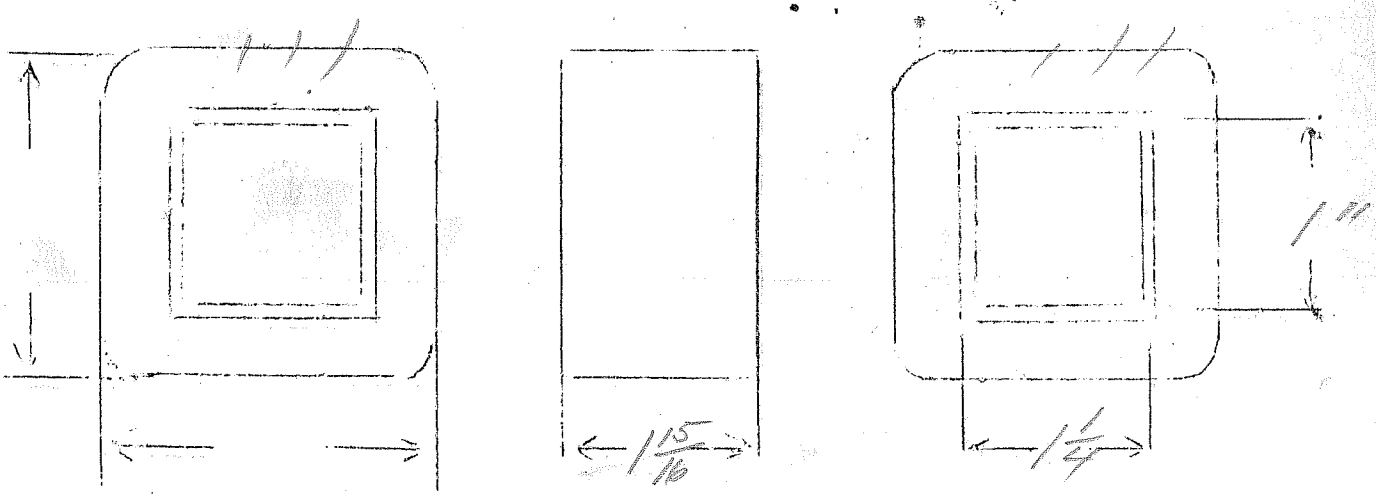
DESIGNED BY G. W. DATE

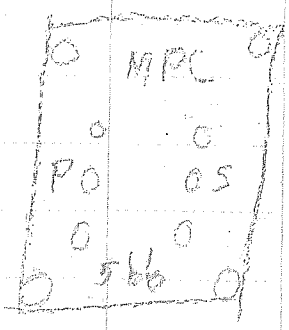
Class B input
P.P. 45, 59 pk to 46, 59 Class B
or P.P. 243 pk to 2-844 grids

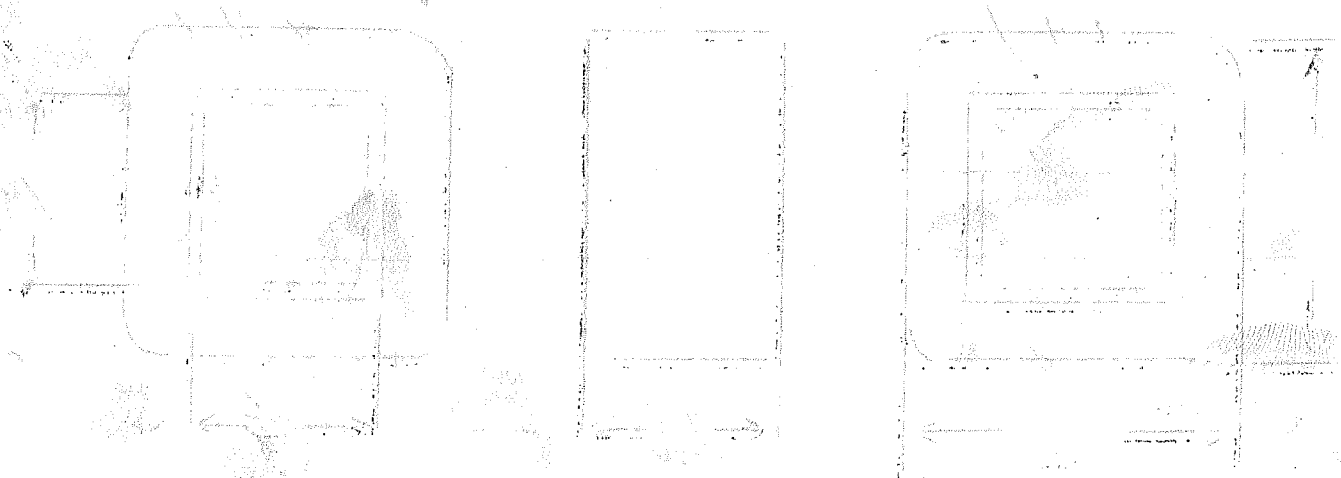
SPEC. NO. 566

	Black White	Red Blue					
Winding	PRI	SEC					
Turns	6400	5800					
Taps	3200	2900					
Wind. Lgth.	1.25	1.25					
Wire Size	33	33					
T.P.L.	200-32	200-29					
Kind Term.	#28 PBr	#28 PBr					
Term. Lgth.	9"	9"					
Layer Insul.	30#	30#					
Wrapper	2L007KC	2L005GA					

TUBE	7L007	IMPREGNATION	VARNISH
CURE	1 1/4 X 1 (2x2 stack)	290B	




MPC



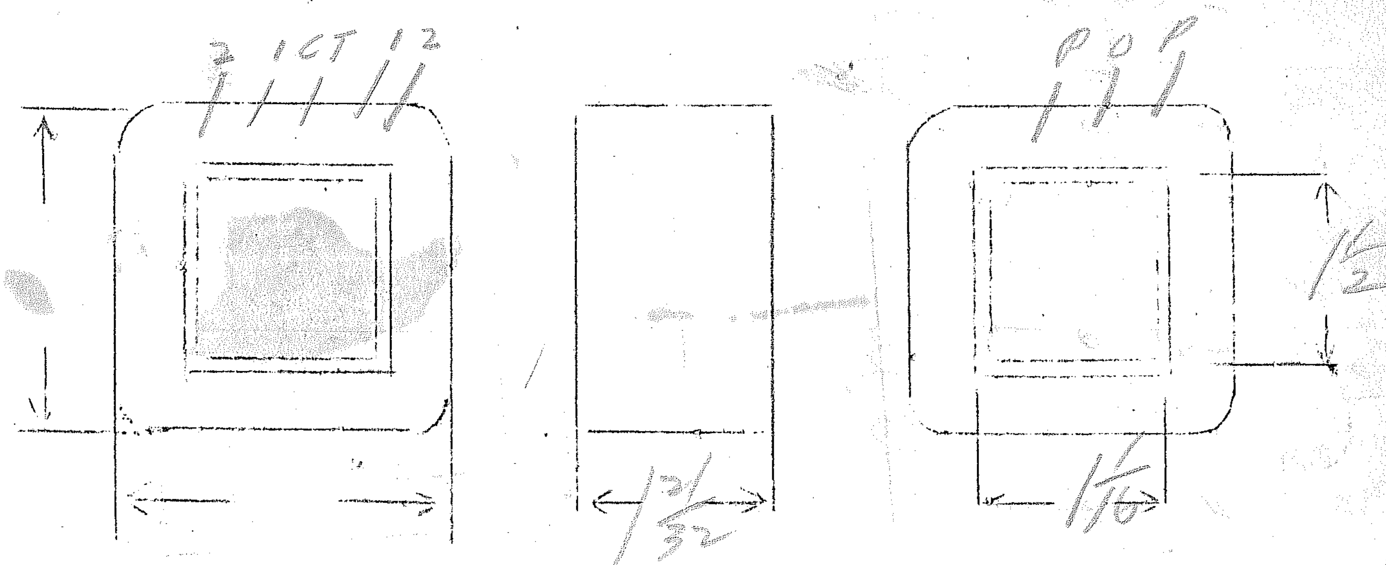
PP2A3 to 2-RK18, RK31, 210, 800, 830 or 801
Class B Grids

SPEC. NO. 567

Winding	PRI	SEC					
Turns	4660	4660					
Taps	2330	3495 2330-1165					
Wind. Lgth.	1 15/32						
Wire Size	#34	#34					
T.P.L.	195-24	195-24					
Kind Term.	all B - 3"						
Term. Lgth.	Par B - 9"						
Layer Insul.	40#	40#					
Wrapper	1000 VC 3L A	2L005GA					

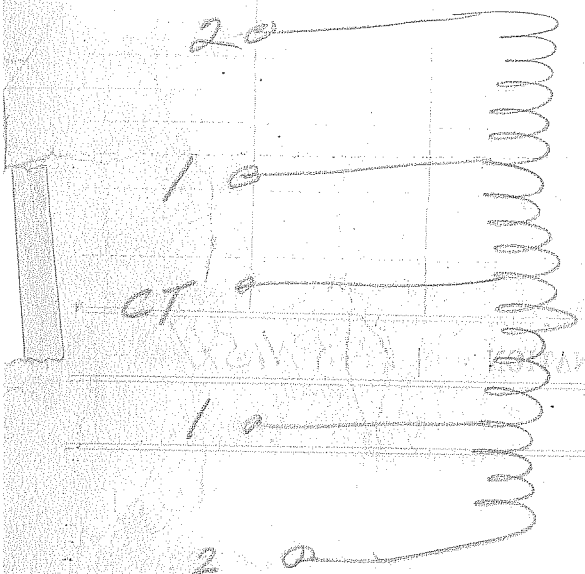
TUBE | 76007 | IMPREGNATION | VARNISH

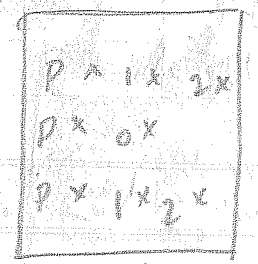
CURE | 1 1/16 X 1 1/2 2X2 2900

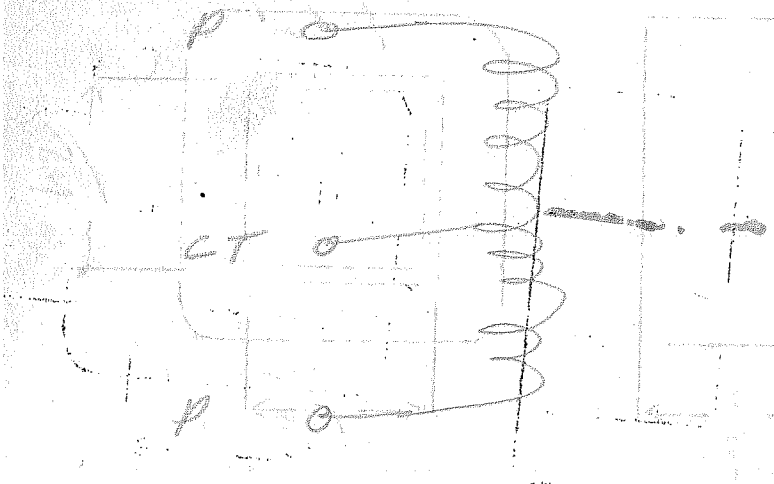


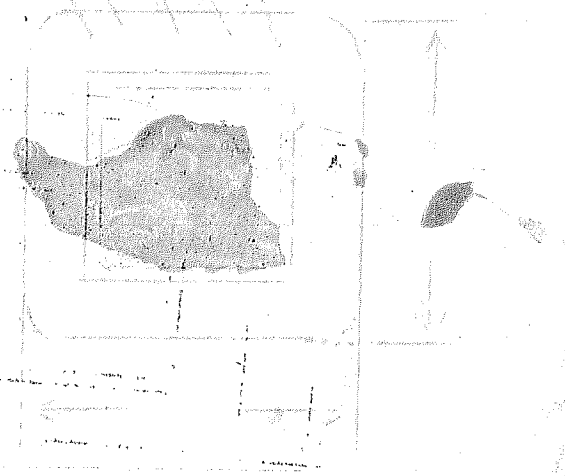
Primary Color Code		Secondary Color Code	
Start	Black	Start	Red
C. T.	White	C. T.	Blue
Finish	Black	Finish	Red

Pri. Black - White CT.
Sec Red Outsides
Blue CT
Yellow Taps









Primary - P.P. 46, 59 plates
Sec. - 3,500 Ohms - 120 D. C. Ma.
or 5,000 Ohms

OLD

SPEC. NO. 8568

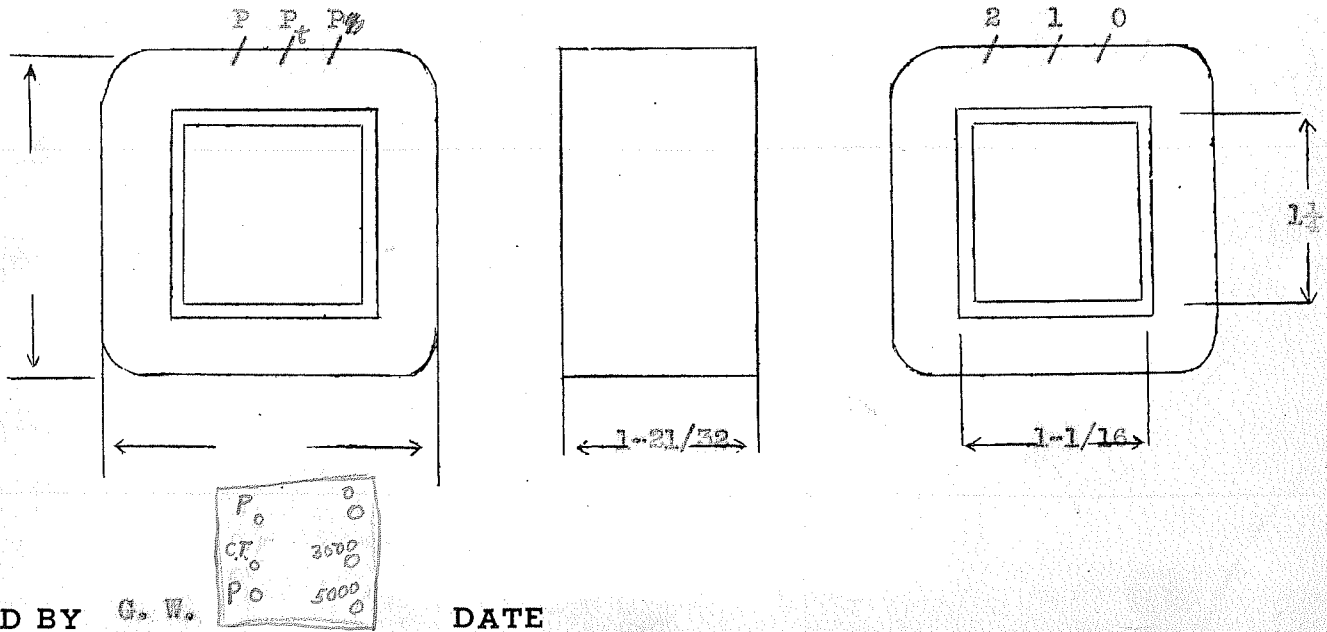
Winding	PRI	SEC					
Turns	~~3500~~	~~3000~~					
Taps	~~1650~~	~~2500~~					
Wind. Lgth.	1-15/32	~~1-15/32~~ 1 13/32					
Wire Size	#32	#31					
T.P.L.	153-32	~~139-32~~ 128-24					
Kind Term.	#20 P Br	#20 P Br					
Term. Lgth.	9"	9"					
Layer Insul.	30#	30#					
Test Volt.	2500	3500					
Wrapper	2L007VC	1L007VC 3L005GP					

TUBE | 7L007 | IMPREGNATION | VARNISH

CORE | 1-1/16 x 1-1/4 29G "B" .010 Gap | PRIMARY V.A.

MOUNTING F

Note- Spiral C.T. into position-
Anchor all leads



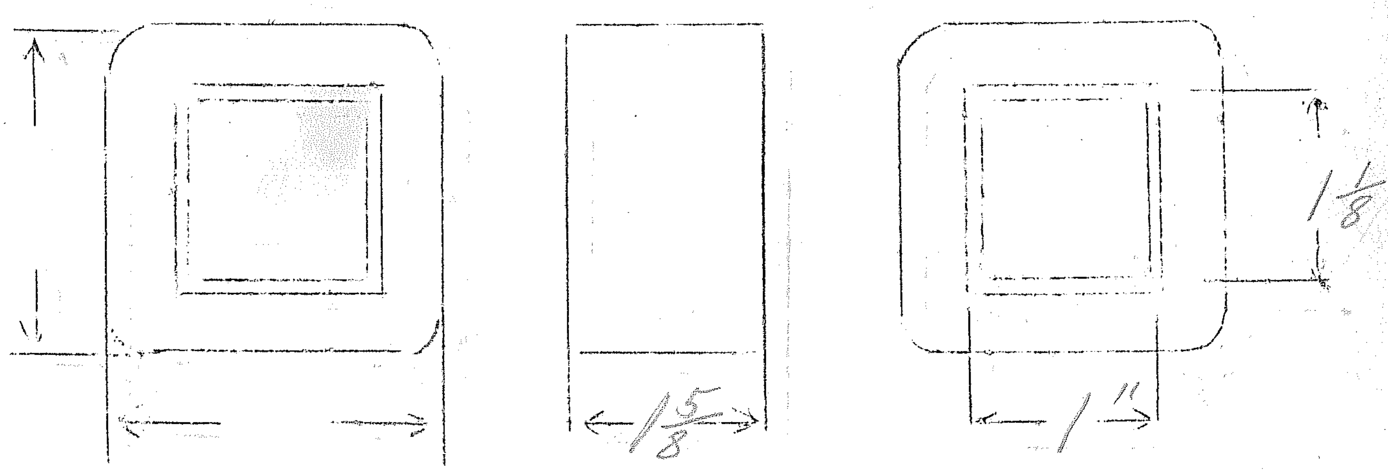
DESIGNED BY G. W. DATE

Class A output P.P. 2A3 - 200,500 Ω line #7 - [illegible]

SPEC. NO. 569

	Black White Tap	Red Yellow Yellow Tap					
Winding	PRI	SEC					
Turns	6000	1900					
Taps	3000	1200					
Wind. Lgth.	1 7/16	1 7/16					
Wire Size	#34	#28					
T.P.L.	190-32	97-20l					
Kind Term.	#20 PBW						
Term. Lgth.	9"						
Layer Insul.	30#	30#					
Wrapper	7L007VC	7L005GA					

TUBE	7L007	IMPREGNATION	VARNISH
CURE	1 x 1½ M	29 gr. "A"	



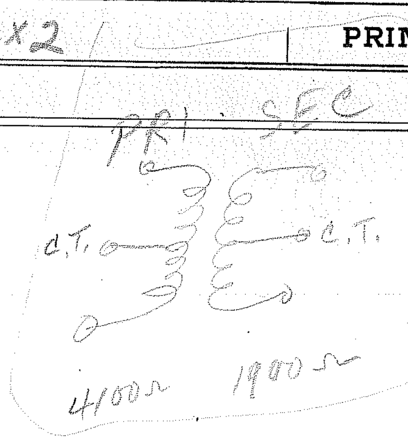
P.P. 46. 59 plates to four P.P. parallel
59 or 46 Class B grids.

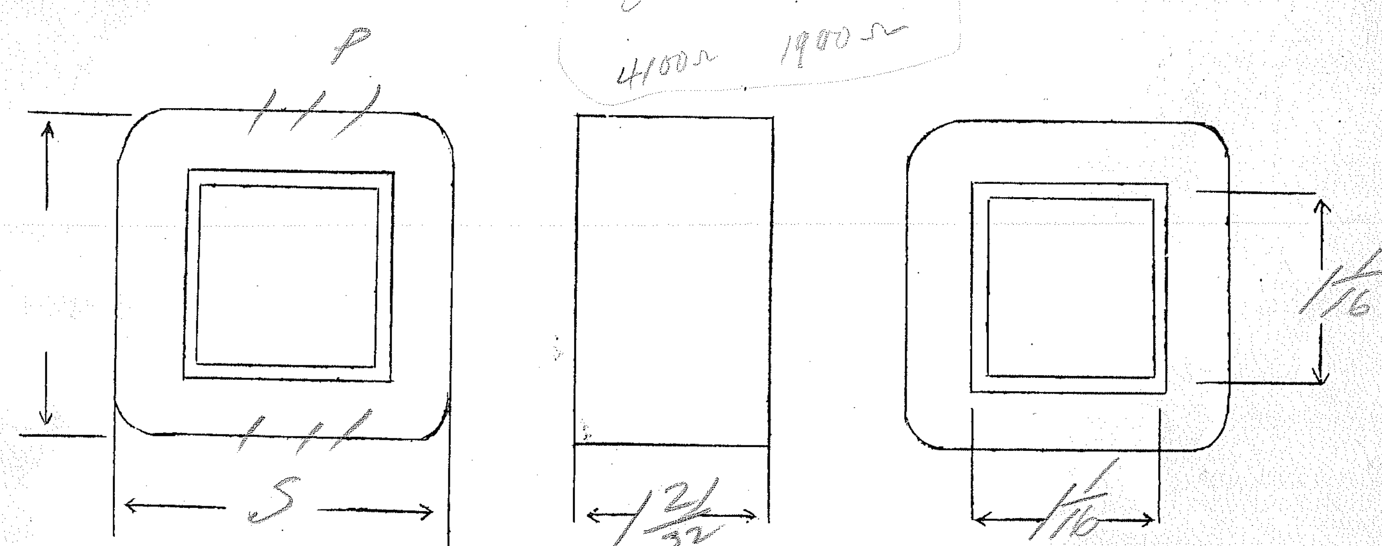
OLD

SPEC. NO. S570

Winding	P	S					
Turns	4100	1900					
Taps	2050	950					
Wind. Lgth.	1 15/32	1 15/32					
Wire Size	#33	#30					
T.P.L.	172-24	121-16					
Kind Term.	#20 Pm Br						
Term. Lgth.	9"	9"					
Layer Insul.	20#	30#					
Test Volt.							
Wrapper	71005VP 10L-2P	21005GA					

TUBE	71007	IMPREGNATION	VARNISH
CORE	29-B Grade - 2x2	PRIMARY V.A.	
MOUNTING	A or F		





ESIGNED BY G. W. DATE 7/11/39

P.P. 45, 59 plates to two Class B grids
of 2-800, 2-830, 2-RK18, 2-210.

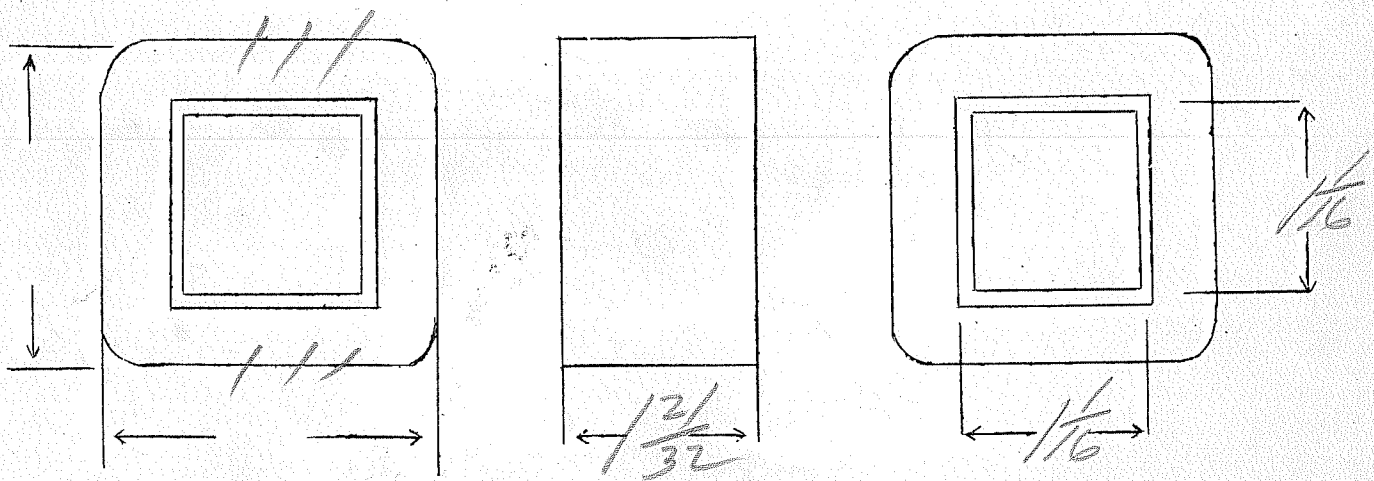
OLD

P. 1/2 3-28

SPEC. NO. S571

Winding	P	S					
Turns	4100	2900					
Taps	2050	1450					
Wind. Lgth.	1 15/32						
Wire Size	#33	#31					
T.P.L.	172-24	136-22					
Kind Term.	#20 Bar Br						
Term. Lgth.	9"	9"					
Layer Insul.	20#	30#					
Test Volt.							
Wrapper	7L005VP 10L101	2L005G-A					

TUBE	7L007	IMPREGNATION	VARNISH
CORE	7L4B-2N2	PRIMARY V.A.	
MOUNTING	A OR F		



DESIGNED BY G. W. DATE 7/11/39

500 or 200 ohms to 2-203A, 2-211D, or 2-242A

Class B

SPEC. NO. 573

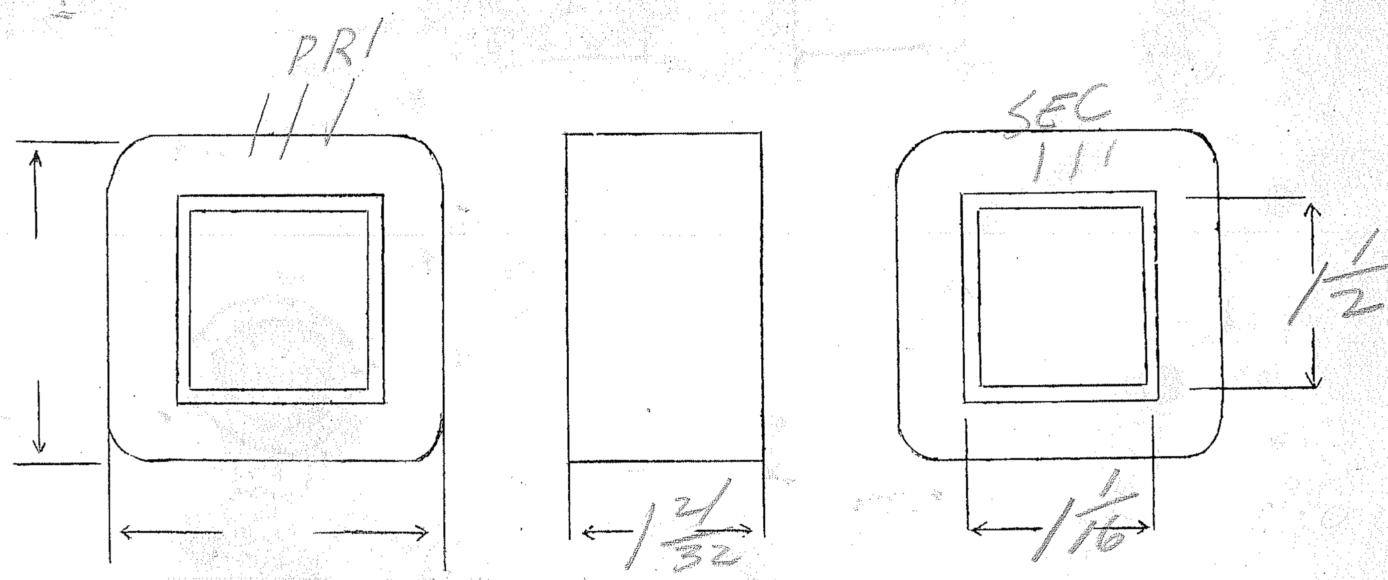
Winding	PRI	SEC					
Turns	1500	2650					
Taps	950	1325					
Wind. Lgth.	1 15/32	1 15/32					
Wire Size	#28	#31					
T.P.L.	100-16	135-20					
Kind Term.	#20 [illegible] or silver						
Term. Lgth.	3" or 9"						
Layer Insul.	40#	40#					
Test Volt.	2500	2500					
Wrapper	1200 NO 3 [illegible]	2100 5GA					

TUBE 7007 | IMPREGNATION VARNISH

CORE 1 1/16 x 1 1/2 - 2x2 29 [illegible] | PRIMARY V.A.

MOUNTING A or F

Pri {
White - 0
Black - 200
Yellow - 500



DESIGNED BY Gurney DATE 2/15/37

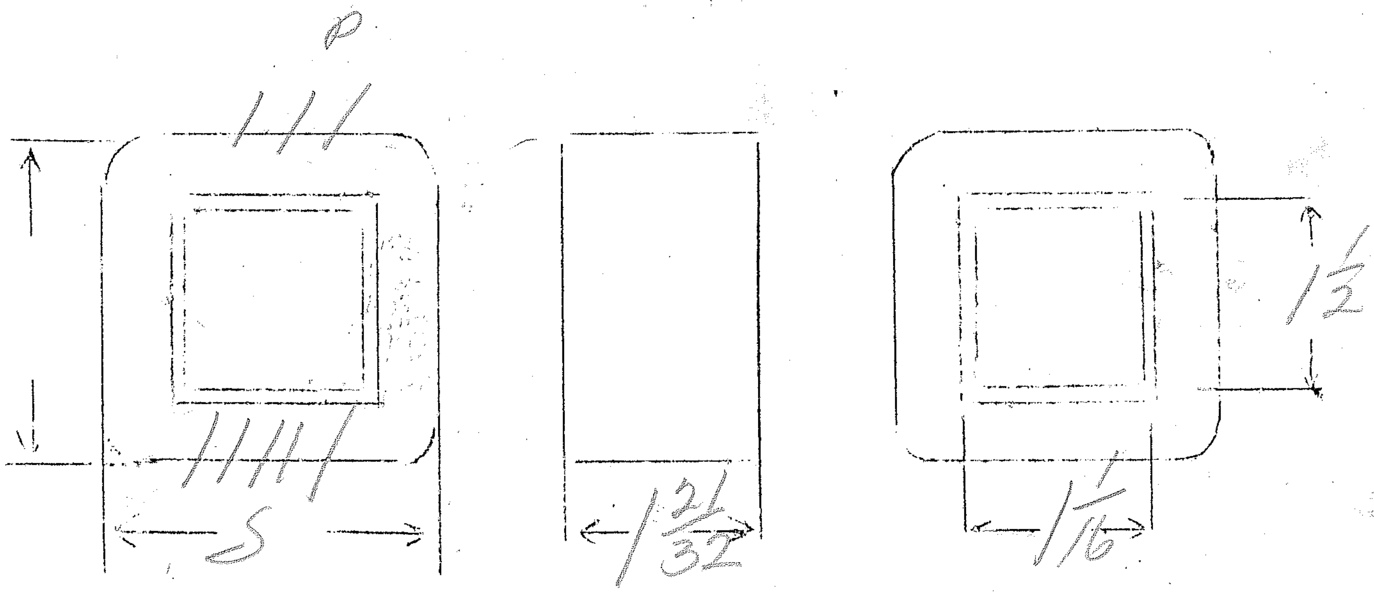
500 or 200 ohm line to 2-210, 2-2RK18,
2-800, 2-801, 2-830 Class B Grids

SPEC. NO. 574

Winding	SEC		PRI				
Turns	3600		1250				
Taps	~~2700~~ 1800 —	900	800				
Wind. Lgth.	1 15/32		1 15/32				
Wire Size	#32		#27				
T.P.L.	151-24		90-14				
Kind Term.	Sil Bron	#20 Par Br					
Term. Lgth.	3" or 9"		3" or 9"				
Layer Insul.	30#		40#				
Wrapper	1200 TVC 41 GR.		3L005GA				

TUBE 7L007 — IMPREGNATION VARNISH

CURE 1 1/16 x 1 1/2 — 2X2 24 Ga B



50 } red
29.

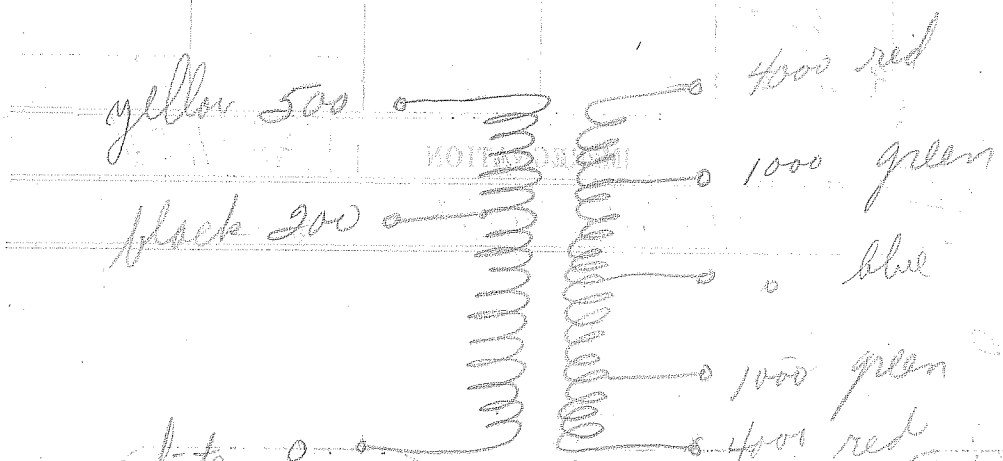
100.08 }
58.5 } gauss

500 ——— 22.4

200 ——— 14.1

1000 ——— 31.6
(RK18)

4000 ——— 63.2
(80,830,20,801)

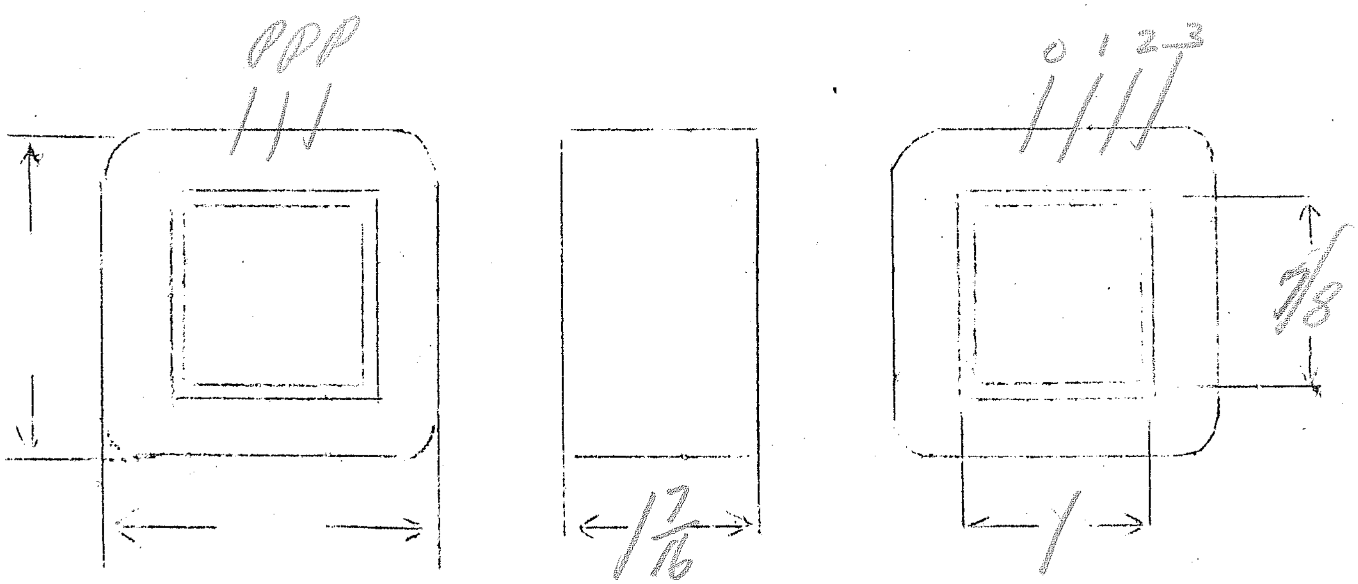


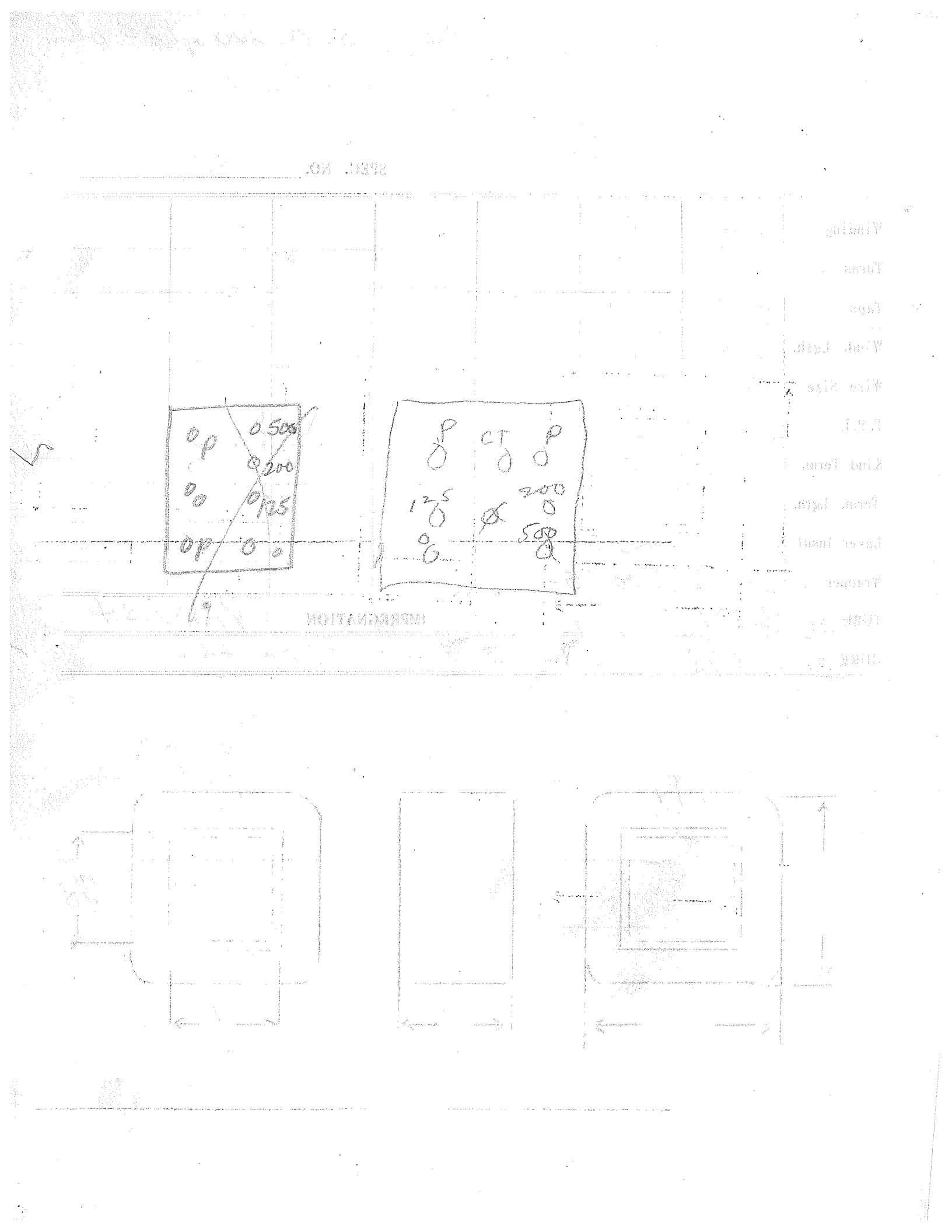
OP- 10000 Ω plates to 500, 200, 125 ohm lines for use at low levels

SPEC. NO. 576

Winding	PRI	SEC					
Turns	8500	1230					
Taps	4250	770-615					
Wind. Lgth.	1.25	1.25					
Wire Size	#38	#29					
T.P.L.	252-34	92-14					
Kind Term.	Sil Br	Sil Br					
Term. Lgth.	3"	3"					
Layer Insul.	20#	40#					
Wrapper	1200 WC	2005 GA					

TUBE	7007	IMPREGNATION	VARNISH
CURE	1 X 7/8 2X2 B Grade 29 oz 2X2		



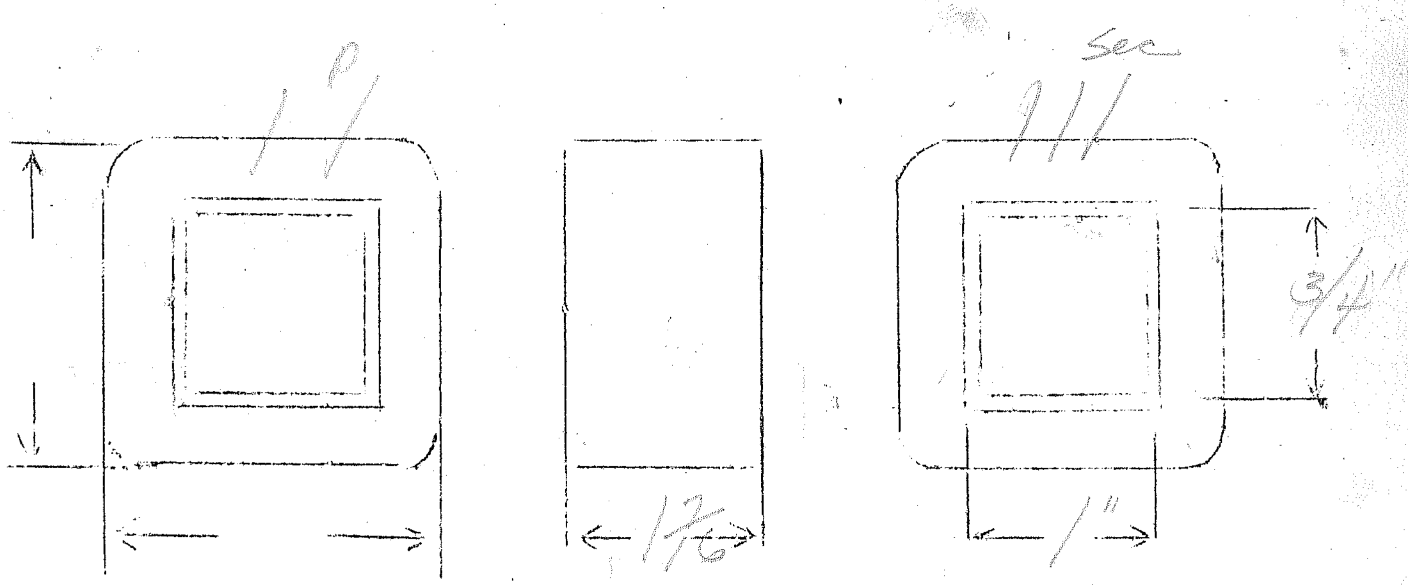


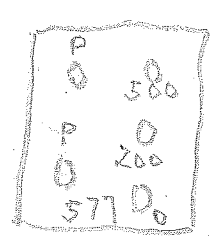
Crystal mike (10000) Ω — to 500 or 200 Ω

SPEC. NO. 577

Winding	PRI	SEC					
Turns	12000	850					
Taps	—	535					
Wind. Lgth.	1.25	1.25					
Wire Size	#39	#28					
T.P.L.	275-44	83-11					
Kind Term.	Silver Braid						
Term. Lgth.	4"	4"					
Layer Insul.	16#	30#					
Wrapper	7L007VC	2L0056A					

TUBE	7L007	IMPREGNATION	WAX
CURE	1X3/4 2X2 B Grade 29 gage		





2000 or 1000 Ω to 500 or 200 Ω line

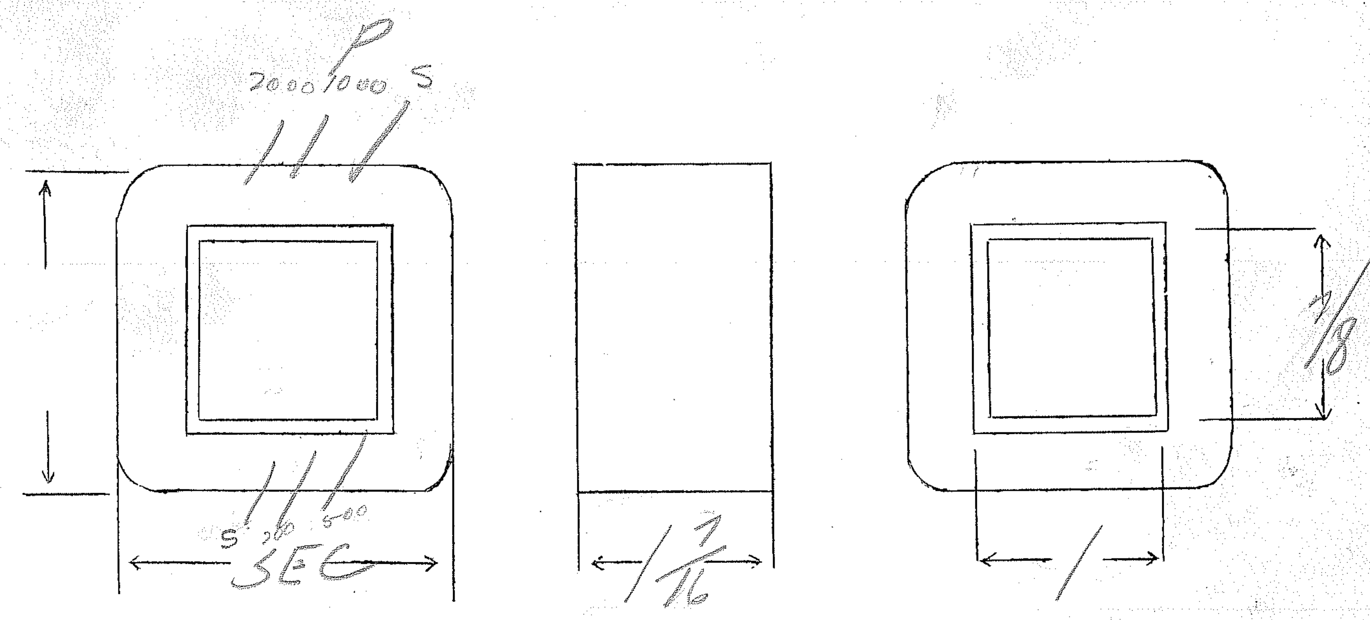
SPEC. NO. 578

Winding	PRI	SEC					
Turns	1700	850					
Taps	1200	530					
Wind. Lgth.	1 7/16	1 7/16					
Wire Size	#31	#27					
T.P.L.	117-15	76-12					
Kind Term.	WIRE	ONLY					
Term. Lgth.	4"	4"					
Layer Insul.	30#	30#					
Test Volt.	—						
Wrapper	1007VC	2100SG-A					

TUBE 7007 | IMPREGNATION VARNISH

CORE 1 X 7/8 — B Grade audio, 2 1/2 | PRIMARY V.A.

MOUNTING F



DESIGNED BY GW DATE 3/19/37

PRI.: 12000Ω OR 2-TZ, 20,801 PLATE & SCREEN MOD. TRANS.

SEC - TO MODULATE 2-RK20,804 @100 watts OLD

SPEC. NO. 5579

Winding	Pri	1-2 Sec	3-4 Sc. Grid Sec				
Turns	2540	1900	380				
Taps	1270	—	—				
Wind. Lgth.	1 3/4	1 3/4	1 3/4				
Wire Size	#29	#28	#33				
T.P.L.	128 - 20	113 - 18	200 - 2				
Kind Term.	Wire Outlet		Sil Br				
Term. Lgth.	4"	4"	4"				
Layer Insul.	double 30#	double 30#	double 30#				
Test Volt.		7500	5000				
Wrapper	3L007VC 8LG1	3L007VC 8LG1	1L007VC 2L007GA				

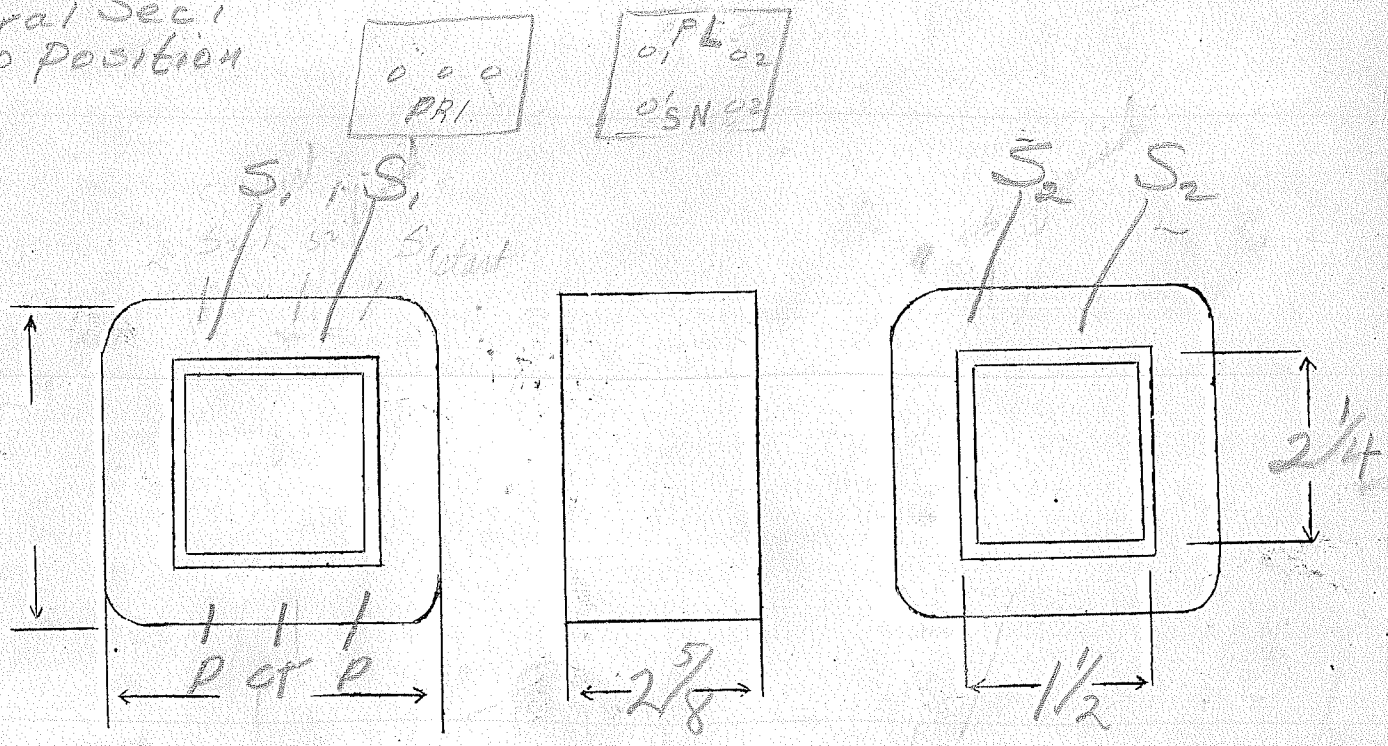
over from Hum Test

TUBE | 9L007G/T + 1L007VC | IMPREGNATION | Varnish

CORE | 1½X2¼ - 0.020" gap 24ga. | PRIMARY V.A.

MOUNTING J

Spiral Sec 1 into position



DESIGNED BY JCS DATE 1-3-39

PRI 12,500 Ω OR 2-800,357, RK18 — Plate & Screen Mod. Trans.

SEC - TO MODULATE 2-RK28,803 @ 200 watts

S_1 - 13300 Ω - 150 ma

S_2 - 2130 Ω - 100 ma

OLD

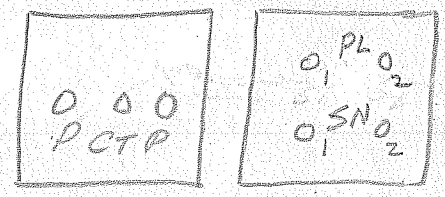
SPEC. NO. 5580

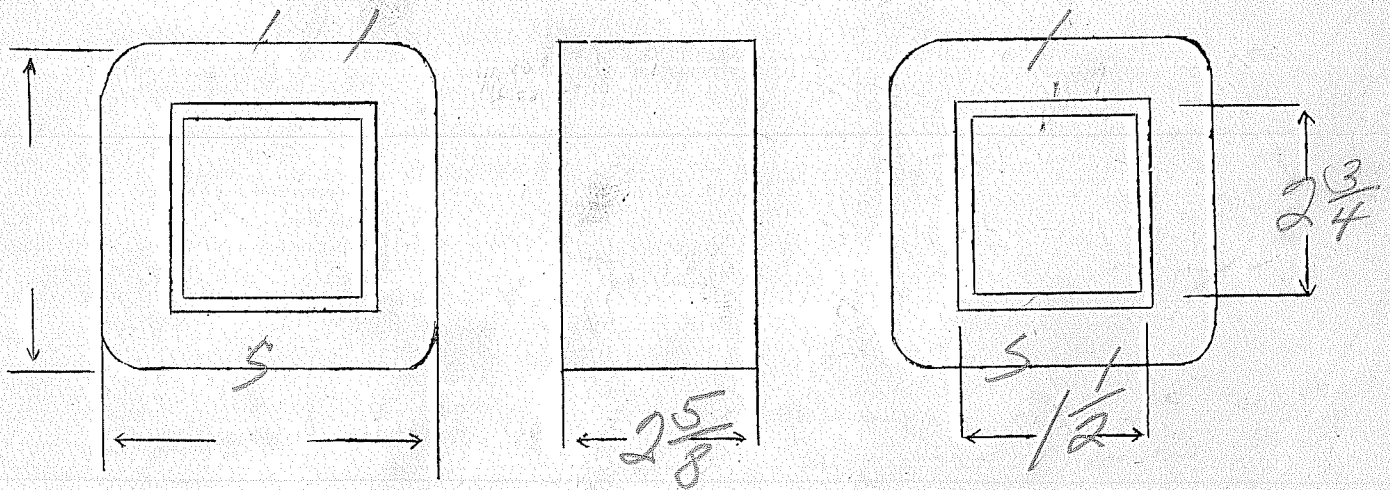
Winding	SEC$_2$	PRI	SEC$_1$				
Turns	1050	2500	2650			(over for Testing)	
Taps	—	1250	—				
Wind. Lgth.	1 7/8	1 7/8	1 7/8				
Wire Size	#29	#29	#29				
T.P.L.	140-8	140-18	140-19				
Kind Term.	WIRE	ONLY					
Term. Lgth.	6"	6"	6"				
Layer Insul.	double 30#						
Test Volt.	7500						
Wrapper	3 wds 7VC 4L bd	3 wds 7VC 4L bd	3 wds 7VC 2 layers EA			Double	

TUBE | 10-2007 + 2-2007VC | IMPREGNATION | Vacuum-Impregnation

CORE | 24 ga - .020" gap | PRIMARY V.A.

MOUNTING J





DESIGNED BY Gw DATE 6/21/38

Load test use 1450 or normal test (432) on pri (3402) overloaded ple[illegible] slight Hum
17 globes on Sec 1

Put 120 V. into
½ Pri.

Sec. 1 = 254.8 V.
Sec 2 = 100.9 V.

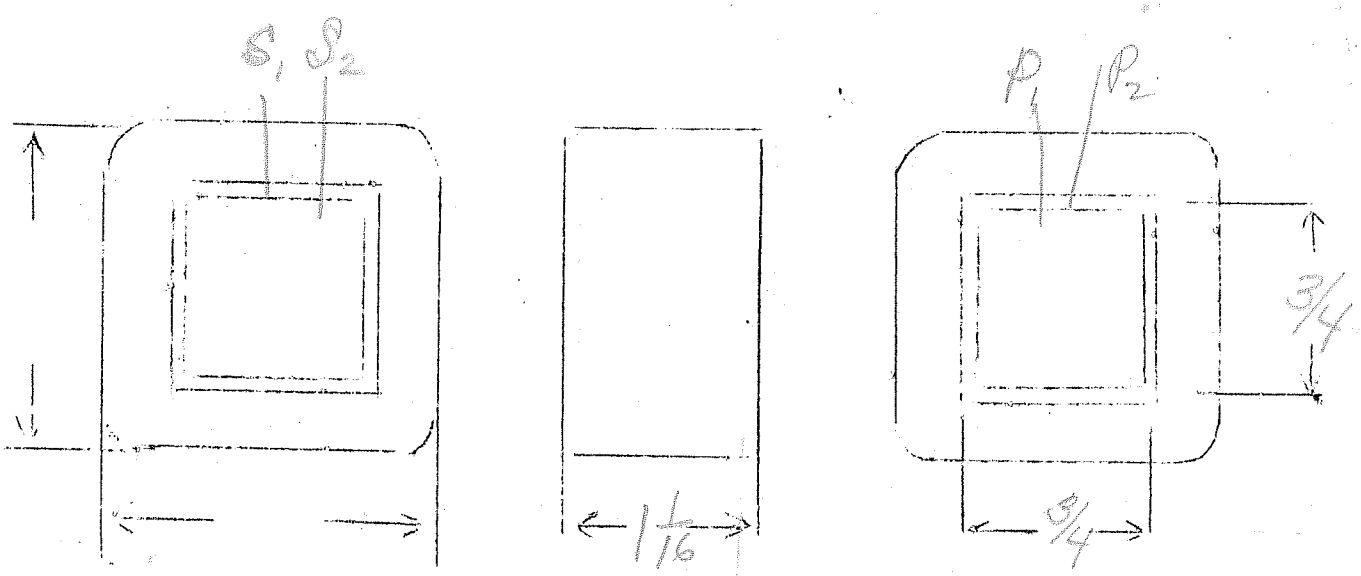
200 v line - line

SPEC. NO. 580

Winding	Pri	Sec					
Turns	480 (240)	500					
Taps	NONE	NONE					
Wind. Lgth.	15/16	15/16					
Wire Size	#29	#29					
T.P.L.							
Kind Term.	S,1 BR	S,1 BR					
Term. Lgth.	3"	3"					
Layer Insul.	30#	30#					
Wrapper	2403VP	2405DA					

TUBE | 4L007 | IMPREGNATION | Wax

CURE | 3/4 x 3/4 Auto



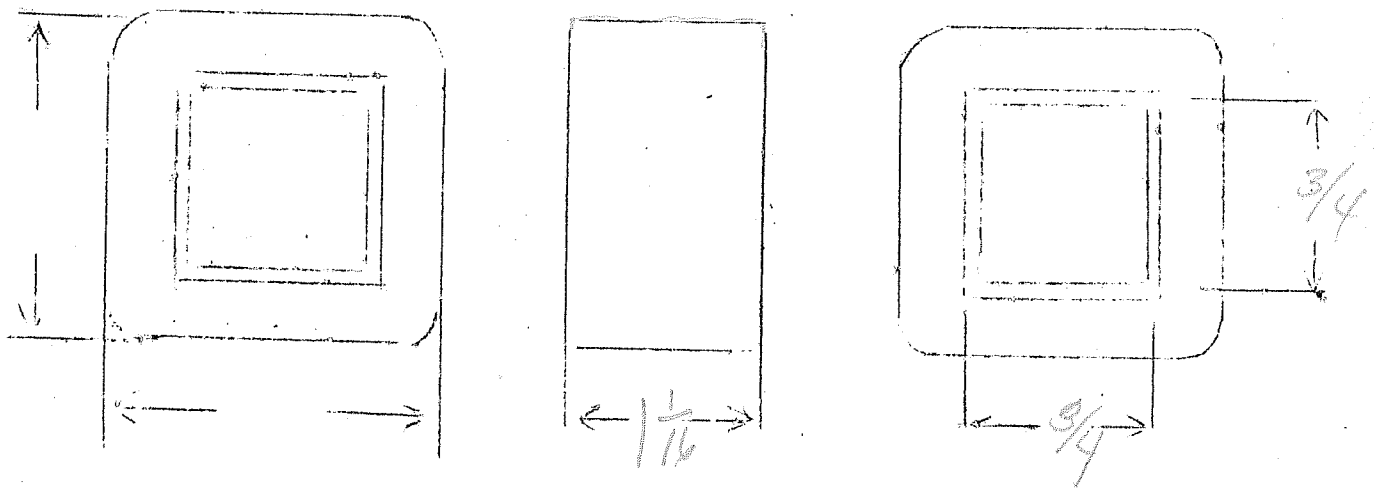
600Ω — 100,000Ω

SPEC. NO. 581

Winding	SEC	PRI					
Turns	8400	650					
Taps	—	—					
Wind. Lgth.	15/16"	15/16					
Wire Size	#41E	#29E					
T.P.L.	290	70					
Kind Term.	S/L BR	S/L BR					
Term. Lgth.	3"	3"					
Layer Insul.	16#	35#					
Wrapper	2L003VP	2L005GA					

TUBE | 4L007 | IMPREGNATION | WAX

CURE | 3/4 x 3/4 ends



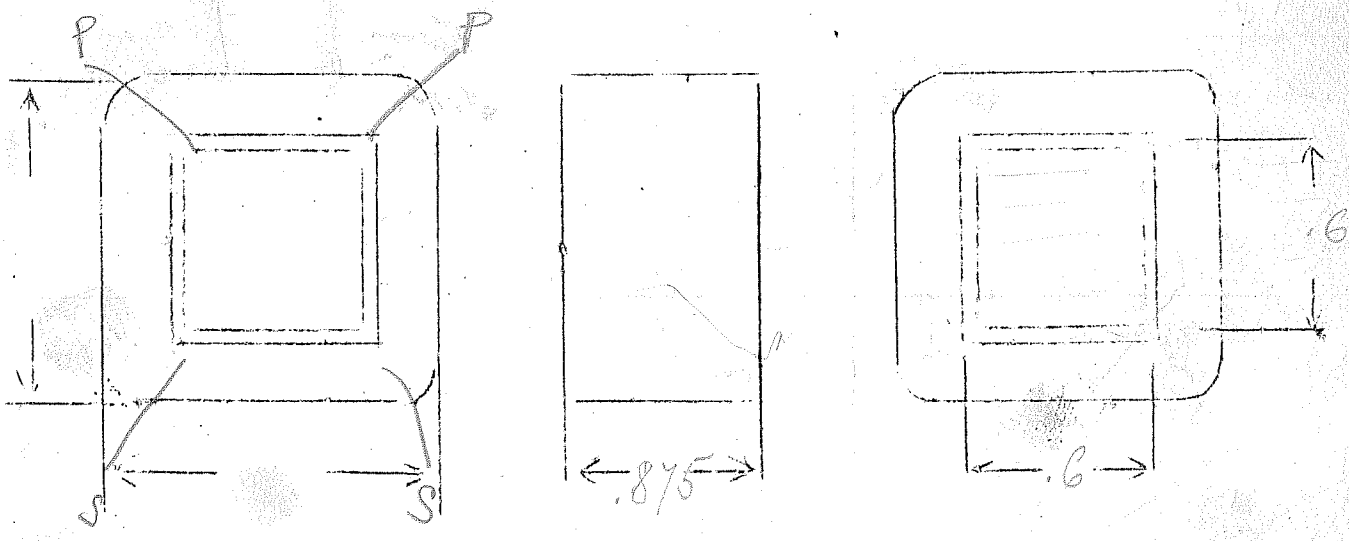
AMERICAN MICROPHONE CO.
10000Ω - 200Ω

SPEC. NO. 582

Winding	PRI	SEC					
Turns	4100	590					
Taps							
Wind. Lgth.	.75	.75					
Wire Size	#40E	#30E					
T.P.L.	195	6k					
Kind Term.	P. BRAID	P. BRAID					
Term. Lgth.	7"	7"					
Layer Insul.	1/2 #61	16 #61					
Wrapper	1 LAYER VP	2 LAYERS VP					

TUBE | HL007 | IMPREGNATION | WAX

CURE | .6 X .6 NW - WITH U BAND 2 X 2
very light.



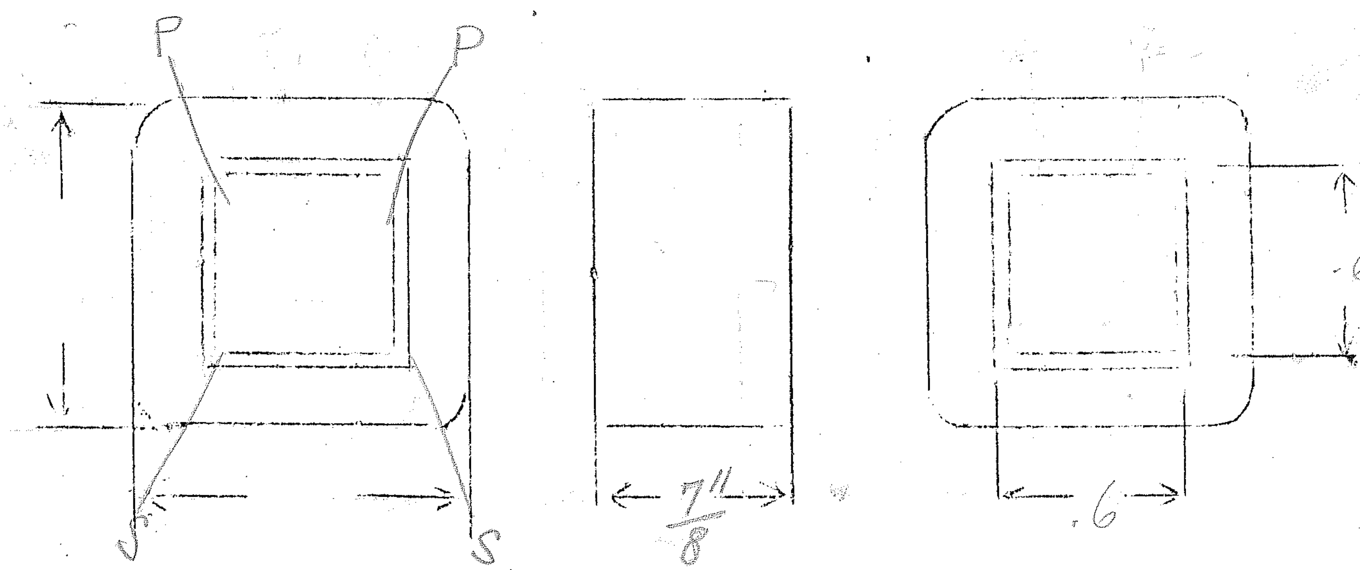
AMERICAN MICROPHONE CO

CONDENSER MIKE

SPEC. NO. 583

Winding	SEC	PRI					
Turns	640	8					
Taps	NONE	NONE					
Wind. Lgth.	3/4"	3/4"					
Wire Size	#34	#14					
T.P.L.							
Kind Term.	Sil. Br.	WIRE ONLY					
Term. Lgth.	3"	3"					
Layer Insul.	16 #GP						
Wrapper	2L0050A	2L0050A					

TUBE	4L007	IMPREGNATION	WAX
CURE	.6 x .6 NW — IRON ONLY — NO BAND		



i 117.5
5 C.T. .075 A.
V. - 2 A.
3 V. - 1.85 A.

3.1

Emerson
8 DT - 584 A
8 DT - 584

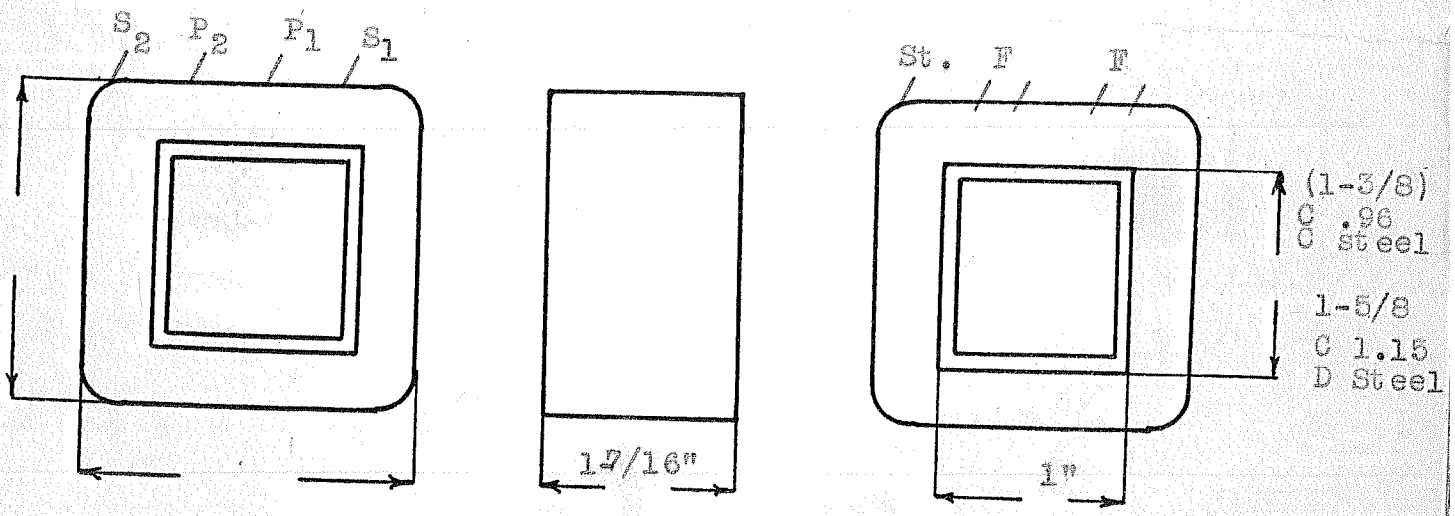
SPEC. NO.

Winding	SEC	SHIELD	PRI	FIL	FIL		
Turns	2000	1	364	18	22		
Taps	1000	-	-				
Wind. Lgth.	1¼	1¼	1¼	1¼	1¼		
Wire Size	#33	.002 CU	#23	#21	#21		
T. P. L.	143-14	1	46-8	1L	1L		
Finish							
Type Lead	see drawing	SB	See Dwg.	See Dwg.	See Dwg.	(8 DT -554) (8 DT -584 (8 DT -584A)	
Lead Lgth.	"		"	"	"		
Layer Insul.	20# G		50# C				
Test Volt.							
Wrapper	1L.003VC 3L.50#C	3L.50#G	3L.00J GK	3L.005" GK	2L.005 GA		

TUBE	6L.007" GK	IMPREGNATION	VARNISH

CORE 1 x GA. 24/26 GRADE d 1.15/c .96 STACK 2 x 2

MOUNTING



DESIGNED BY DLJ

DATE 6/26/40

I am returning a design which someone in LA made up. This design is impossible in that lamination could not be stacked into the coil. If this is an example of how the newly prepared charts work out I think it would be a good idea for me to examine those charts.

Weaver

200 ohm (single button mike) to grid

See # 7490

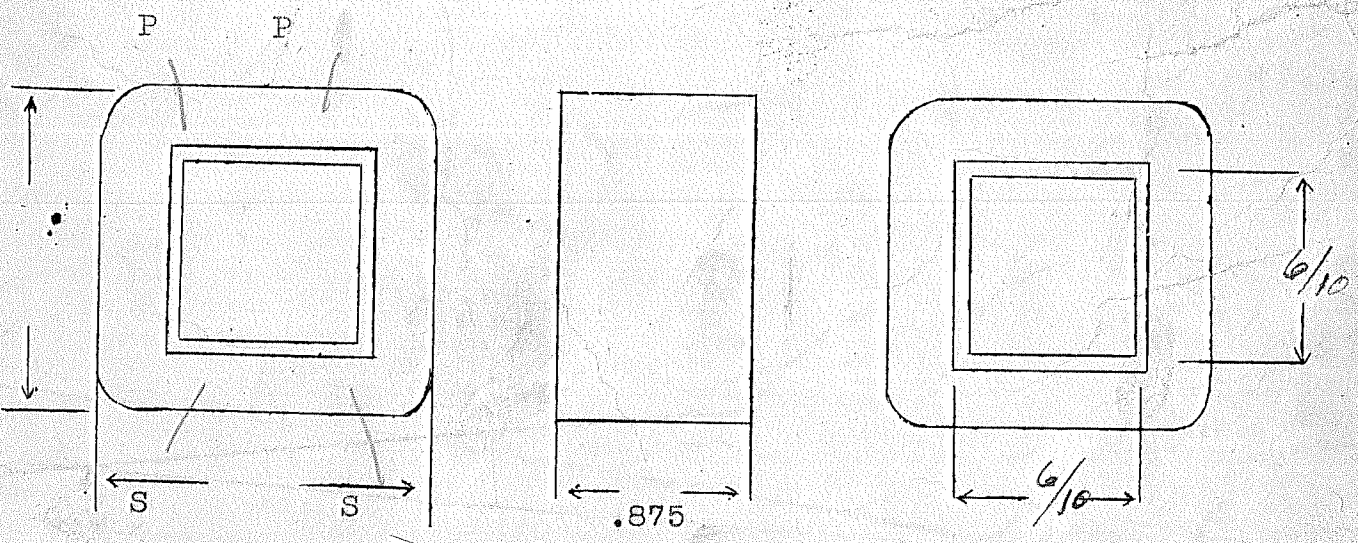
OLD

SPEC. NO. D584

Winding	SEC	PRI					
Turns	7900	355					
Taps	—	—					
Wind. Lgth.	.75	.75					
Wire Size	#40E	#34					
T.P.L.	190-42	90-4					
Kind Term.	Sil Br	Sil Br					
Term. Lgth.	3"	3"					
Layer Insul.	12#	16#					
Test Volt.							
Wrapper	1L003VP	2L005GA					

TUBE	4L007	IMPREGNATION	WAX
CORE	.6 x .6	29-B — 2x2	PRIMARY V.A.
MOUNTING	D		

Wire Net .219 (



DESIGNED BY G.W. DATE

Cathode Modulation Transf.

6F6
7000 W Primary

425 list
6 watt

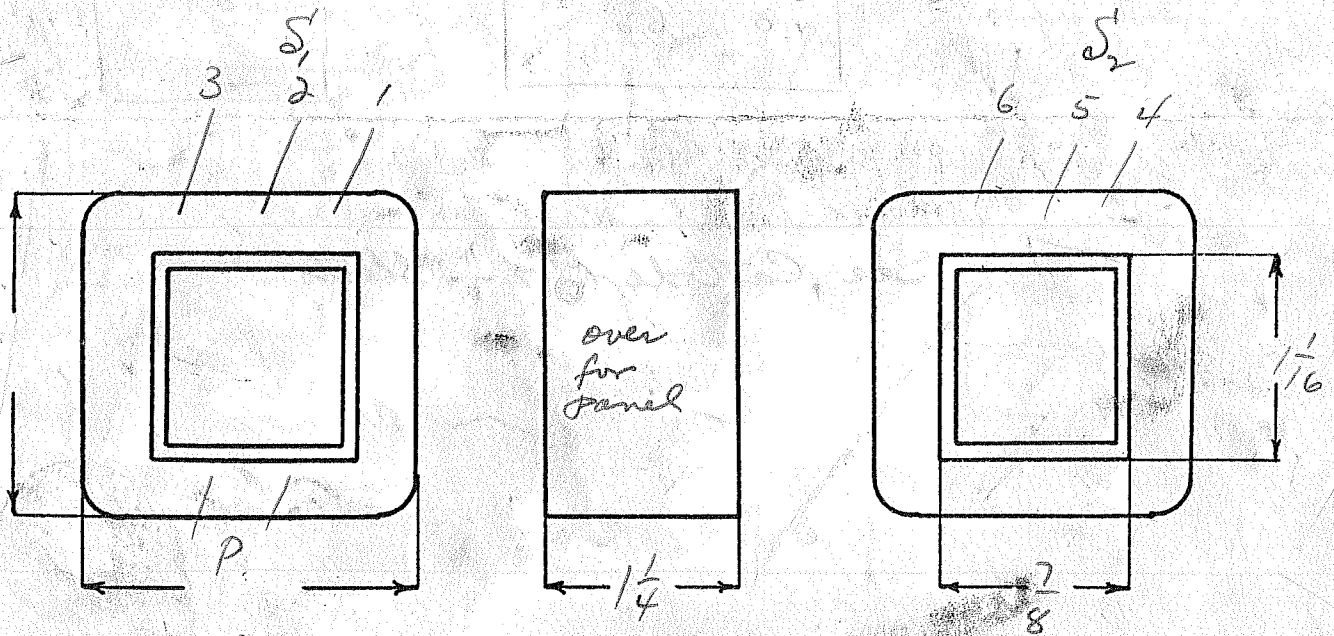
SPEC. NO. S-585

Winding	P	S_1	S_2				
Turns	1740	437 / 28	720				
Taps		312 / 20	240 / 16				
Wind. Lgth.	1 1/16	~	~				
Wire Size	#36	#29	#29				
T. P. L.	174-10	80-6	80-9				
Finish							
Type Lead	Sil Br.	w. o.	w. o.				
Lead Lgth.							
Layer Insul.	20#	30#	30#				
Test Volt.	2500	-					
Wrapper	1L 007 VC	1L 005 VC	1L 005 GA				

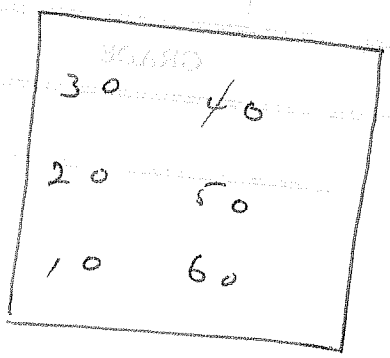
TUBE	6L 007	IMPREGNATION	Varnish over laminations

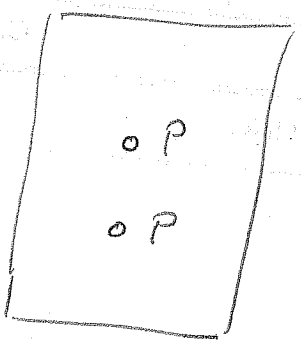
CORE GA. 24 GRADE STACK .005" gap

MOUNTING F



DESIGNED BY G.W. DATE 9-28-39





See Cathode Mod 3 Sheets.

catalog

AMERICAN MICROPHONE CO

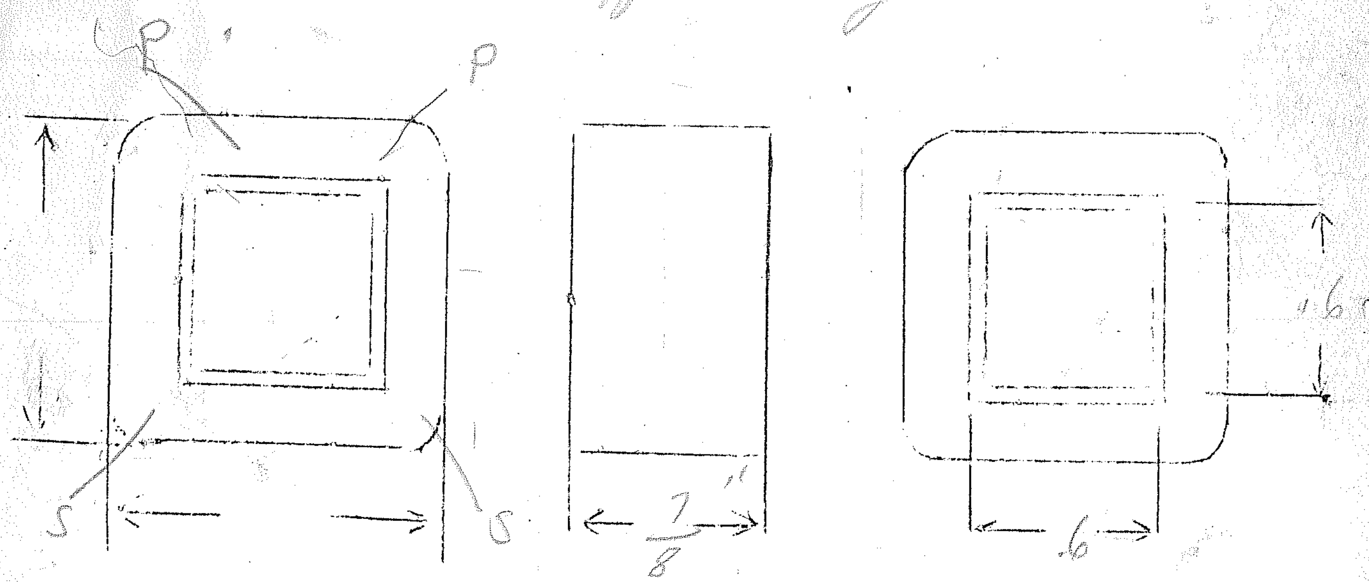
CONDENSER MIKE – 200 Ω line

SPEC. NO. 585

Winding	SEC	PRI					
Turns	930	15					
Taps	—	—					
Wind. Lgth.	.75	.75					
Wire Size	#34	#20					
T.P.L.	93-10	15					
Kind Term.	S/I. BR	WIRE ONLY					
Term. Lgth.	3"	3"					
Layer Insul.	16 # Gl						
Wrapper	2L0056A	2L0056A					

TUBE	4L007	IMPREGNATION	
CURE	.6X6 NW-29D IRON ONLY – NO BAND		

leave off sleeving



Cathode Mod. Transformer. # 525 list 20 Watt Copy

PP 6F6, 6V6, or 6A3

(10,000 or 5,000 Ω)

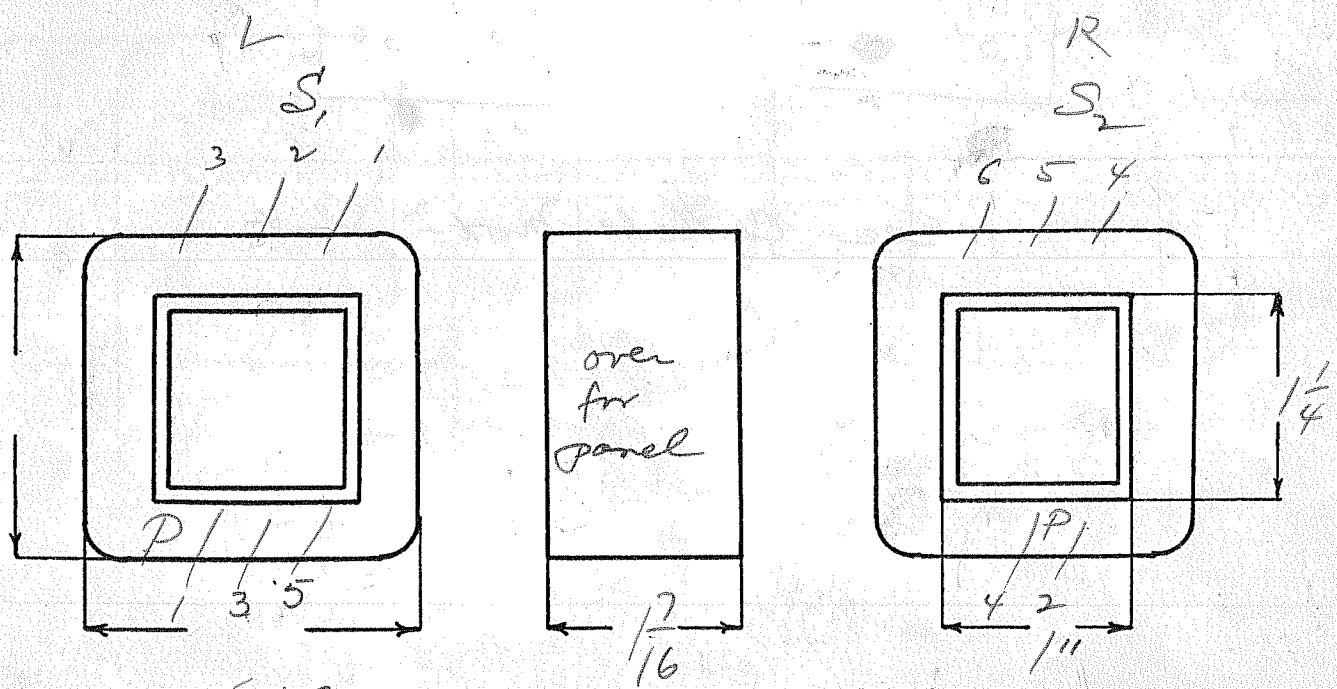
SPEC. NO. S-586

Winding	P		S_1	S_2			
Turns	2100		420 (3)	700 (6)			
Taps	175-1050-1925		300 (2)	245 (5)			
Wind. Lgth.	1¼		(1)	(4)			
Wire Size	#35		#27	#27			
T. P. L.	175-12		75-6	75-10			
Finish							
Type Lead	Sil Bz.		W.O	W.O	Pull S taps twice		
Lead Lgth.	6"		6"	6"			
Layer Insul.	20#		30#	30#			
Test Volt.							
Wrapper	1L 007 Ve		1L 007 Ve	1L 005 Ve 2L 005 GA			

TUBE 6L 007 IMPREGNATION Varnish over laminations

CORE GA. 24 GRADE D STACK .005" gap

MOUNTING F



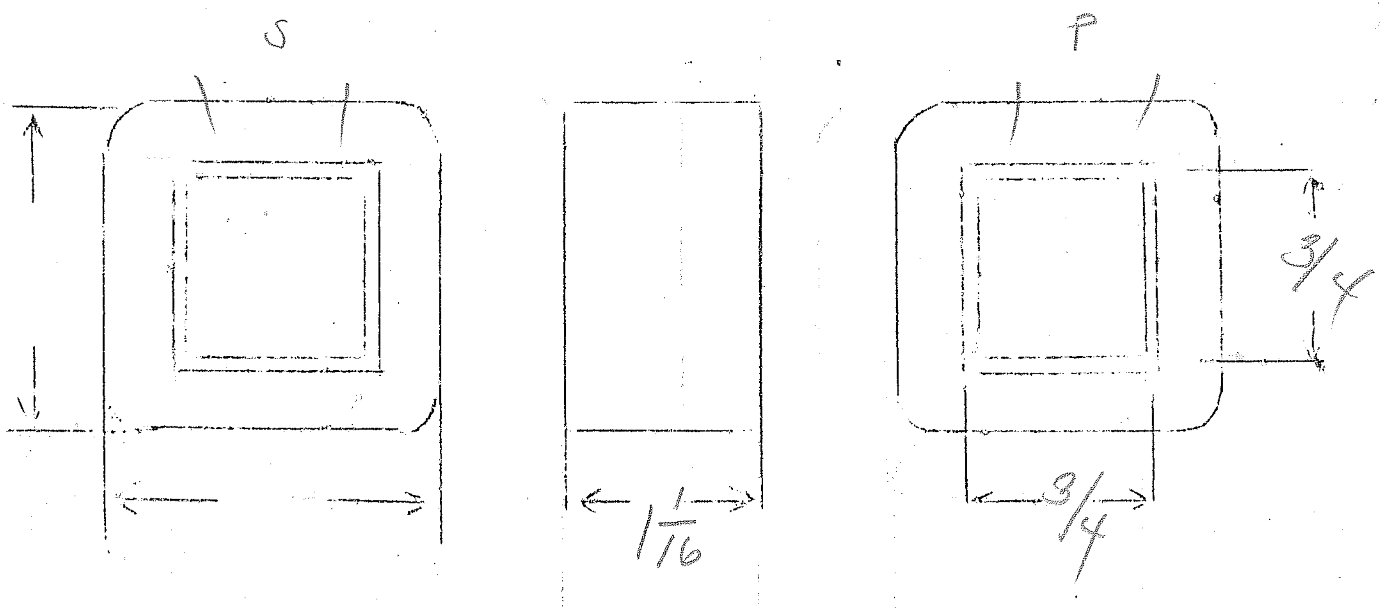
DESIGNED BY G.W. DATE 4/1/39

50 Ω — grid
Am. Micr. Co

SPEC. NO. 586

Winding	SEC	PRI					
Turns	8400	190					
Taps	—	—					
Wind. Lgth.	15/16	15/16					
Wire Size	#41	#29					
T.P.L.	290	70					
Kind Term.	S11 BR	S11 BR					
Term. Lgth.	3"	3"					
Layer Insul.	16#	30#					
Wrapper	2L003VP	2L005GA					

TUBE	4L007	IMPREGNATION	wax
CURE	3/4 x 3/4 audio (99)		

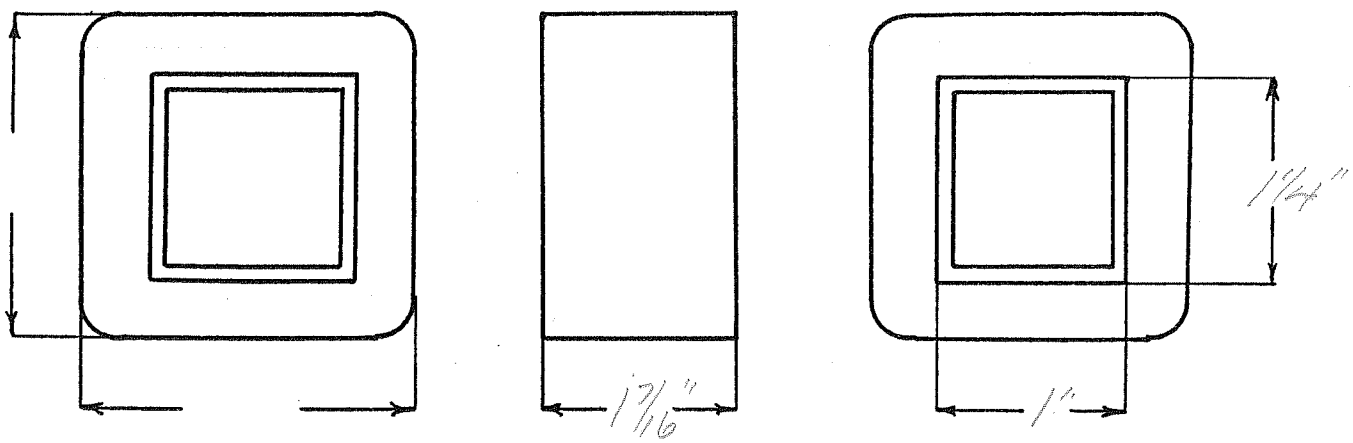


Cathode Modulation
PP6F6, 6V6 or 6A3
(10,000 w or 5000 w)

SPEC. NO. S-586

Winding		Pri		Sec		Sec	
Turns		2100		420		740	
Taps	175-	1050 -	1925	300		245	
Wind. Lgth.		1¼		1¼		1¼	
Wire Size		#35		#27		#27	
T. P. L.		175-12		75-6		75-10	
Finish							
Type Lead		S.I.B.K.		W.O.		W.O.	
Lead Lgth.		6"		6"		6"	
Layer Insul.		12 ~~20#~~		12 30#'s		12 30#'s	
Test Volt.							
Wrapper		12 007VC		12 007VC		12-005VC 24-005G.A	

TUBE	6L-007"GK	IMPREGNATION	Double Varnish
CORE	GA. 24	GRADE D	STACK .005 gage
MOUNTING	E		



DESIGNED BY GW

DATE 11-1-39

Cathode Mod'n Transformer
OP 6L6 (5500 or 3800)

#65 list
50 watt

Copy

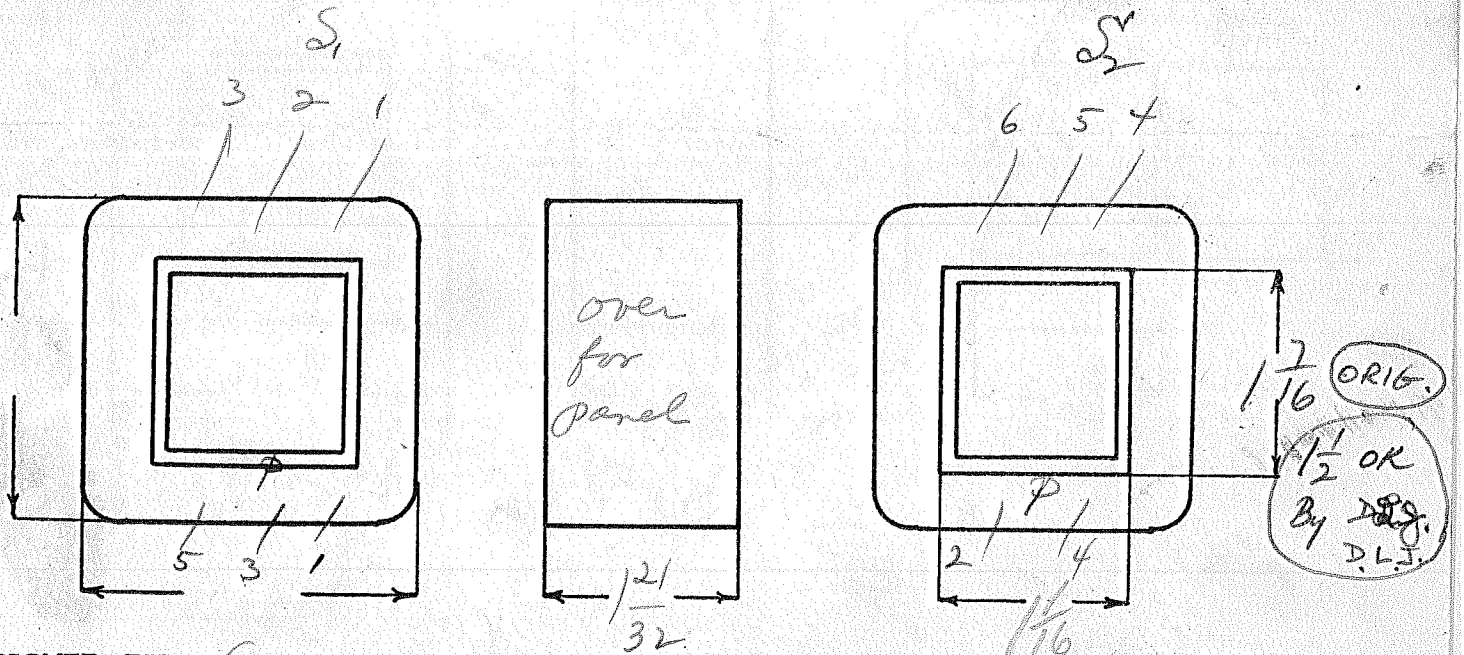
SPEC. NO. S-587

Winding	P		S_1	S_2			
Turns	1650		460	735			
Taps	150-825-1500		330	268			
Wind. Lgth.	$1\frac{7}{16}$						
Wire Size	#32		#25	#25			
T. P. L.	150-12		60-7	67-11			
Finish							
Type Lead	Sil Br.		N.O	N.O			
Lead Lgth.	4"		4"	4"			
Layer Insul.	30#		50#	50#			
Test Volt.							
Wrapper	2L 005 VC		1L 007 VC	1L 005 VC 2L 005 GA			

TUBE 6L 007 IMPREGNATION Varnish over laminations

CORE GA. 24 GRADE D STACK .005 gap

MOUNTING F



DESIGNED BY GM 11/1/39 DATE /-

200 v — 50 v line

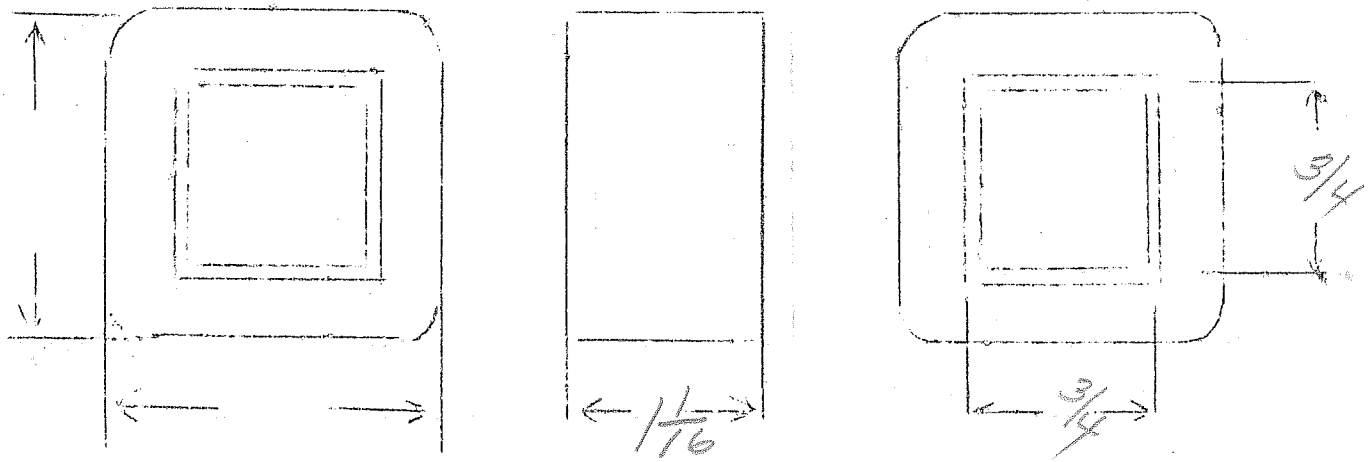
Am. Mic. Co.

SPEC. NO. 587

Winding	PRI	SEC					
Turns	600	310					
Taps	—	—					
Wind. Lgth.	15/16	15/16					
Wire Size	29	29					
T.P.L.	70	70					
Kind Term.	S/B	S/B					
Term. Lgth.	3"	3"					
Layer Insul.	30#	30#					
Wrapper	2L003VPI L005PA						

TUBE	4L007	IMPREGNATION	Wax
CURE	3/4 x 3/4 Audia		

Hadley



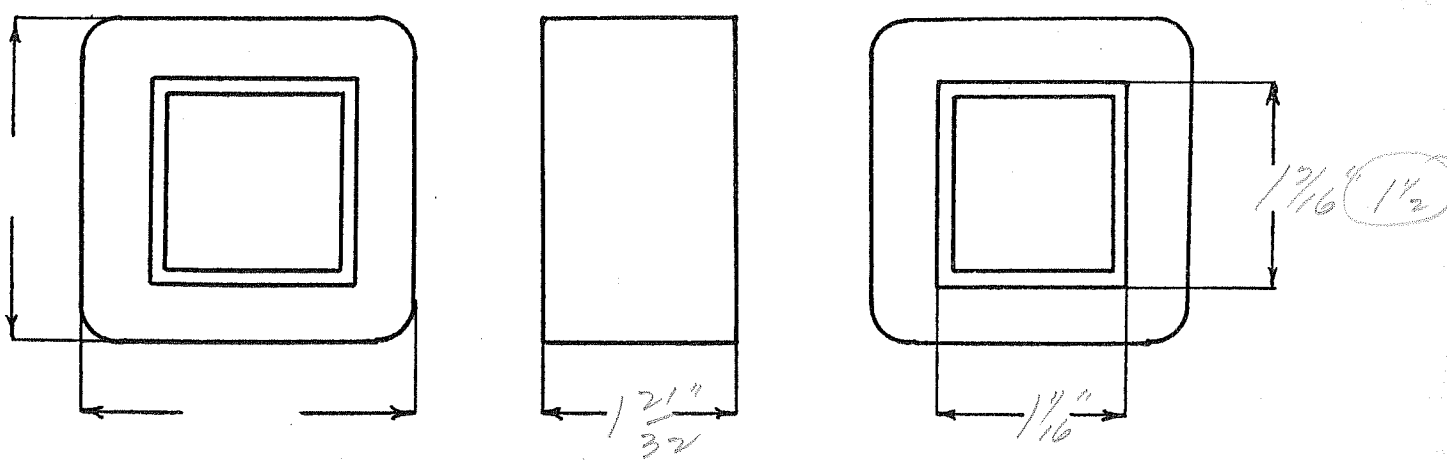
Cath. Modulation Transf

PP 626

5800 or 3840W

SPEC. NO. S-587

Winding		Pri		Sec		Sec	
Turns		1650		460		735	
Taps	150-	825-1500		330		268	
Wind. Lgth.		1 3/16"		1 3/16"		1 3/16"	
Wire Size		#32		#25		#25	
T. P. L.		150-12		67-7		67-11	
Finish							
Type Lead		S.I. Br.		W. O.		W. O.	
Lead Lgth.		4"		4"		4"	
Layer Insul.		12 .5 Mil		12 .5 Mil		12 .5 Mil	
Test Volt.							
Wrapper		2L .005 VC		1L .007 VC		1L-.005 VC 2L-.005 GA	
TUBE	6L-007 GA			IMPREGNATION		Double Varnished	
CORE		GA. 24		GRADE D		STACK .005 Soft	
MOUNTING E							



DESIGNED BY GW

DATE 11-1-39

MODULATION

STOCK

P-P 6N7 or 6A6 (10,000 ohms CT)
to
3000 - 5000 - 9000 ohms
10 watts

SPEC. NO. S-588-D

Winding		1-2-3 Pri.		4-5-6-7 Sec.			
Turns		2040		1830			
Taps		1020		1120-1445			
Wind. Lgth.		7/8		7/8			
Wire Size		#35		#33			
T. P. L.		128-16L		102-19L			
Finish		89%		91%			
Type Lead		~~Silver Braid~~ #22 DuLAC		~~Silver Braid~~ #22 DuLAC			
Lead Lgth.		9" from Coil		9" from Coil			
Layer Insul.		20#		20#			
Test Volt.		2000		2000			
Wrapper		.114 1L007VC		.167 2L005GA			

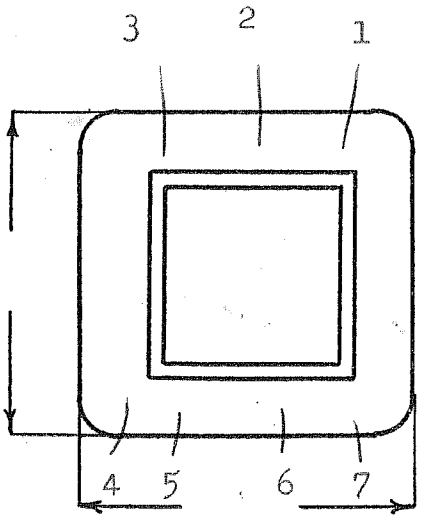
TUBE	4L007GK plus 1L003VG	IMPREGNATION	Varnish

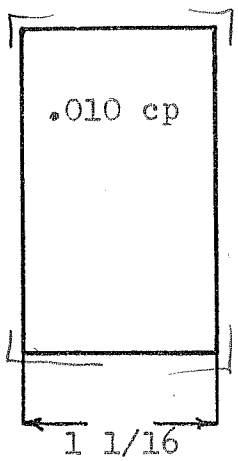
CORE 3/4 x 3/4 GA. 29 GRADE B STACK Butt .002 Gap

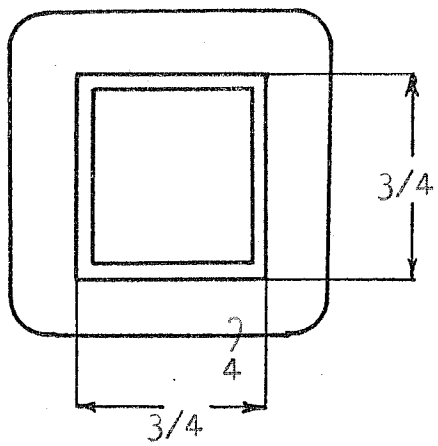
MOUNTING D - ~~Lugs~~ Leads Armite Keepers

Stack so laminations & keepers fit in D bracket

T. P. V. —
window - .339/.375 = 90.4%







DESIGNED BY Rewritten F. F.

DATE

DESIGN AND TEST DATA

Rating:

Z = 10,000 - 8,000 - 5,000 - 3,000
Zr = 3.333 - 2.667 - 1.667 - 1.000
Tr = 1.825 - 1.633 - 1.291 - 1.000
T = 2040 - 1830 - 1445 - 1120

Winding		Pri.		Sec.			
Mean Turn		3.66		4.71			
Resistance 25° c		209		152			
Pounds Copper		.061		.112			
Copper Density							
Ratio Volts		73-73		90.8-117.2-148.3			
Test to Ground		2000		2000			

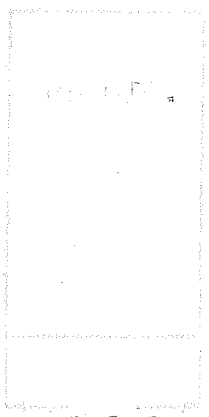
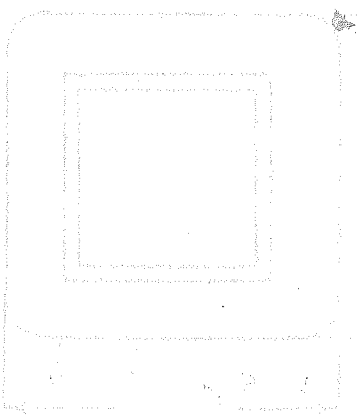
Iron Induction _____ @ _____ Cycles _____

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:

1 Brown
2 Red
3 Blue
4 Black
5 Green
6 Yellow
7 White

OUTPUT — PRI — 5000 ohm C.T. 65 Ma peak 22 ma normal

SEC — 2 ohm, 500 ohm

Power Level — 25 Watts Class "AB"

$R_{(P-S_1)} = 3.16$

$R_{(P-S_2)} = 50$

Golden Bear

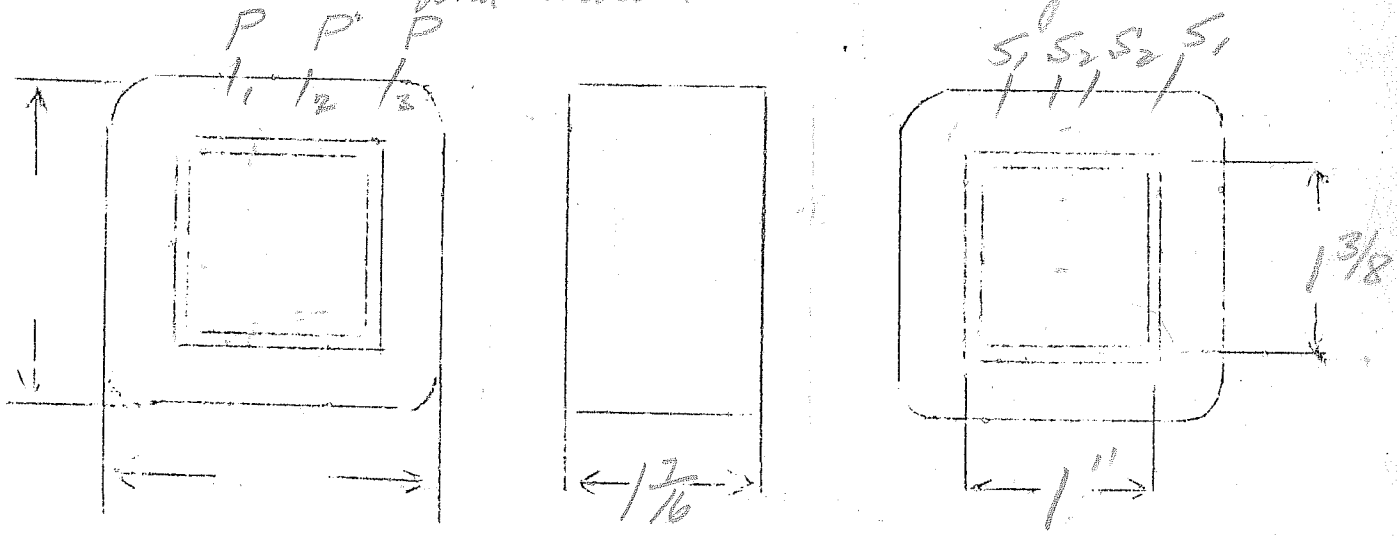
SPEC. NO. 589

Winding	PRI	SEC.	SEC.				
Turns	3600	1140	72				
Taps	1800	NONE	NONE				
Wind. Lgth.	1.25	1.25	1.25				
Wire Size	#35	#31	#18				
T.P.L.	182-20	116-10	25-3				
Kind Term.	#20 PBR	#20 PBR	WIRE ONLY				
Term. Lgth.	9"	9"	9"				
Layer Insul.	30#	30#					
Wrapper	3L003VO	2L005GA	2L005GA				

TUBE | 4L007 | IMPREGNATION | VARNISH-WAX

CURE | 1X1 3/8 (1"NW 29G AUDIO) .005 gap

Mtd. Mount - leads out grommets



INPUT — Single 42(A) to Push Pull 42 (AB)

RATIO 1-1

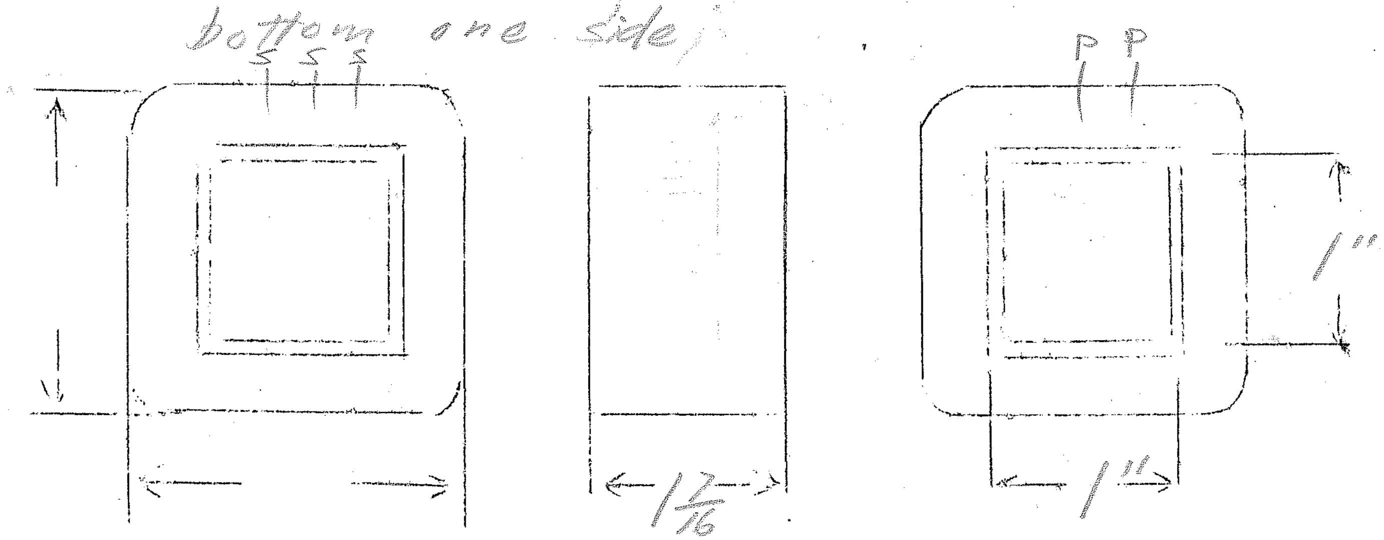
Golden Bear SPEC. NO. 590

Winding	PRI	SEC					
Turns	2240	4480					
Taps	NONE	2240					
Wind. Lgth.	1.25	1.25					
Wire Size	#32	#34					
T.P.L.	125-18	161-28					
Kind Term.	#20 P.BR	#20 P.BR					
Term. Lgth.	9"	9"					
Layer Insul.	20#	20#					
Wrapper	3L003VP	2L005G					

TUBE | 4L007 | IMPREGNATION | VARNISH-WAX

CURE | 1" x 1" (1" N.W. 296. AUDIO) .005" gap stack

standard Und. Mount - Leads out bottom one side



PRI — 10,000Ω P-P — 65 ma per tube   RADIO SUPPLY
SEC — 4000Ω — 150 Ma (MODULATOR)

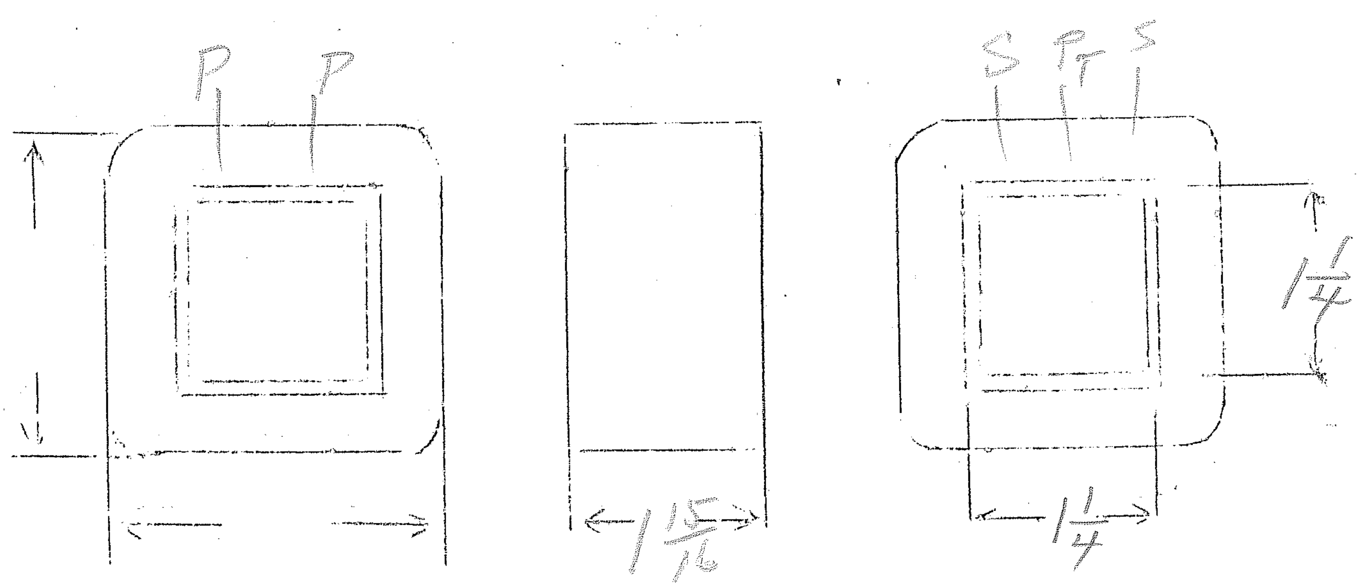
OUTPUT — 2 CLASS B 801A

SPEC. NO. 591

RATIO = 1.58

Winding	PRI		SEC				
Turns	3200		2000				
Taps	1600		NONE				
Wind. Lgth.	1.75		1.75				
Wire Size	#34E		#31				
T.P.L.	229-14		160-32				
Kind Term.	#20 P.B.R		#20 P.B.R				
Term. Lgth.	9"		9"				
Layer Insul.	20#		30#				
Wrapper	2L005VC		2L0056A				

TUBE	4L007	**IMPREGNATION**	VARNISH — WAX
CURE	1 1/4 x 1 1/4		



P.P. 2A3 plates to two 203A, 211, or 242A Class B grids.

OLD

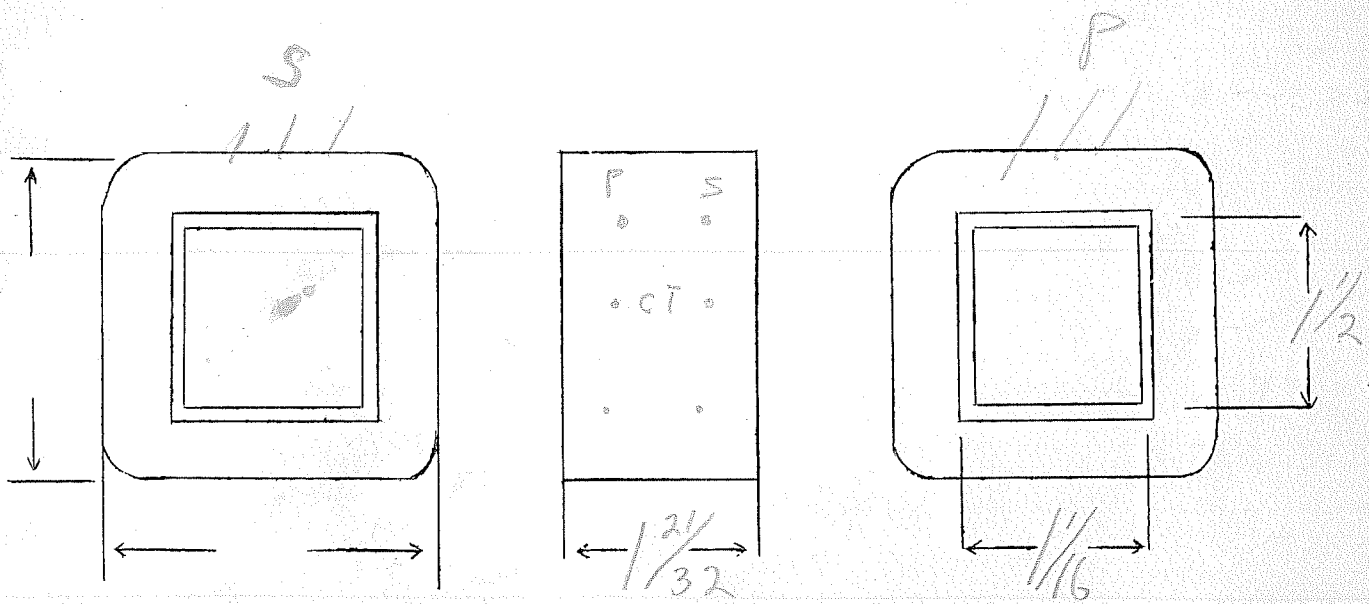
SPEC. NO. 3592

Winding	P	S					
Turns	2720	3120					
Taps	1410	1560					
Wind. Lgth.	1 15/32	″					
Wire Size	#33	#30					
T.P.L.	171-16	120-26					
Kind Term.	#20 Tin Br	Pn Br					
Term. Lgth.	3½″	3½″					
Layer Insul.	30 #	30 #					
Test Volt.	1250	2500					
Wrapper	2L007VC 4LGP	2L005GH					

TUBE 7L007GK | IMPREGNATION VARNISH

CORE 1⅛X1½ 296a B 2X2 | PRIMARY V.A.

MOUNTING A OR F



DESIGNED BY G. W. DATE

P.P. 2A3 to - 805, 838, 808

P: $\frac{1}{2}$S = 3.2

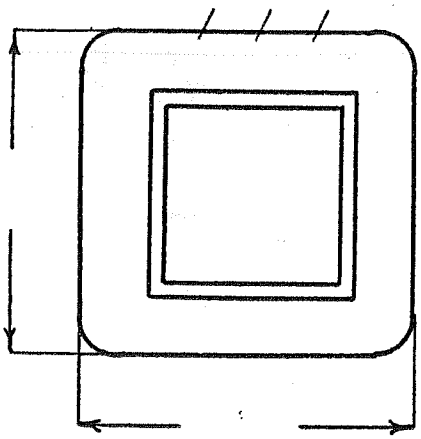
SPEC. NO. S-593

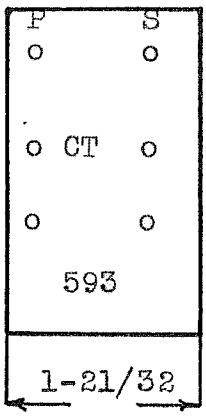
Winding	P	S					
Turns	4660	2900					
Taps	2330	1450					
Wind. Lgth.	1-15/32	1-15/32					
Wire Size	#34	#31					
T. P. L.	195-24	145-20					
Finish							
Type Lead	Sil.	Br.					
Lead Lgth.	6"	6"					
Layer Insul.	40#	40#					
Test Volt.							
Wrapper	1L007VC 5LG1	2L005GA					

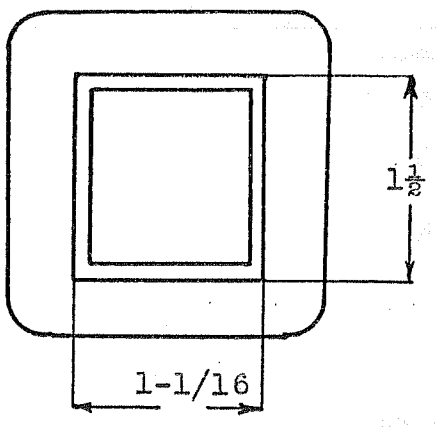
TUBE	7L007	IMPREGNATION	VARNISH

CORE 1-1/16 x 1-1/2 GA. 29 GRADE B STACK 2 x 2

MOUNTING F







DESIGNED BY GW

DATE 6/22/38

INTERCOM

SEC - 100,000 GRID

PRI #1 200 Ω

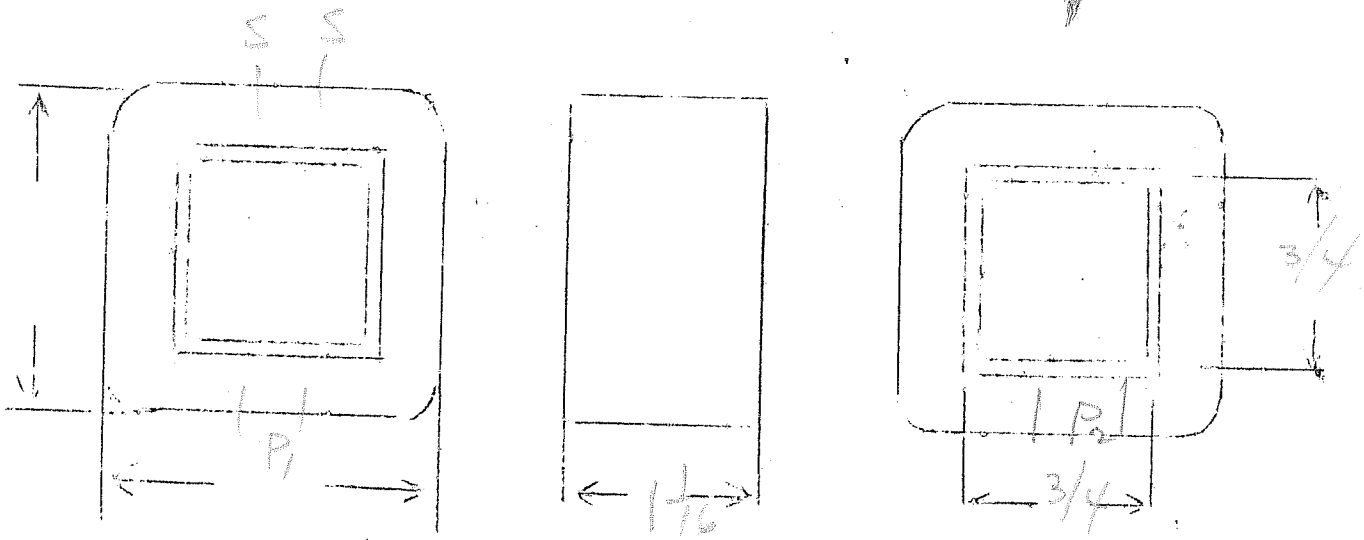
PRI #2 4 Ω

SPEC. NO. 593

Winding	SEC	PRI 1	PRI 2				
Turns	8400	370	23				
Taps	4200	—	—				
Wind. Lgth.	15/16	—	—				
Wire Size	#40	#32	#23				
T.P.L.	236-36						
Kind Term.	SIL BR	SIL BR.	WIRE				
Term. Lgth.	3"	3"	3"				
Layer Insul.	16 #AP	30 #AP					
Wrapper	2 LAM 5GA	2 LAM 5GA	2 LAM 5GA				

TUBE | 4L007 | IMPREGNATION | WAX

CURE | 3/4 x 3/4 | 295 - AUDIO | 2 x 2 STACK



Universal Class B Input - P.P. 2A3 to Tapped Sec.
P/½S. = 1.0, 1.3, 1.7, 2.2

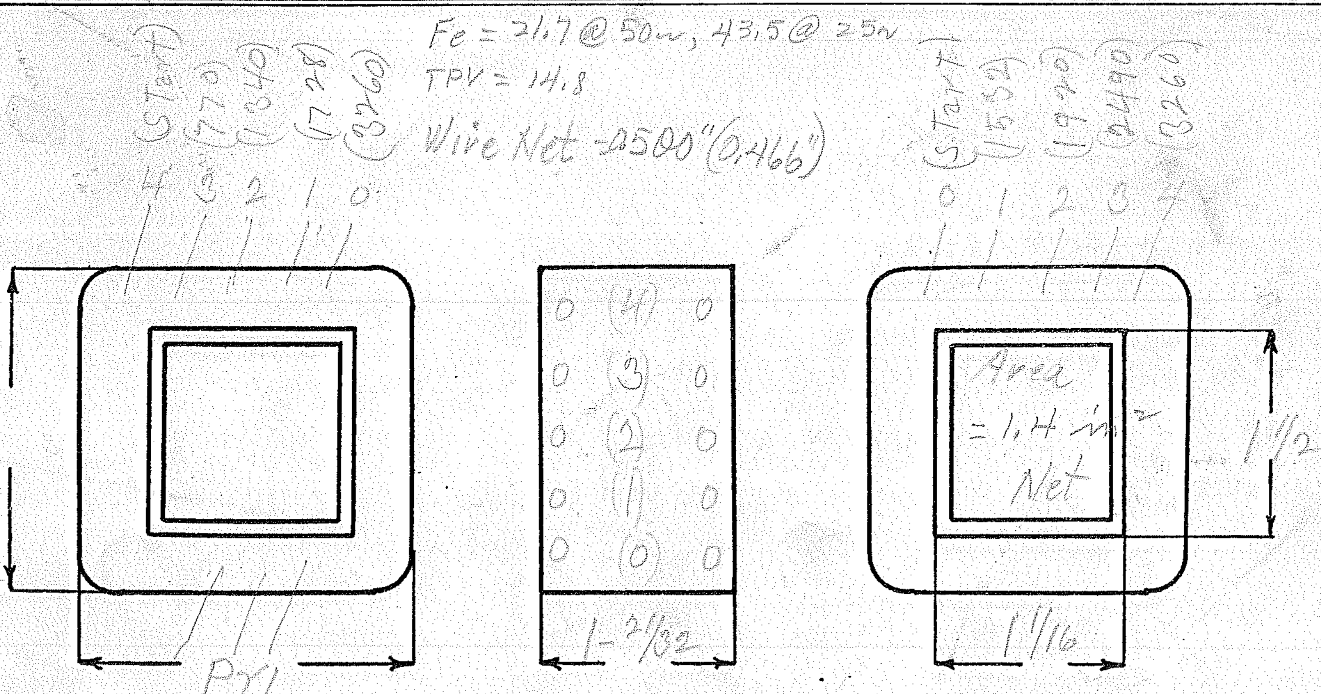
SPEC. NO. S 594

Winding	Sec.₁		Pri	Sec.₂			
Turns	3260		3300	3260			
Taps	1340 - 1728 0 - 770		1650	1920 - 2490 0 - 1532			
Wind. Lgth.	1-15/32		1-15/32	1-15/32			
Wire Size	#34		#33	#34			
T. P. L.	192-17		165-20	192-17			
~~Finish~~ Pitch	89%		86½%	89%			
Type Lead	Sil. Br.		Sil. Br.	Sil. Br.			
Lead Lgth.	4"		4"	4"			
Layer Insul.	30#		30#	30#			
Test Volt.	2500		2500	2500			
Wrapper	1 L007VC 4LG1		1L007VC 4LG1	2L005GA			

TUBE	7L007GK	IMPREGNATION	Varnish

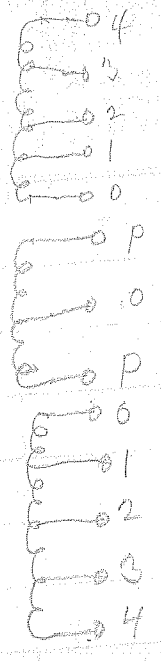
CORE 1 1/16 X 1 1/2 GA. 29 GRADE B STACK 2X2

MOUNTING F



Re DESIGNED BY W.McL
orig. G.W.

DATE 6/3/41
5/7/38


4
3
2
1
0
P
O
P
0
1
2
3
4

Universal Class B input - P.P. 2A3 to tapped sec.

P/½S = 1.0, 1.3, 1.7, 2.2

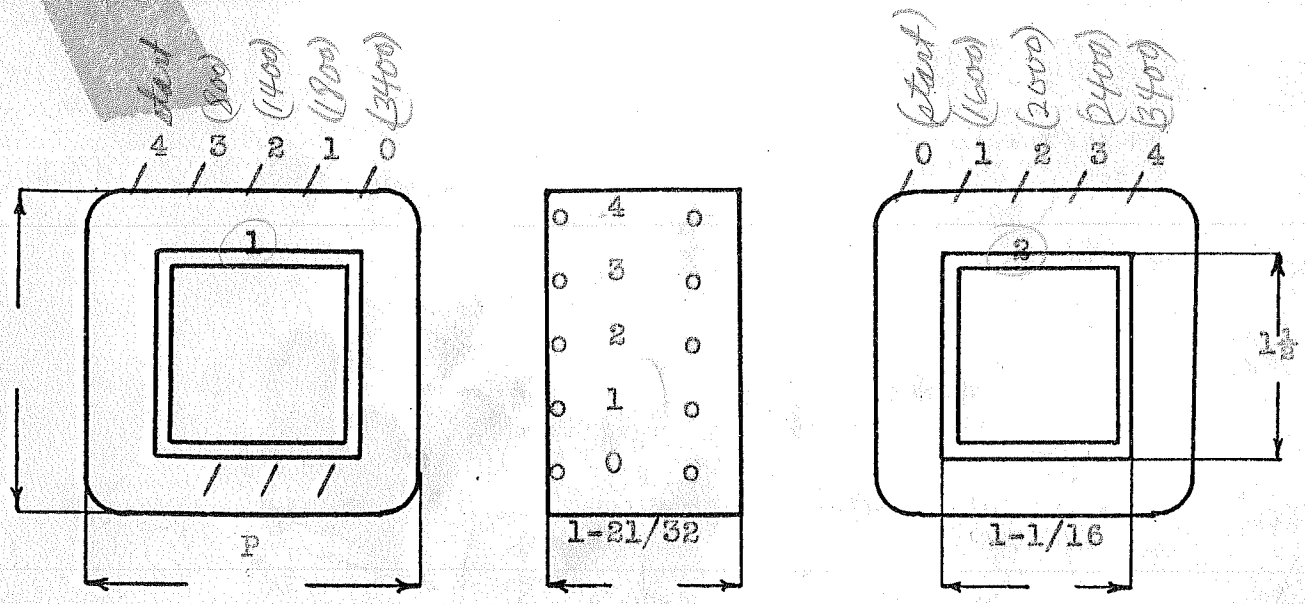
SPEC. NO. S-594

Winding	SEC_1		PRI	SEC_2			
Turns	3400		3400	3400			
Taps	0-800-1400-1800		1700	2600-2000-1600-0			
Wind. Lgth.	1-15/32						
Wire Size	#34		#33	#34			
T. P. L.	192-18		165-22	192-18			
Finish							
Type Lead	Sil. Br.						
Lead Lgth.	4"		4"	4"			
Layer Insul.	30#		30#	30#			
Test Volt.							
Wrapper	1L007VC 4LG1		1L007VC 4LG1	2L005GA			

Obsolete

TUBE	7L007	IMPREGNATION	VARNISH
CORE	GA. 29	GRADE B	STACK 2 x 2
MOUNTING F			

Finish into position



DESIGNED BY GW

DATE 5/7/38

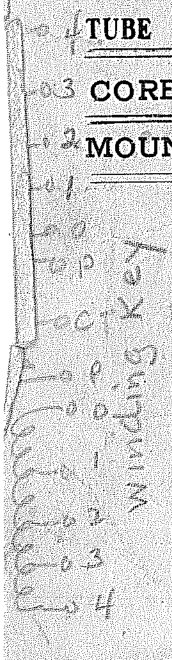
Universal Class B Input – RP2A3 to various

P/½ sec – 2.8, 3.6, 4.7, 6.0 OLD

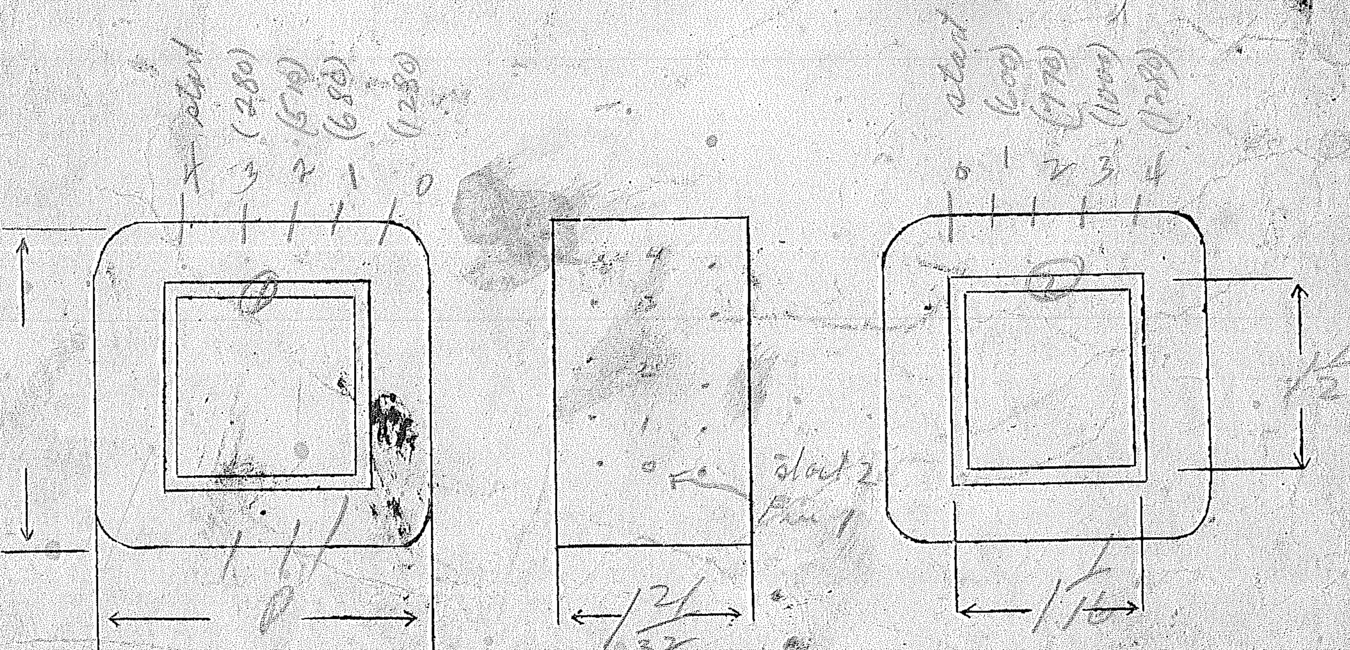
SPEC. NO. 5595

Winding	SEC 1		PRI	SEC 2			
Turns	1280		3600	1280			
Taps	680-510-280		1800	600-770-1000			
Wind. Lgth.	1 15/32		1 15/32				
Wire Size	#33		#33	33			
T.P.L.	165-104		165-22	165-10			
Kind Term.	Sil Br						
Term. Lgth.	6"		6				
Layer Insul.	30#		30#				
Test Volt.	2500		2500	–			
Wrapper	1400 TVC 4 1/2		1400 TVC 4 1/2	2400 SGA			

TUBE	7007	IMPREGNATION	VARNISH
CORE	21 A-B-2x2	PRIMARY V.A.	
MOUNTING	F		



Spiral leads to position



DESIGNED BY Gw DATE 5/7/38

UNIVERSAL CLASS AB & B DRIVER

STOCK

P-P Par. 2A3's or 6L6's with feed back
30 watts
Ratio P/½S equals 1.5 - 2.0-2.5

SPEC. NO. D-596-F

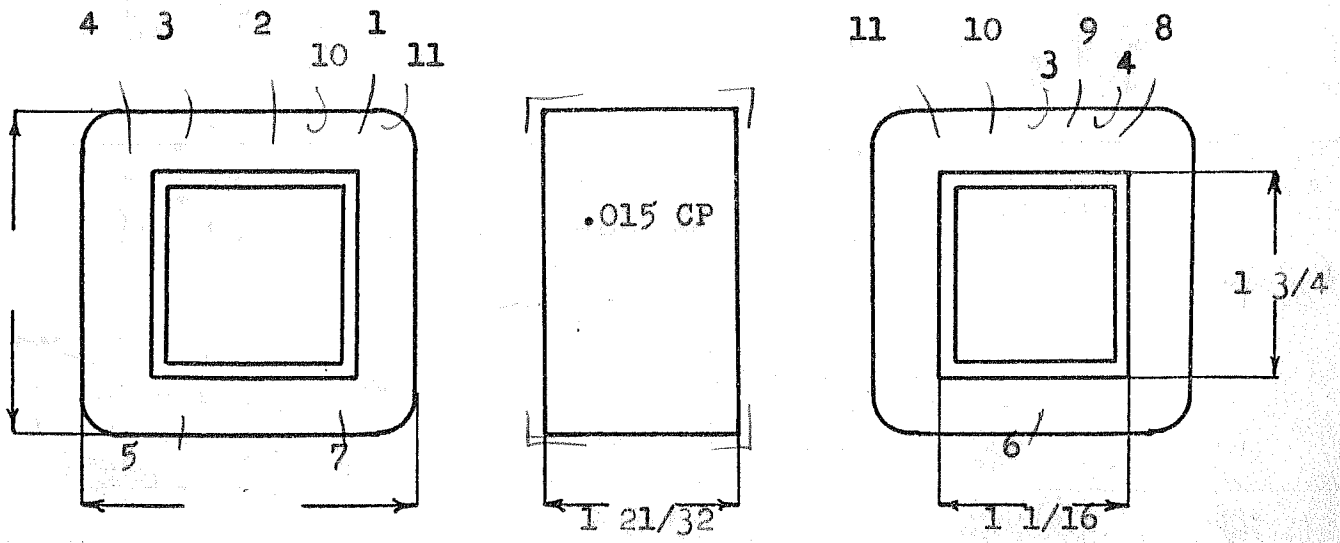
Winding		1-2-3-4 Sec #1		5-6-7 Pri.		8-9-10-11 Sec. #2	
Turns		707		1060		707	
Taps		177-282		530		425-530	
Wind. Lgth.		1 7/16		1 7/16		1 7/16	
Wire Size		#29		#29		#29	
T. P. L.		106-7L		106-10L		106-7L	
Finish		90%		90%		90%	
Type Lead		Silver Braid Vinyl Sl.		Silver Braid Vinyl Sl.		Silver Braid Vinyl Sl.	
Lead Lgth.		6"		6"		6"	
Layer Insul.		30#		30#		30#	
Test Volt.		2500		2500		2500	
Wrapper	2L005VC			2L005VC		2L007GA	

TUBE	7L007GK plus 1L003VP	IMPREGNATION	Varnish

CORE 1 1/16 x 1 3/4 GA. 29 GRADE B STACK Butt no gap

MOUNTING FF Armite Keepers

T. P. V. —
Window — .1430/.656 = 65.5%



DESIGNED BY F. Frazee DATE

DESIGN AND TEST DATA

Rating:

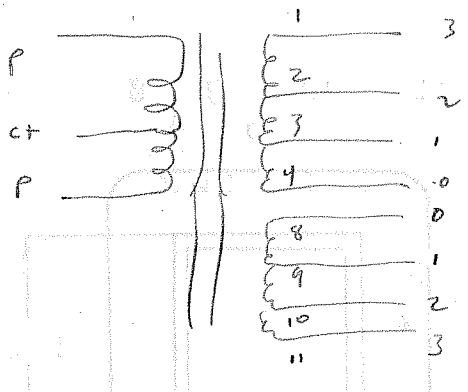
Winding	1-3-3-4 Sec #1		5-6-7 Pri.		8-9-10-11 Sec. #2		
Mean Turn	6.49		7.74		8.97		
Resistance 25° c	31.9		57.0		44.6		
Pounds Copper	.149		.367		.206		
Copper Density							
Ratio Volts	88.2-110-147		110-110		88.2-110-147		
Test to Ground	2500		2500		2500		

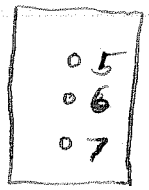
Iron Induction 8.0 kg @ 50 Cycles with 212 volts on 5-7

Exciting Current _____ amperes @ _____ volts 60 cycles on _____

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

Remarks:





1 = 2.5 : 1 Ratio

2 = 2.0 : 1 "

3 = 1.5 : 1 "

0 = ct

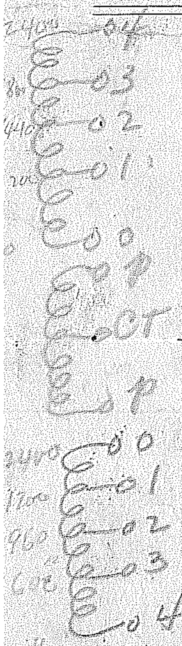
universal class B input — 00616 (Chinese feedback) OLD

P/½ S — 1.5, 2.0, 2.5, 3.0

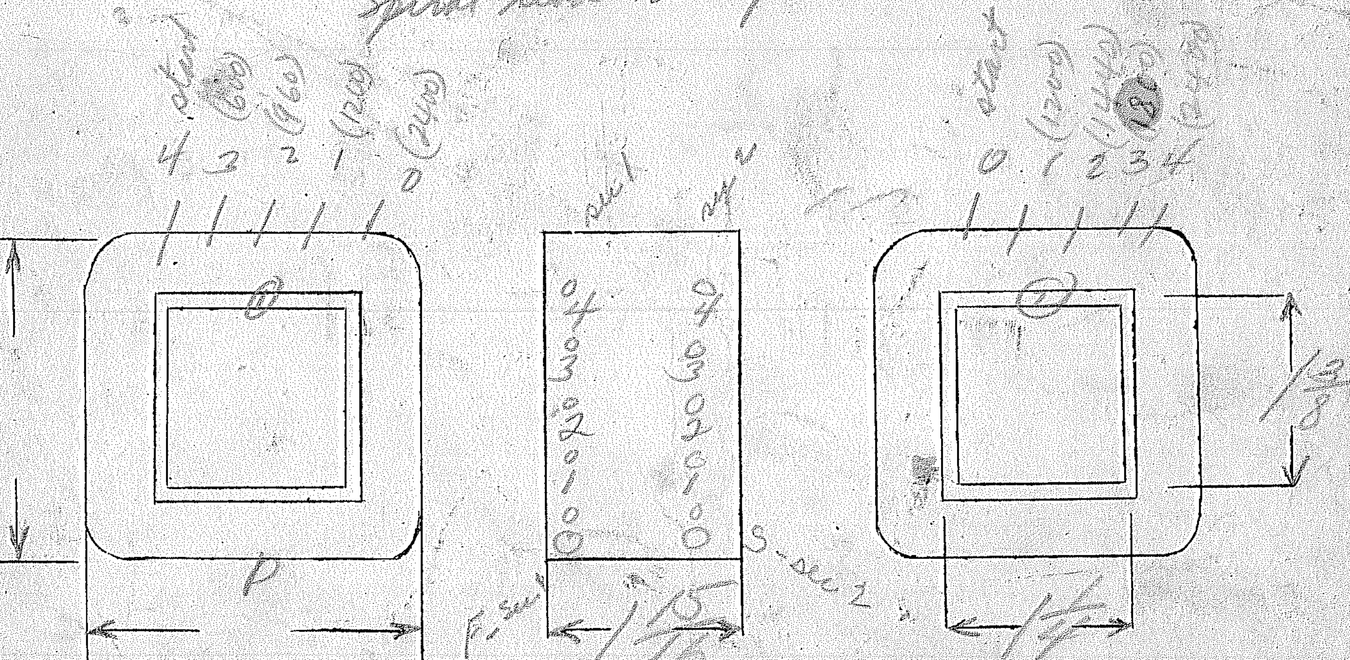
SPEC. NO. 5596

Winding	SEC1		PRI	SEC2			
Turns	2400		3600	2400			
Taps	600-960	-1200	1800	1800	-1440	-1200	
Wind. Lgth.	1.75		✓				
Wire Size	#31		#31	#31			
T.P.L.	180		180-20				
Kind Term.	Sil Braid						
Term. Lgth.	4"						
Layer Insul.	30#		30#	30#			
Test Volt.							
Wrapper	1600 VC 4H		1600 VC 4H	2600 VC 1			

TUBE	7L007	IMPREGNATION	Varnish
CORE	29 Ga - B Grade - 2X2	PRIMARY V.A.	
MOUNTING	F		



spiral leads into position



SIGNED BY Gw DATE 8/19/38

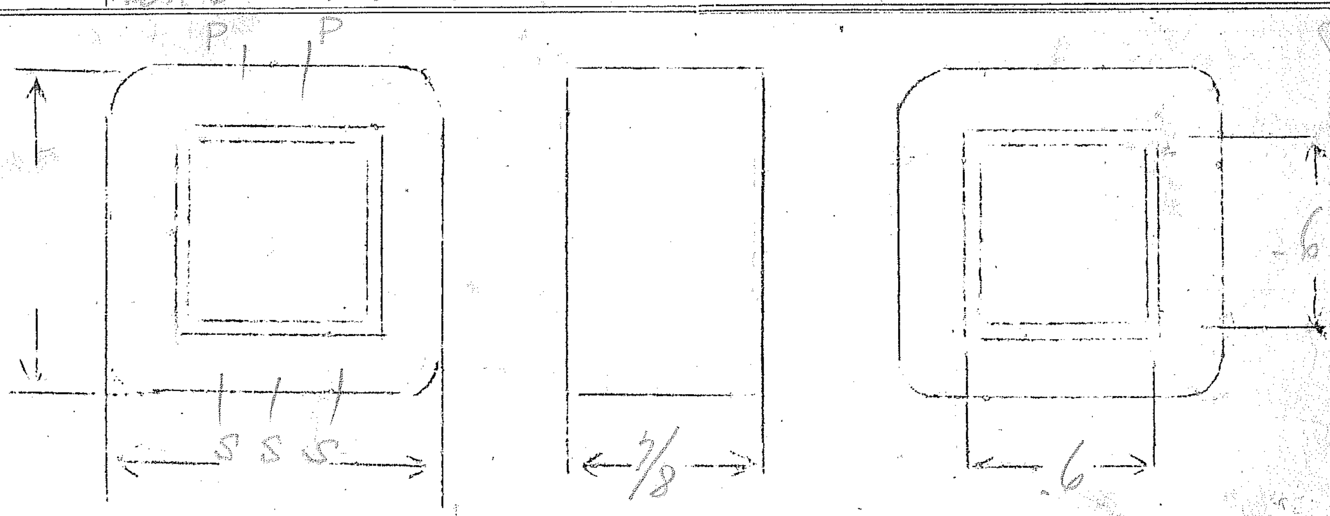
RADIO DOC

P.P. INPUT -

SPEC. NO. 597

Winding	PRI	SEC					
Turns	2200	5500					
Taps	—	2750					
Wind. Lgth.	3/4	3/4					
Wire Size	39	39					
T.P.L.	158	158					
Kind Term.	Sil Br	Sil Br					
Term. Lgth.	4"	4"					
Layer Insul	16#	16#					
Wrapper	2L005VP	2L005GA					

TUBE	4L007	IMPREGNATION	VARNISH & WAX
CURE	.6X.6 – 29GAUDIO – 2X2		



use panel, but no lugs. leads out

Receiver input
Plate + D Button Mike to grid

SPEC. NO. 598

Winding	PRI	SEC	PRI 2				
Turns	2600	6500	410				
Taps	—	3250	205				
Wind. Lgth.	3/4	3/4	3/4				
Wire Size	40	40	33				
T.P.L.	225-12	225-34	70-6				
Kind Term.	S/I Br	S/I Br	S/I Br				
Term. Lgth.	3"	3"	3"				
Layer Insul.	16#	16#	20#				
Wrapper	LL005VC	LL005VC	LL005CA				

TUBE	4L807	IMPREGNATION	VARNISH-WAX
CURE	.6 x .6