

BELL SYSTEM
TRANSMISSION TRANSFORMERS

The information in this Section has been prepared primarily for the use of Bell Telephone Laboratories technical people as an aid in development work. It is believed, however, that much of the information will be valuable to engineering people of the Telephone Companies. This Section will be kept up to date by means of addenda or revisions as required.

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BELL SYSTEM TRANSMISSION TRANSFORMERS

1. INTRODUCTION

This is one of a series of Engineering Reference Data Bulletins containing information on apparatus designed by the Bell Telephone Laboratories, for other than Military Applications, and manufactured by the Western Electric Company or by other suppliers in accordance with specifications prepared by the Laboratories. Up-to-date information on coded transmission transformers is presented in this bulletin; it partly replaces "Reference Data-Coils and Transformers," issued in May, 1947. The specific types described are Auto Transformers, Induction Coils and Networks, Input and Output Transformers, Repeating Coils and Transformers (transmission type). It is intended for use primarily by engineers of the Laboratories and contains information on apparatus which may be rated AT&TCo Standard, A&M Only, AT&TCo Special and Component Part or codes classified ML. Codes rated Manufacture Discontinued are not included.

Information on power transformers, retardation and choke coils, frequency generators and current supply sets will be covered in separate bulletins to be issued at a later date.

The information given herein is intended to aid in development work. For any specific circuit arrangement, however, consideration should be given to the existence of new designs which may be more efficient, smaller or less expensive.

Because of space limitations no information is given on characteristics such as transmission loss, crosstalk balance, and certain others which may be of importance for any specific application.

TO OBTAIN THE LATEST INFORMATION AND COMPLETE CHARACTERISTICS FOR ANY APPLICATION, CONSULT THE TRANSMISSION TRANSFORMER DEVELOPMENT DEPARTMENT, 2113.

Ratings, New Code Designation, Data and Index Tables, and Color Code Designations are discussed briefly under the headings which follow. Photographs of well-known types of transformers are given in Figs. 1 and 2 at the end of the text.

2. RATINGS

All transformers listed are PREFERRED types and are recommended for use wherever practicable. Some codes are noted as having "low demand" at the time this bulletin was prepared.

It is planned to bring this bulletin up to date periodically. However, the information contained herein may not be complete and ratings of the items are not shown. The information should be supplemented by reference to the usual sources such as the Western Electric Apparatus Card Catalog, the manufacturing specifications, and price data. For information regarding the output of apparatus refer to the Western Electric Report A-822.1.

The bulletin may include some codes of apparatus for which cards will not be found in the Western Electric Apparatus Card Catalog. Such codes are in general rated "Component Part." This rating is applied to apparatus where it is believed that the associated telephone companies will have no need for apparatus card catalog information and orders for the apparatus from the field are not expected.

When apparatus which is not listed on a white card in the Western Electric Apparatus Card Catalog is selected for use in new applications, the Standards Engineer, Dept. 5241, Bell Telephone Laboratories, 463 West Street, New York should be notified of the new use and probable demand so that consideration can be given to rerating the apparatus. When such new applications are to be made, the selection should first be discussed with the Transmission Transformer Development Department 2113.

3. NEW CODE DESIGNATION

For many years transmission transformers were designated as "Auto Transformers," "Induction Coils," "Input Transformers," "Output Transformers," and "Repeating Coils," depending on their principal circuit use. However, since 1950, all new transformers that do not fit into an existing code series have been coded simply as "Transformers."

4. DATA AND INDEX TABLES

The transformer information is given in data tables for the various types, arranged in order of the code numbers. The items covered are as follows:

Code
Former Specification Number
Shield (E for electrostatic, M for magnetic)
Impedance Ratio, Ohms*
Maximum DC Resistances for Low and High Windings
Minimum Inductance of Low Windings (sometimes for high)
Frequency Range (design range)
Dimensions
Weight
Low Windings
High Windings
Remarks

* For certain transformers the ratio in ohms is not available. For these, the ratio of turns is given, or impedance ratio, only.

The figures mentioned under "Remarks," such as Fig. A, Fig. J, etc, refer to labeled transformers on the photographs of Figs. 1 and 2. These are designs which are widely used and which are generally well known throughout the Bell System.

To aid in finding a transformer of a given ratio and frequency range, INDEX tables have been prepared, listing them in order of impedance ratio in ohms, ratio of turns or impedance ratio.

In the first group of these tables, the transformers are listed in order of the lower of the two impedances, beginning with the low values and proceeding to the high values. Transformers having more than one ratio are listed at the several appropriate values of impedance. Ratio of turns and impedance ratio tables are prepared in the same manner.

5. COLOR CODE DESIGNATIONS

Some of the transformers are provided with flexible leads instead of terminals. The colors of the leads and the symbols used in the data table corresponding to lead numbers are given in the table below:

COLOR CODE DESIGNATIONS		
<u>Lead No.</u>	<u>Color</u>	<u>Symbol</u>
1	Red	R
2	Red White	RW
3	Blue	BL
4	Blue White	BLW
5	Green	G
6	Green White	GW
7	Brown	Br
8	Brown White	BrW
9	Orange	O
10	Orange White	OW
11	Yellow	Y
12	Yellow White	YW
Shield	Black	Bk

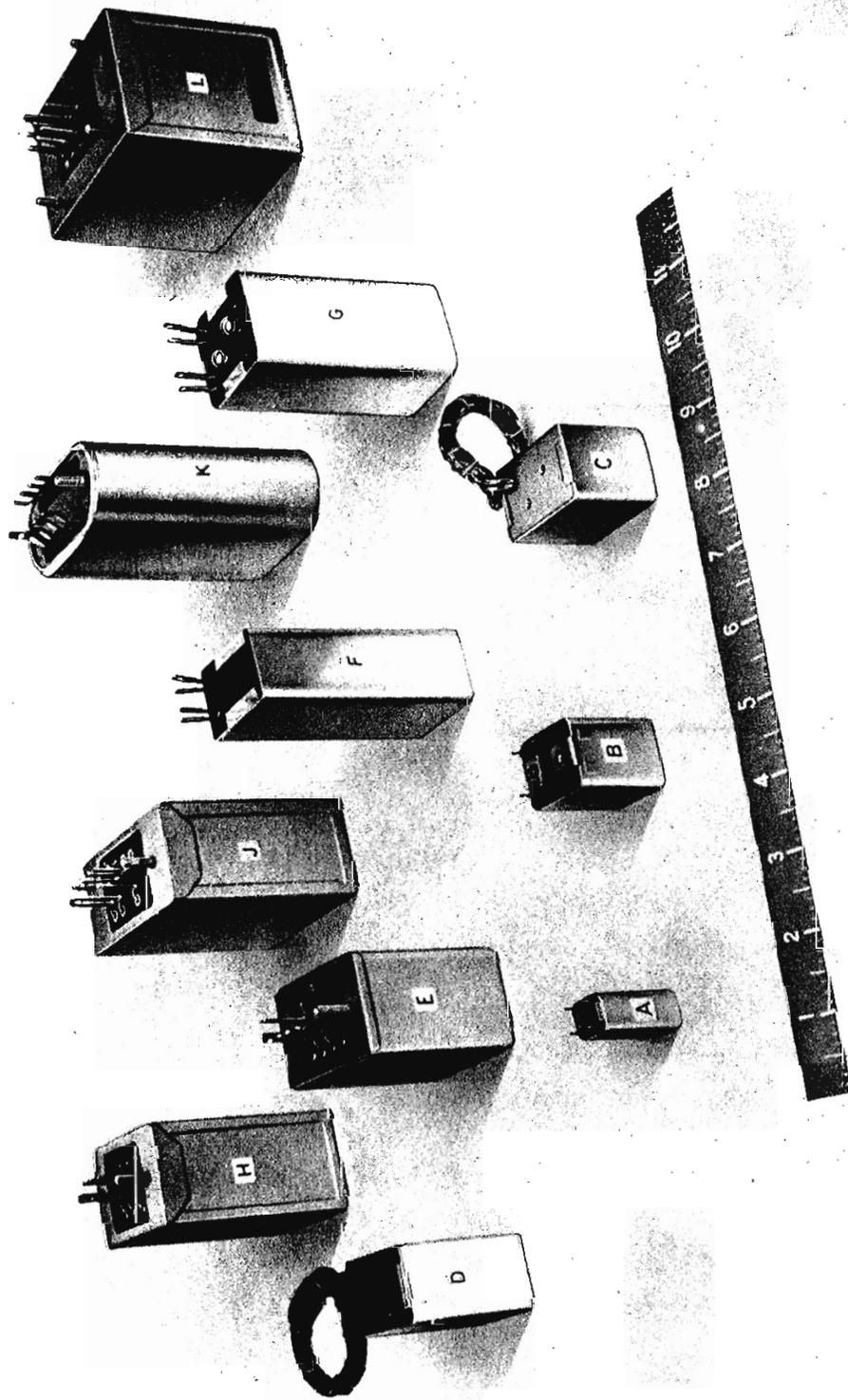


Fig. 1 - Transmission Transformers A to L

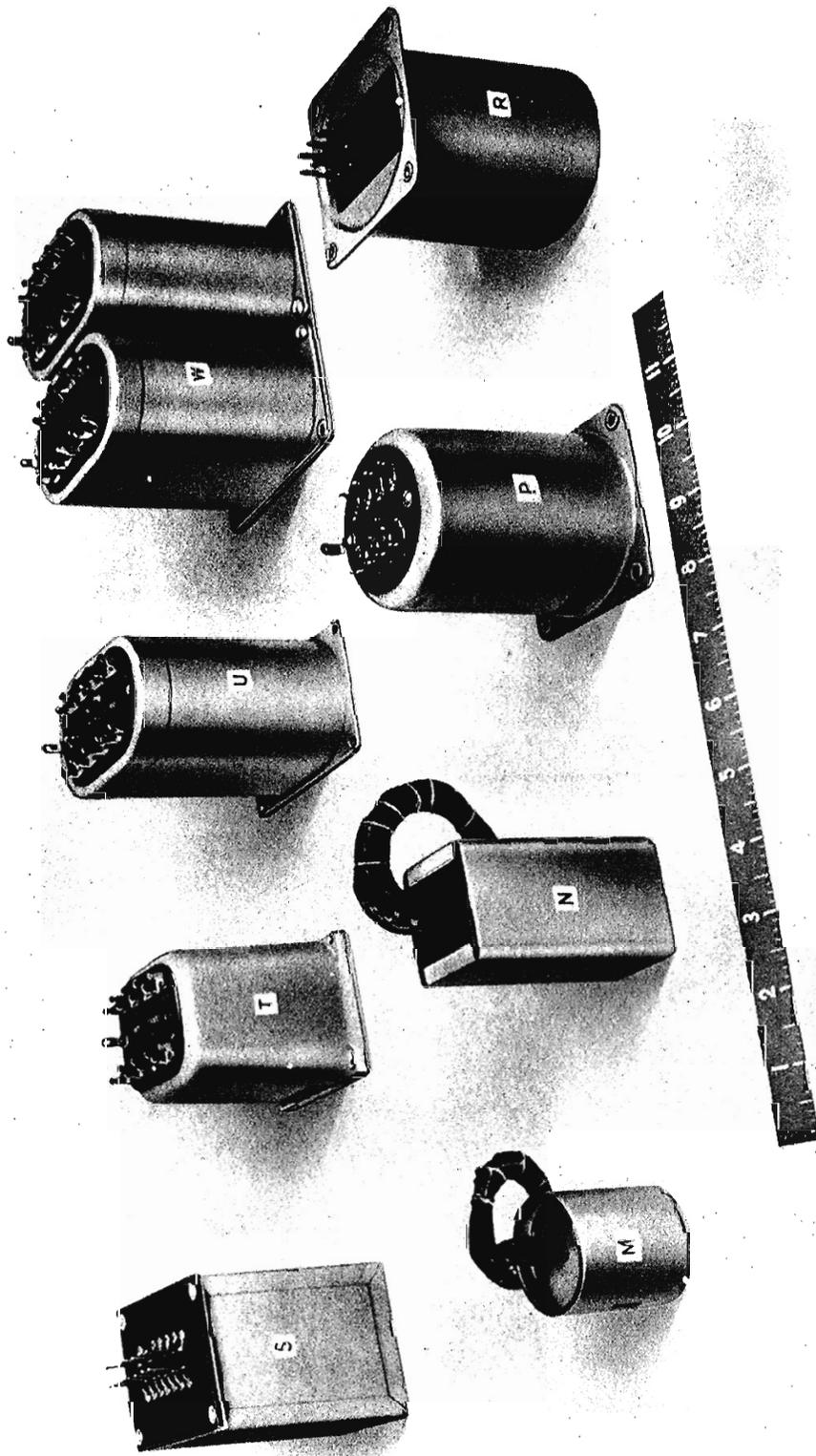


Fig. 2 - Transmission Transformers M to W

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks	
				Low Wdg	High			Length	Width	Height					
5B		-	500: - See Remarks	-	80	6.0 (1-12)	100-5000cps	4-3/16	2-9/16	4-5/32	4.5	(2-12)	(1-12)taps	Terminals 2 to 11 in 2db steps below Terminal 1. Fig. U	
7A		-	500:16	-	12	9.0 (1-13)	60to5000cps	4-3/16	2-9/16	4-5/32	4.5	(2-13)	(1-13)taps	Terminals 3 to 13 in 2db steps below Terminal 2. Fig. U.	
14B	Phantom group auto-transformer to connect H-88-50 loaded cable to 104-mil open wire line						Voice, 135 cps and dc telegraph	19	5-3/4	5-7/32	28				Relay rack mounting
15A		-	2.15:1 ratio	26.7	122	1.5	Voice, 135 cps and dc telegraph	4-9/32	2-9/16	4-3/8	5.5	(2-1)(6-5)	(4'-3)(2-1) (6-5)(8-7)		
15C		-	1.6:1 ratio	11	184	2.0	Voice, 135 cps and dc telegraph	4-9/32	2-9/16	4-3/8	5.5	(2-1)(6-5)	(4'-3)(2-1) (6-5)(8-7)	Used in side circuits of 14B and 16B Auto Transformers.	
15D		-	1.7:1 ratio	47	125	1.75	Voice, 135 cps and dc telegraph	4-9/32	2-9/16	4-3/8	5.5	(9-9T)(9T' -10)	(1-2)(3-4) (9-9T)(9T' -10) (5-6)(7-8)	Used in phantom circuits of 14B and 16B Auto Transformers	
16B	Electrically similar to 14B but designed for outdoor use						Voice, 135 cps and dc telegraph	26-5/16	6-5/8	9	65	-	-		
17A		-	1.77:1 ratio	5 av	15 av	0.18	135 cps	3-1/8	1-23/32	4-1/4	1.75	(1-2)	(1-3)	Fig. K	
18A		-	500:0.25 to 130	-	27.6	4.5 (1-15)	50-10,000 cps	5-1/2	3-9/16	4-9/16	9.0	(2-15)	(1-15) taps	Operates into various loud speaker impedances	
21A			1.9:1 turns	-	11.7	6.7 (1-7)	30-8000cps	3-9/32	1-11/16	3-7/16	2.0	(2-6)	(1-7) taps	Fig. J	
22A	D-98833	-	400:330	-	8.0	-	64-120 kc	3-9/32	1-11/16	3-7/16	1.75	(2-3)	(1-4)	Fig. J	
23A		-	4.65:1 ratio	30	65	0.7	0.2-145 kc	2-3/4	1-27/32	4-23/32	2.5	(2-3)(4-5)	(1-3)(4-6)		
24A	Two 23A Auto Transformers with associated capacitors						0.2-145 kc	7-5/8	3-15/16	9-3/16	15			For outdoor use.	

av - average

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
<u>INDUCTION COILS</u>														
77A	-	-	25:900	3.25	165	1.5 high wdg	Voice	2**	1-1/2	1-3/8	0.5	G - R*	L1 - C*	
79B		-	40:9000 85, 86, 87-type Test Sets	11.5	530	6.5 high wdg	Voice	2	1-1/2	1-3/8	0.5	(1-4)*	(4-3-2)*	
79C		-	40:16,000 84, 88-type Test Sets	11.2	575	7.4 high wdg	Voice	2	1-1/2	1-3/8	0.5	(1-4)*	(4-5-3-2)*	
101A	Common Battery Anti-sidetone Station Apparatus						Voice	2**	1-1/2	1-3/8	0.5	*	*	302-type Telephone Sets
101B	Common Battery Anti-sidetone Station Apparatus						Voice	2**	1-1/2	1-3/8	0.5	*	*	304-type Telephone Sets
104A	Local Battery Anti-sidetone Station Apparatus						Voice	2**	1-21/32	1-3/8	0.5	*	*	307-type Telephone Sets
180A	-		15,000:80 (1-2) :4800 (2-3)	8 (1-2) 60 (2-3)	125	2 high wdg	400-3000cps	2-13/16	1-3/8	1-5/8	0.5	(1-2-3)	(4-5)	
180B	E		24,000:16 (1-2) :24,000 (2-3)	3.7(1-2) 1815 (2-3)	1470	14 high wdg	400-3000cps	2-13/16	1-3/8	1-5/8	0.5	(1-2-3)	(4-5)	
180C	-		50,000:600 + 600	20.5 (1-2) 21.5 (3-4) 45.0 (4-5)	2150	0.7 (1-2) (3-5) 60 ma dc	200-3000cps	2-13/16	1-3/8	1-5/8	0.5	(1-2),(3-4), (4-5)	(6-7)	
181B	M		50:900 + 600 50:730 (1-2) (5-6) 50:540 (2-3) 50:240 (1-2) or (5-6)	2.5 19.8 (1-2) 28.8 (2-3) 18.2 (5-6) 490-600 (2-4) (3-4) NI		0.200- 0.335 (1-2)(5-6)	Voice	3-3/4***	1-3/16	1-11/16	0.75	(7-8)	(1-2-3),(5-6)	
<u>NETWORKS</u>														
425B	Common Battery Anti-Sidetone Station Apparatus						Voice	3-3/8	2	1-7/8	0.75	*	*	500 C, D Telephone Sets

* Screw Terminals

** One mounting lug extends 11/32 beyond this dimension

*** Exclusive of terminals and mounting screws

NI Non-inductive

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
233D		-	20,000:50,000	3480	5450	150	60-5000cps	3-3/16	2-5/8	3-17/32	3.5	(1-2)(5-6)	(3-4)(7-8)	Fig. T
242B		-	600:80,000	19	1930	0.091	720 cps	2-7/8	2-7/8	3-19/32	2.5	(1-2)(5-6)	(3-4)(7-8)	Fig. P
255D	D-91916	M	600:29,400	280	5100	50	35-8000 cps	3-13/32	2-9/16	3-7/16	2.8	(1-2)(5-6)	(3-4)(7-8)	Fig. L
255L	D-95448	-	22.4:1 turns	150	4600	5.0	300 cps	3-13/32	2-9/16	3-7/16	2.8	(1-2)	(3-4-5)	Fig. L
255M		E	300:307,200	25	6700	5.0	1000-3000 cps	3-13/32	2-9/16	3-7/16	2.8	(2-1)(6-5)	(4-3)(8-7)	Fig. L
261B		E,M	200:110,000	17.5	5100	3.8	35-10,000 cps	2-7/8	2-7/8	3-19/32	2.5	(1-2)(3-4)	(5-6)	Fig. P
266C		-	600:135,000	55	8435	1.75	375-2350cps	3-13/32	2-9/16	3-7/16	3.0	(2-1)(6-5)	(4-3)(8-7)	Fig. L
266D		E	200:100,000	28	8000	160(5-6)	100-5000cps	3-13/32	2-9/16	3-7/16	3.0	(1-2)(3-4)	(5-6)	Fig. L
270D		M	600:88,800	38	3800	10	30-8000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. J
270G		E	300:3000 300:10.3	67 av	1729 av	52 at 60cps	35-8000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6T-6) (6T-6)	Fig. J
270H		E,M	300:7500	27 av	1400 av	10	100-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6-7)	Fig. J
270J	D-177355	-	600:405,600	22	5860	3.0	200-3200cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. J
273A		-	10,000:140,000	2520	9500	29	100-5000cps	2-7/8	2-7/8	3-17/32	2.5	(1-2)	(3-4)(5-6)	Fig. R
274B	D-94622	-	1:2 turns 1:10 5:1(1-2): (7-8)	12.6 1.38	202 2830	0.238	1000 cps	3-9/32	1-11/16	3-7/16	2.3	(1-2) (7-8)	(3-4) (5-6)	Fig. J
276A		-	20,000:605,000	1150	8400	30	100-5000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(5-6)	(3-4)(7-8)	Fig. J
277D	D-156669	E	600+600:135,000	175	4250	1.7	300-2700cps	3-13/32	2-9/16	3-7/16	3.0	(3-4)(7-8)	(1-2)(5-6)	Fig. L
277E	D-156670	-	60,000:1,500,000	1090	7380	22	500-3000cps	3-13/32	2-9/16	3-7/16	3.0	(1-2)	(3-9) taps	Fig. L
278A		-	Oscillator coil	41	100(5-6) 425(3-4)	0.0057(1-2) 0.155(3-4) 0.35(5-6)	800 cps	1-1/2	1-9/32	3-15/32	0.5	(1-2)	(3-4)(5-6)	
278C		-	600:600	145	736	-	6000 cps	1-1/2	1-9/32	3-15/32	0.5	(1-2)	(3-4-5-6)	
280A		E	300:30,000	110	4500	0.77	60-5000 cps	3-13/32	2-9/16	3-7/16	2.3	(2-1)(6-5)	(4-3)(8-7)	Fig. L
281A		-	500:100,000	175	6600	2.0	30-7000cps	3-13/32	2-9/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. L
282A		-	600:240,000	48.5	5280	90 av high wdg	200-3000cps	1-3/4	1-3/4	3-1/4	1.0	(R-RW)	(B1-B1W)	Fig. N
282B		-	600:120,000	90	5680	1.32	100-5000cps	1-3/4	1-3/4	3-1/4	1.0	(R-RW)	(B1-B1W-G)	Fig. N

av - average

INPUT TRANSFORMERS

INPUT TRANSFORMERS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
283A		-	1:92	0.2	10.6	325 uh	10.2-10.4kc	3-9/32	1-11/16	3-7/16	1.2	(1-2)	(3-4)	Fig. J
284A		M	200:116,000	125	5500	4.5	60-10,000 cps	2-19/32	1-1/4	2-19/32	0.5	(1-2)	(3-4)	
285E		E,M	600:25,000	27 av	1170 av	14.0 av	35-10,000 cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW)(B1- B1W)	(G-GW)	Fig. N
285F		E,M	250:165,000 30:165,000	21.5 3.33	4000	3.8	30-10,000 cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW-B1) (R-RW)	(G-GW)	Fig. N
285K		E,M	15,000:80,000	860 av	2700 av	230 av	50-10,000 cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW)	(B1-B1W-G)	Fig. N
285P		E,M	500:200,000	36.3 av	3150 av	7.04	40-10,000 cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW)	(B1-B1W-G) (GW-Br-BrW)	Fig. N
285S		E,M	600:25,000	60 av	1100 av	5.5 av	50-10,000cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW-B1)	(B1W-G)	Fig. N
287B	D-99164	E	1600:500,000	109	7100	-	230-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6) Term- inated intern- ally	Fig. J
287C	D-93318	-	150:300,000	7.0	4000	0.30	100-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. J
288B		-	600:300,000	55.3	5190	2.67	400-3000cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW)	(B1-B1W)	Fig. N
288G		-	15,000:67,000	1725	4880	125	50-6000cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW)	(B1-B1W-G)	Fig. N
291A	D-97419	E	600:600	50	180	3.0	60-108 kc suppress 200-3100cps transmit	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)	Fig. J
292A		E	600:30,000	-	205	-	64-108 kc	3-9/32	1-11/16	3-7/16	1.4	(1-2)	(3-4)	Fig. J
292B		E	125:11,000	-	50	-	308-554 kc	3-9/32	1-11/16	3-7/16	1.4	(1-2)(3-4)	(5-6)	Fig. J
292C		E	125:15,000	1.0	45	-	400-448 kc	3-9/32	1-11/16	3-7/16	1.4	(1-2)	(3-4)	Fig. J
292F	D-98828	E	600:40,000	1.1	50	-	120kc	3-9/32	1-11/16	3-7/16	1.4	(1-T-2) 40,000 ohm resistor with taps across (4-8)	(3-4)	Fig. J
292G		E	125:20,000	-	145	-	92-143 kc	3-9/32	1-11/16	3-7/16	1.4	(1-2) 20,000 ohm resistor across (3-4)	(3-4)	Fig. J
292H		E	135:40,000	1.25	130	0.063 high wdg	64 kc	3-9/32	1-11/16	3-7/16	1.4	(1-2)	(3-4)(5-6)	Fig. J
294A		-	25,000:25,000	1200	5250	0.0686(1-2)	60-108 kc	1-1/2	1-9/32	3-15/32	0.5	(1-2)	(3-4)	
294B		-	15,000:15,000	1600	1600	0.109(1-2)	35-150 kc	1-1/2	1-9/32	3-15/32	0.5	(1-2)	(3-4)	
294C		-	10,000:10,000	180	180	0.00380	300-550 kc	1-1/2	1-9/32	3-15/32	0.5	(1-2)	(3-4)	
294D		-	4,000:4,000	50	50	0.00168	300-550 kc	1-1/2	1-9/32	3-15/32	0.5	(1-2)	(3-4)	

av - average

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
295A		E	200+600: 450,000	0.8(2-3) 2.5(3-4)	22,300	0.00182 (3-4)	12-60 kc	4-15/16	1-11/16	4-3/8	2.8	(2-3-4)	(5-6)	Low demand
296A		-	4:1 turns	0.2	0.5	-	500-650 kc tsf	4-1/8	2-9/16	3-13/16	0.8	(1-2)	(3-4)	Oscillator coil
297A		E	250:25,000	1.0	25	-	650 kc	3 includgs	1-7/16	3-3/8 incterm	1.0	(1-2)	(3-4)(5-6)	
298B		E	135+67.5:7500	0.25 0.25	33	0.25(5-6)	35-150 kc	3-13/32	2-9/16	3-7/16	2.8	(1-1T-2) (3-3T-4)	(5-6)	Fig. L
299A	D-99313	-	184:880 turns	1.25 av	25.0 av	-	7150 cps	3-13/32	2-9/16	3-7/16	0.8	(1-2-3-4)	(5-6)	Oscillator coil Fig. L
600A		E	600:450,000	14.4	3610	-	4-10 kc	3-9/32	1-11/16	3-7/16	2.3	(1-2)	(3-4)	Fig. J
600C		-	1:3.16 turns	241	147	0.54	200-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)	(3-4)	Fig. J
602A		-	1:1 turns	1200 av	1550 av	-	1300 cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4-5-6)	Fig. K
602B	D-98822	E,M	30,000:100,000	15	63	-	4 kc trans mit 8 kc sub- press	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4-5)	Fig. K
602C		-	600:190,000	3.0	4650	-	1000cps	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
602D		-	1:1 turns	360 av	460 av	10 av	1800 cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4-5-6)	Fig. K
603A		-	600:150,000	23 av	7430 av	1.9 av	250-2800cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)(3-4) 600 ohm resistor across (1-4)	(5-6)	Fig. K
603C	D-157128	E	1:3000	0.29	830	18 high wdg	425-1615cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4)(5-6)	Fig. K
604A		-	1:1	11,100	102,000	0.88 (1,3- 2,4)	5-30 kc	1-11/16	1-11/16	4-13/32	0.8	(1-2)	(3-4)	
605A		E	600+400:450,000	5.1	25,000	0.0160	5-30 kc	3-9/32	2-1/16 incterm	3-7/16	2.3	(1-1T-2) (3-3T-4)	(5-6)	
605B		E	8000:8000	110	100	-	1-150 kc	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. J
606A		-	Oscillator Coil	0.8	0.5 (1-2) 1.6 (3-8)	0.0113(3-4)	6-13 kc tsf	3-13/32	2-9/16	3-7/16	2.0	(9-14) Output	(1-2) Plate (3-8) Osc	Fig. L
607A		-	Oscillator Coil	0.75	0.65(1-2) 3.0 (3-8)	0.002955 (3-4)	17.5-30 kc tsf	3-13/32	2-9/16	3-7/16	2.0	(9-14) Output	(1-2) Plate (3-8) Osc	Fig. L
608A		-	300:30,000	34 av	2330 av	14.0	30-8000 cps	4-7/8	3-7/16	4-3/8	4.5	(1-2)	(5-13) Taps	
609A		-	2,000,000: 2,000,000	9000	9000	450 (1-2)	30-8000 cps	4-7/8	3-7/16	4-3/8	6.0	(1-2) (5-6)	(3-4) (7-8)	
610A		-	350:40,000	140 av	2950 av	0.28	200-5000cps	1-13/16	1-3/4	2-1/4	0.8	(R-RW)	(B1-B1W)	
618B		M	600:25,000 30:25,000	214.0av 8.9av	2680 av	19.0 av (R-B1)	30-15,000cps	1-11/16	d1a	1-27/32	0.3	(R-B1) (R-RW)	(G-QW-Br)	Fig. M

tsf - tuned single frequency

"includgs" including lugs

"incterm" including terminals

av - average

INPUT TRANSFORMERS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
619A		E	25,000:175,000	17	150	-	58-80 kc tsf	2-17/32	1-11/16	3-7/16	1.2	(1-T-2)	(3-4)	Fig. H
619B		E	25,000:175,000	10	100	-	92-143 kc tsf	2-17/32	1-11/16	3-7/16	1.2	(1-T-2)	(3-4)	Fig. H
619C		E	100:300,000 150:300,000	0.18(1-2) 0.22(3-4)	43	0.023(5-6)	128 kc	2-17/32	1-11/16	3-7/16	1.2	(1-2) (3-4)	(5-6)	Fig. H
620A		E	60,000:420,000	23	220	-	40 kc	2-17/32	1-11/16	3-7/16	1.2	(1-T-2)	(3-4)	Fig. H
620B		-	1:1.84 turns	186	950	0.216	20 kc	2-17/32	1-11/16	3-7/16	1.2	(1-2-3)	(4-5-6)	Fig. H
621A		E	125:50,000	0.2	75	-	308-364 kc	2-17/32	1-11/16	3-7/16	1.2	(1-T-2)	(3-4)	Fig. H
623A	D-157242	E	500:120,000 500:600	37	8970 40	2.0	Voice	3-1/8	1-23/32	4-1/4	2.5	(1-2)	(5-9) taps (3-4)	Fig. K
624A		-	1:1	50	350	1.96 (1-2)	85 cps	6-15/16	6-15/16	3-7/16	17.5	(1-2)	(3-4)	
626A		-	300:357,000	9	4210	0.6 av	250-3000cps	1-11/16	1-11/16	3-9/16	1.3	(8-9)	(1-7) taps	Fig. G
626B		E	300:30,000	3.4	240	-	8-64 kc	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(7-8)	Fig. G
626C		E	550:240,000	48	5400	2.0	270 cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-7) taps	Fig. G
626D		-	1000:3200	200	890	8.0	600-1800cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-4)	Fig. G
626E		-	300:300 300:140,000	47.5	185 4860	1.2 (1-2)	200-3500cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-4) (7-11)taps	Fig. G
626F		-	600:3000	32	150	6.0	50-5000cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-4)	Fig. G
627A	D-156204	-	1:1 turns	67	182	0.388	Voice	5-3/16	5-3/16	3-7/16	8.5	(1-2)	(3-4)	
627B	D-156205	-	1:1 turns	2.5	10.8	0.0149	Voice	5-3/16	5-3/16	3-7/16	6.8	(1-2)	(3-4)	
627C	D-156206	-	1:1 turns	15.7	86.5	0.0995	Voice	5-3/16	5-3/16	3-7/16	7.3	(1-2)	(3-4)	
627D	D-156207	-	1:1 turns	4.4	18	0.0298	Voice	5-3/16	5-3/16	3-7/16	7.3	(1-2)	(3-4)	
628A	D-157603	E	600:25,000	55	2900	1.5	255-3145cps	2-17/32	1-11/16	3-7/16	1.3	(1-2)	(3-4)	Fig. H
631A	D-99374	-	60,000:540,000	1000	3130	43	200-4000cps	3-5/8	3-3/16	3-3/8	2.8	(1-2)	(3-4)	
633A		E,M	40,000:80,000	1450	2760	300 av	200-3500cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)(3-4)	(7-8)	Fig. G
633B		E,M	100:200,000	1.81	3290	0.475 av	200-3500cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)(3-4)	(7-8)	Fig. G
633C		E,M	600:75,000	73	2620	14(60 cps) 7.8(200cps)	40-8500cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(7-8)	Fig. G
633D		E,M	600 or 150 or 37.5:50,000	80 (1-7)	3150	-	50-15,000cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)(3-4) \	(8-9)(10-11)	Fig. G
633E		M	300:142,00	16.6	2415	-	200-12,000 cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(7-8)	Fig. G

tsf - tuned single frequency

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
633F	D-170635	M	1:1	4125	4125	100	200-12,000 cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(7-8)	Fig. G
634B		-	40,000:60,000	4200	4100	100	200-5000cps	1-11/16	1-11/16	3-9/16	1.3	(1-6) taps	(7-8)	Fig. G
635A	D-159130	E	72:500+9000	-	12.18	0.00575 (3-4)	312-552 kc	3-13/32	1-11/16	4-3/8	2.0	(1-2)	(3-T-4)	
636A	D-158850	E	125:2000 (420kc) 125:12,500 (612kc)	0.275 (1-2) 0.275 (3-4)	14.5	-	420-612 kc	3-13/32	2-9/16	3-19/32	2.0	(1-2-3-4)	(5-6)	
637A		E	144:4000	0.25	3.1	10.5 µh	620-2350 kc tsf	2-17/32	1-11/16	3-7/16	1.0	(1-2)	(3-4)	Fig. H
638A		-	4000:160,000	0.070	1.2	4.4 µh	2064 kc	2	d1a	4-13/32	0.5	(1-2)	(3-4)	
638B		-	4000:25,000	0.06	0.3	2.1 µh	3096 kc	2	d1a	4-13/32	0.5	(1-2)	(3-4)	
638C		-	2000:100,000	-	70	-	64 kc	2	d1a	4-13/32	0.5	(1-2)	(3-4)	
638E		-	5000:300,000 (1-G):(3-G)	1.8(1-2)	21	0.00322 (3-G) 20 kc	556 kc	2	d1a	4-13/32	0.5	(1-G-2)	(3-G)	
639A		-	50,000:50,000	11.5	11.5	145 µh	2064 kc	2-17/32	1-19/32	2-7/16	0.8	(1-2)	(3-4)	
639B		-	50,000:50,000	2.8	2.8	78 µh	3096 kc	2-17/32	1-19/32	2-7/16	0.8	(1-2)	(3-4)	
639C		-	100,000:100,000	650	325	0.11 (1-2) 0.052(3-4)	64 kc	2-17/32	1-19/32	2-7/16	0.8	(1-2)	(3-4)	
639D		-	100,000:100,000	13	13	-	556 kc	2-17/32	1-19/32	2-7/16	0.8	(1-2)	(3-4)	
642A		-	4:1 turns	3	2	212 µh (3-4)	463-605 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2) grid	(3-4) plate	Oscillator coil Fig. E
642B		-	75:1470	0.4 av	5.0 av	-	9.66-12.44 mc	2-17/32	1-19/32	2-9/16	0.6	(1-2) 1470 ohm resistor across	(3-4) (3-5)	Fig. E
645A		E	4000:4000	0.10	0.10	1.45 µh	11.5-15 mc	1-7/8	1-1/2	1-11/16	0.3	(1-2)	(3-4-5)	
646A		-	40:1440	8	66	1.5 (3-4)	Voice	1-11/16	1-3/8	3-1/2	0.5	(1-2)	(3-4)	
646B		M	20,000:80,000	1440	4060	15	200-3000cps	1-11/16	1-3/16	3-3/4	0.5	(1-2)	(3-4)	Fig. F
647B		E	600+600:160,000 600+600: 1,000,000	53.5	2030 8000	0.48	200-3500cps	3-1/8	1-23/32	4-1/4	2.3	(1-2)(3-4) + (5-6)	(9-10)(11-12) (7-8)	Fig. K
647C		E,M	1000:9000	43	605	1.2	200-3500cps	3-1/8	1-23/32	4-1/4	2.3	(1-2)(3-4)	(5-6-7)	Fig. K
648A		E	72:800	1.25	3.8 (3-4) 3.8 (5-6)	800 µh 60 kc	150-3500 kc	2-17/32	1-19/32	2-17/32	0.8	(1-2) 800 ohm resistor across	(3-4)(5-6) (3-6)	
648B		E	72:1500	1.4	8.6	685 µh 60 kc	150-3500 kc	2-17/32	1-19/32	2-17/32	0.8	(1-2) 1500 ohm resistor across	(3-4) (4-5)	

tsf - tuned single frequency

INPUT TRANSFORMERS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
649A		E	72:800	-	2.4(3-4) 2.4(5-6)	6.4 μh at 1 mc (3-4)	4.9-8.1 mc	2-17/32	1-11/16	2-19/32	0.7	(1-2) 800 ohm resistor across (3-6)	(3-4)(5-6)	
649B		-	72:1100	-	0.75	-	4.9-8.1 mc	2-17/32	1-11/16	2-19/32	0.7	(1-2) 1100 ohm resistor across (3-4)	(3-4)	
650A		-	120:10,000 tuned	0.23	2.0(1-2) 5.35(1-3)	0.0517(1-3)	5 kc, tuned	1-11/16	1-11/16	2-21/32	0.5	(5-6)	(1-2)	
651A		-	120:10,000 tuned	0.15	1.5(1-2) 2.75(1-3)	0.006435 (1-3)	25 & 50 kc, tuned	1-9/16	1-7/16	2-3/4	0.4	(5-6)	(1-2)	
652A		-	120:10,000 tuned	0.11	1.05(1-2) 2.10(1-3)	0.001404 (1-3)	75 kc tuned & 150 kc	1-9/16	1-7/16	2-3/4	0.3	(5-6)	(1-2)	
653A		-	120:10,000 tuned	0.2	3.5(1-2) 9.3(1-3)	-	200-250 kc, tuned	1-9/16	1-7/16	2-3/4	0.3	(5-6)	(1-2)	
653B		-	140:10,000 tuned	0.26	2.65(1-2) 9.5(1-3)	-	300-600 kc, tuned	1-9/16	1-7/16	2-3/4	0.3	(5-6)	(1-2)	
653C		-	140:10,000 tuned	0.06	0.5(1-2) 1.7(1-3)	-	600-1200 kc tuned	1-9/16	1-7/16	2-3/4	0.3	(5-6)	(1-2)	
653D		-	140:10,000 tuned	0.04	0.35(1-2) 0.9(1-3)	-	1200-2500kc tuned	1-9/16	1-7/16	2-3/4	0.3	(5-6)	(1-2)	
653E		-	140:10,000 tuned	0.04	0.18(1-2) 0.25(1-3)	-	2500-5000kc tuned	1-9/16	1-7/16	2-3/4	0.3	(5-6)	(1-2)	
653F		-	140:10,000 tuned	0.03	0.035 (1-2) 0.035 (1-3)	-	5000-10,000 kc tuned	1-9/16	1-7/16	2-3/4	0.3	(5-6)	(1-2)	
654A		-	36.6:1 turns	0.11	2.8	5.4 μh	39 kc	1-7/8	1-1/32	2-1/16	0.5	(5-6)	(1-2-3)	Oscillator coil
654B		-	1:1	155	155	2.54	1400 cps	1-7/8	1-1/32	2-1/16	0.5	(1-2-3)	(5-6)	Oscillator coil
656A		-	300:357,000 input 600:18,800 output	19 90	7300 2150	0.55 0.63	200-3000cps	1-19/32	1-5/32	2-3/32	0.4	(O-OW) (R-RW) (G-GW) fb (Br-BrW) mon	(Y-YW) (Bl-BlW)	Two transformers in one case. Fig. D
660A		E	900:1000 double tuned	0.015	0.015	0.103 μh at 1.0 mc	90 mc	1-25/32 includgs	1-1/16	2-7/32 incterm	0.2	(3-4-5)	(1-2)	
661A		E	800:800	0.5	0.6	1400 μh at 100 kc	0.05-20 mc	2-17/32	1-19/32	2-9/16	0.8	(1-2-3)	(4-5)(6-7)	Fig. E
663A		E	110:2000	0.35	13.8	2500 μh	50-4000 kc	1-11/16	1-11/16	2	0.4	(1-2)	(3-4)	
663B	664A	E	2000:2000	11.0	16.1	0.22	10-2000 kc	1-11/16	1-11/16	2	0.4	(1-2)	(3-4)	
665A		-	1:1:1	5.5	5.8 (3-4) 6.1(5-6)	0.013	blocking oscillator	1-17/32	1	1-29/32	0.3	(1-2)	(3-4)or(5-6)	Blocking oscillator

"includgs" including lugs

"incterm" including terminals

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
666A	D-99917	E	600:360,000	0.5	13	0.0098(4-3) (8-7)	100 kc	2-17/32	1-11/16	3-7/16	1.0	(2-1)(6-5)	(4-3)(8-7)	Fig. H
667A		-	5000:664,000	860	6800	5.85	200-3500cps	1-19/32	1-5/32	1-13/32	0.2	(R-RW)	(B1-B1W)	Fig. C
667B		-	600:10,000 600:450,000	20.4	615 6050	0.54	200-3500cps	1-19/32	1-5/32	1-13/32	0.2	(R-RW) (R-RW)	(B1-B1W) (G-GW)	Fig. C
667C		-	600:644,000	360	7720	0.85	200-3500cps	1-19/32	1-5/32	1-13/32	0.2	(R-RW)	(B1-B1W)	Fig. C
668A	D-171216	-	72:10,500	1.8	33	-	60-3200 kc	2-17/32	1-11/16	2-19/32	0.5	(1-2)	(3-4)	
669A	-	-	3000:20,000	115	365	-	44-140 kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B
669B	-	-	3000:20,000	28	92	-	164-260 kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B
670A	D-175886	-	50,000:50,000	160	160	0.08	94-106 kc	1-3/4	1-3/4	2-25/32	0.6	(1-2)	(3-4)	
670B	D-175888	E	300:30,000	2	135	0.083 at 5kc (5-6)	94-106 kc	1-3/4	1-3/4	2-25/32	0.6	(1-2)(3-4)	(5-6)	
671A	-	E	75:400	-	0.04	-	70-90 mc	1-25/32 includgs	1-1/32	2-7/32 incterm	0.2	(1-2)	(3-4)	
672A	D-176495	-	8250:63,000	19	60	-	100 kc	1-3/4	1-3/4	3-1/2	0.7	(1-2) 8250 ohm resistor across (1-2)	(3-4)(5-6)	
673A		E,M	600:100,000	37.4	3700	450(4-5)	100-6000cps	1-21/32	1-7/32	2-3/32	0.5	(1-2-3)	(4-5)	
674A	D-160553	E	135:200 at 12 kc 135:26,000 at 60 kc	0.7 av	100 av	-	12-60 kc	3-13/32	2-9/16	3-9/16	2.0	(1-2-3)	(4-5)	
675A	D-160747	E	600:60,000	13 av	750 av	-	12-60 kc	2-17/32	1-11/16	3-7/16	1.0	(1-2) 60,000 ohm resistor across (3-4)	(3-4)	Fig. H
676A	D-161158	-	70,000:600,000	31	410	0.143(3-4)	56 kc	3-13/32	2-9/16	3-7/16	1.7	(1-2)	(3-4)	Fig. L
677A	D-161159	-	500:5000	24	360	0.032	5 kc	2-17/32	1-11/16	3-7/16	1.0	(1-2)	(3-4)	Fig. H
678A		E,M	40,000:80,000	1450	2760	130	25 cps	1-3/4	1-3/4	3-1/2	1.5	(1-2)(3-4)	(5-6)	

"includgs" including lugs

"incterm" including terminals

Code	Form# Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
104T		E	18,000:600	52	335	0.75	200-3000cps	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
104Y	D-12008	-	6000:700 6000:40	35 20	225	1.6	200-3000cps	4-3/16	2-9/16	4-5/32	4.5	(3-4)(7-8) (9-10) mon	(1-2)(5-6)	Fig. U
104AG		-	6000:3.75 6000:10.4	0.32 7.3	272	11.0 high wdg	200-3000cps	4-3/16	2-9/16	4-5/32	4.5	(3-4)(7-8) (9-10)	(1-2)(5-6)	Fig. U
104AH		-	6000:46 6000:10.4	5.0 7.2	264	12.0 high wdg	150-5000cps	4-3/16	2-9/16	4-5/32	4.5	(3-4)(7-8) (9-10)	(1-2)(5-6)	Fig. U
123G		-	6000:600 + 600 2300:600 + 600	95 20	325	6.0(2-5)	100-3000cps	3-3/16	2-5/8	3-17/32	3.5	(3-4)+(7-8)	(2-2T-5) (2T-5)	(9-10) mon. Fig. T
139B		E	30,700:600	34.2	775	4.1	250-2750cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. J
144A		-	6800:8	0.42	160	8.5 high wdg 15 ma dc	100-7000cps	2-7/8	3-1/2	2-7/8	2.5	(R-RW)	(B1-B1W-G)	
151B		E	20,000:600	12	240	0.1 (5-6)	60-108kc	3-9/32	1-11/16	3-7/16	1.2	(1-2)(3-4)	(5-6)	Fig. J
151E		E	80,000:600	-	850	-	16-31kc	3-9/32	1-11/16	3-7/16	1.2	(1-2)	(3-4)	Fig. J
151F	D-157350	E	20,000:135+135	8	240	-	60-108kc	3-9/32	1-11/16	3-7/16	1.2	(1-1T-2)(3-3T-4)	(5-6)	Fig. J
151G		E	100,000:300: 300	1.3(1-2) 1.3(3-4)	90	0.0728(5-6)	tuned at 16,32or 64kc	3-9/32	1-11/16	3-7/16	1.2	(1-2) (3-4)	(5-6)	Fig. J
154B		-	8000:500 8000:250	67.4	1062	2.9	40-6000cps	3-13/32	2-9/16	3-7/16	2.8	(1-4) (2-3)	(5-6)(7-8)	Fig. L
154C		M	15,200:600	96	2480	3.2	25-15,000 cps	3-13/32	2-9/16	3-7/16	2.8	(2-1)(6-5)	(4-3)(8-7)	Fig. L
157A		-	10,000:500 10,000:250	72.0 50.2	1220	43 high wdg	35-10,000 cps	3-9/32	1-11/16	3-7/16	2.3	(1-4) (2-3)	(5-6)(7-8)	Fig. J
157B		E	11,700:600 12,200:300	45.5 32.2	745	23.5 high wdg	250-5000cps	3-9/32	1-11/16	3-7/16	2.3	(1-3)(4-6) (2-3)(4-5)	(7-8-9)	Fig. J
157C	D-95167 except case	E	20,000:600	15	550	0.81	6-9kc	3-9/32	1-11/16	3-7/16	2.3	(1-2)(5-6)	(3-4)(7-8)	Fig. J
157F		E	60,000:600	30	2760	1.65	200-3200cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)	(3-4)	Fig. J
157G	D-99163	E	21,000:1200+ 300	43	1340	28.1(2-5)	200-3000cps	3-9/32	1-11/16	3-7/16	2.3	(3-3T-4) + (7-8T-8)	(2-5)	(9-10)fb. Fig. J
157H		E	60,000:600	67	4500	av 3.5	200-3600cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. J.

SECTION AB47, 006

OUTPUT TRANSFORMERS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
161A	D-94628	-	25,000:200	43	2800	1.13	30-10,000 cps	3-13/32	2-9/16	3-7/16	2.8	(1-2)(3-4)	(5-6)	Fig. L
162B	D-90476	-	7200:600	65.0(1-4)	604	4.5	200-4500cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	(7-8) mon. Fig. J
163A		E	20,000:600	2.2	250	0.045	5-30 kc	3-9/32	1-11/16	3-7/16	2.3	(2-1)(6-5)	(4-3)(8-7)	Fig. J
163C	D-99162	-	21,000:600	13.3	320	11.6(5-6) 7 ma dc	4-10 kc	3-9/32	1-11/16	3-7/16	2.3	(3-4)	(5-6)	(1-2) fb. Fig. J
163D	D-97774	-	100,000:250	25.6	6770	0.63	200-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)	(3-4)	Fig. J
166A		-	4200:12 or 6	0.57	142	6.3 high wdg 10 ma dc	50-10,000 cps	3-13/32	2-9/16	3-7/16	3.8	(1-1T-2)	(3-4)(5-6)	Fig. L
166B		-	4130:500	31.3	200	6.3 high wdg 10 ma dc	50-10,000 cps	3-13/32	2-9/16	3-7/16	3.8	(1-1T-2)	(3-4)(5-6)	Fig. L
			4130:8	0.59		10 ma dc						(1-1T)		
166D		-	6580:300	39	470	45 high wdg 5 ma dc	85 cps	3-13/32	2-9/16	3-7/16	3.0	(1-2)	(3-4)(5-6)	Fig. L
169A		-	12,000:1000	195	1780	50.0(4-5)	60-10,000 cps	2-19/32 includgs	1-1/4	2-19/32 incterm	0.5	(1-2-3)	(4-5)	
171B		-	10,000:500 10,000:8	59.0 1.07	750	27.0 high wdg	50-6000cps	3-5/8	2-5/8	3-7/8	3.8	(1-2-3) (1-2)	(4-5-6)	Fig. S
171C		-	10,000:600 or 150, 30, 17, 8, 2	44 av	475(1-3)	23(1-3) 10 ma dc	30-10,000 cps	3-5/8	2-5/8	3-7/8	3.8	(5-14) taps	(1-2-3)	Fig. S
171D		-	1500:500 or 4 or 2	54 or 0.75 or 0.32	168	9.0 high wdg	50-10,000 cps	3-5/8	2-5/8	3-7/8	3.8	{4-5}(6-7) or (2-3) or (1-2)	(10-11-12)	Fig. S (8-9) fb
173E		-	8500:4200	225	310	7.0, 85 ma dc	100-4500cps	5-1/2	3-9/16	4-9/16	8.0	(1-2)	(3-4-5)	
174A		-	12,000:8	0.84	1170	35.3 high wdg	100-5000cps	1-3/4	1-3/4	3-1/4	1.0	(R-RW)	(B1-B1W-G)	Fig. N
174C		-	6000:600	23 av	318 av	7.6 high wdg	200-3000cps	1-3/4	1-3/4	3-1/4	1.0	(R-RW)	(B1-B1W)	Fig. N
174D		-	20,000:250 20,000:30	26	2250	40 high wdg	50-8000cps	1-3/4	1-3/4	3-1/4	1.0	{R-B1W} {RW-B1}	(G-GW)	Fig. N
177B		E	4000:600+120	3.7each	50	0.02 (1-2) or (3-4)	5-30 kc	3-9/32	1-11/16	4-3/8	2.1	(1-A-2)(3-B-4)	(5-6)	

"includgs" including lugs

"incterm" including terminals

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
178D	D-156880	E	4500:600	41	214	7.2	35-15,000 cps	1-3/4	1-3/4	3-1/4	1.0	(R-RW)	(B1-B1W)	Fig. N
179B		E	16,000:600 or 135	2.8 av	200	-	1-150 kc	2-7/8	2-7/8	4 in term	2.5	(2-1)(6-5)	(4-3)(8-7)	Fig. P
181A		E	150+20:750	1.0(1-2) 1.0(3-4)	4.5	0.030(5-6)	35-150 kc	3-9/32	1-11/16	3-7/16	2.3	(1-1T-2)(3-3T- 4)	(5-6)	Fig. J
181B		E	20,000:125	1.15	155	-	36-150 kc	3-9/32	1-11/16	3-7/16	2.3	(1-2) 20,000 ohm resistor across (3-4)	(3-4)	Fig. J
181C		E	80,000:600	17	1600	-	4.8-16 kc	3-9/32	1-11/16	3-7/16	2.3	(1-2)	(3-4)	Fig. J
181D		E	6000:135	0.85	58	-	30 and 40 kc	3-9/32	1-11/16	3-7/16	2.3	(2-1)(6-5)	(4-3)(8-7)	Fig. J
181E		-	45,000:100 20:1 turns	1.5	263 110(1-3)	0.007(3-4) 0.68(1-2)	2000 cps	3-9/32	1-11/16	3-7/16	2.3	(3-4) (2-3)	(5-6) (1-2)	Two transformers in one case. Fig. J
181F		E	15,000:60	1.0	100	-	8-150 kc	3-9/32	1-11/16	3-7/16	2.3	(1-2)(3-4)	(5-6)	Fig. J
184A		-	1:1 turns	99	500	15.0	20 cps	4-9/32	2-9/16	4-3/8	4.8	(1-2)	(3-4)	
186A		E	60,000:600	33.5 av	4950 av	1.9 av	250-2800cps	3-1/8	1-23/32	4-1/4	2.2	(1-2) 600 ohm resistor across (1-2)	(3-4)	Fig. K
186B		-	30,000:175	107	4850	1.2	Voice	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4)(5-6)	Fig. K
186C		-	12,000:1000	145	1830	18.0 high wdg	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
186E		-	4000:0.22	0.11	245	4.4 (7-8)	255-3145cps	3-1/8	1-23/32	4-1/4	2.2	(1-6) taps	(7-8)	Fig. K
187A		-	5000:300	34 (1-5) 196(9-11)	260	47 (6-7-8)	30-8000cps	4-7/8	3-7/16	4-3/8	8.0	(1-2-3-4-5)	(6-7-8)	(9-11) fb
188A		E	200,000:15,000	29	360		61 kc	1-27/32	1-3/32	2-1/32	2.3	(1-2)	(3-4)	
189A	D-98829	E	3500:2.3	0.05	20		120 kc	3-9/32	1-11/16	3-7/16	1.5	(1-2)	(3-4)	Fig. J
189B		E	100,000:300: 300 50,000:135	0.9 each 5.0(9-10)	100	0.335(7-8)	4 or 8 kc	3-9/32	1-11/16	3-7/16	1.5	(1-2-3) and (4-5-6) (9-10)	(7-8) (7-8)	Fig. J
190A	D-99757	E	7000:300	0.62	60	0.00381	4 kc	5-3/16	4-3/8	5-3/16	12.0	(1-2)	(3-4-5)	

"in term" including terminals

OUTPUT TRANSFORMERS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
193A		E	60,000:200 200:100 200:16	3.5 1.0	175 3.5	-	58-111 kc tsf	2-17/32	1-11/16	3-7/16	1.2	(3-4) (1-T-2)	(5-6) (3-4) (1-T)	Fig. H
194A		-	4:1 ratio (3-4):(1-T-2) 2:1 ratio (1-T):(T-2)	4.0	27 6.0	588µh(1-T) 298µh(T-2)	40-143 kc tsf	2-17/32	1-11/16	3-7/16	1.2	(1-T-2) (T-2)	(3-4) (1-T)	Fig. H
194B		E	4000:15 4000:62.5	0.1(1-2) 0.2(3-4)	13.0	0.89µh	620-2356kc tsf	2-17/32	1-11/16	3-7/16	1.2	(1-2) (3-4)	(4-5)	Fig. H
195A		E	6000:10	0.012	12.5	610µh(3-4)	306-543 kc tsf	2-17/32	1-11/16	3-7/16	1.2	(1-2)	(3-4)	Fig. H
197A		M	24,000:600	370	3200	72 high wdg	30-15,000 cps	2-7/8	2-7/8	3-1/2	2.5	(R-RW)	(B1-B1W) (G-GW)	
199A	D-157602	-	150,000:50,000	632	1800	25	255-3145cps	2-17/32	1-11/16	3-7/16	1.2	(1-2)	(3-4)	Fig. H
500A		-	21,000:600 or 296 or 45 (7-8):(1-2) or (9-10) or (3-4)	19.6 15.4	935 101.0	20 (7-8)	Voice	1-11/16	1-11/16	3-9/16	1.3	(1-2) (3-4) mon	(7-8) (9-10) fb	Fig. G.
500B		-	125,000:220	2.7	1750	0.21	700-1700cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)(3-4)	(5-6)(7-8)	Fig. G
500C		-	10.5:1 turns 10.5:1 turns	2.3	585 585	5.1(3-4)	270 cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-4) (5-6)	Low demand Fig. G
500D		-	140:1.6	0.25	18.5	0.63 (3-4)	600-1800cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-4)	Fig. G
500E		-	7.5:1 turns 7.5:1	1.4	105(3-4) 420(7-8)	3.2	165-435 cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-4) (7-8)	Fig. G
500F		-	10,000:600	69	945	5	50-5000 cps	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(3-4)	Fig. G
503A		E,M	3:1:1	270 270	445	15 (7-8)	200-3600cps	1-11/16	1/11/16	3-9/16	1.3	(1-2) (3-4)	(7-8)	Fig. G
505A	D-158851	E	5000:20	0.15	7.5	0.0029(3-4)	420-612 kc	3-9/32	1-11/16	3-7/16	1.3	(1-2)	(3-4)	
508A		-	7000:10	0.1	3.5		463-605 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4)	Fig. E
509A		-	3470:600 or 100	58av(1-2) 19av(3-4)	113 av 154 av (9-10)	5.5	250-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2) or (1-5) (3-4) mon	(7-8) (9-10) fb	Fig. J
510A		-	720,000:72	0.125	7.0	62µh (1-2)	2064 kc	5/8	d1a	2-3/8	0.1	(3-4)	(1-2)	
513A		E	4000:100	0.24av	11 av		50-3500 kc	3-13/32	2-9/16	3-7/16	1.5	(1-2)	(3-4-5)	Fig. L
514A		E	3000:72	0.1	13	600 µh	50-3500 kc	2-17/32	1-11/16	2-19/32	0.5	(1-2)	(3-4-5)	
516A		-	15,000:250	37	1590	10 (3-4)	250-3000 cps	1-11/16	1-3/16	2-3/4	0.6	(1-2)	(3-4)	

tsf - tuned single frequency

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
517A		M	20,000:600	75	2700(3-4) 150(5-6)	20 (3-4) 6 ma dc	200-3500cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4)(5-6)	Not potted. Fig. F
517B		M	90,000:10,000	600	1400	11 (3-4) 7.5 ma dc	300-3000cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4)	Fig. F
517C		M	25,000:600	54	2400	0.7	200-3000cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4)	Fig. F
517D		M	12,000:600 3000:150	23	334	0.3	1100-3400 cps 150-450 cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4-5)	Fig. F
517E		M	900b:144,000	750	4450	3.4	500-3400cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4-5)	Fig. F
517F		M	20,000:600	75	2700(3-4) 150(5-6)	20(3-4) 6 ma dc	200-3500cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4)(5-6)	Same as 517A except potted. Fig. F
517G		M	70,000:500	58	4000	0.5	500-2000cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4-5)	Fig. F
518A		-	200:200:1 turns	0.155	910 1150	25 (7-8)	1600 or 2000 cps	1-11/16	1-11/16	3-9/16	1.1	(1-5) taps	(7-8) (9-10)	Fig. G
520A		-	2000:66.7 or 4 or 2	1.46 0.185 0.069	26.2	11(11-13) 18 ma dc	50-15,000 cps	4-7/32	4-3/32	6-1/2	14	(9-10) (5-6) (1,3-2,4)	(11-12-13)	(7-8) fb.
521A		-	1600:40	-	3.2	59 μ h (3-4) at 10 kc	3.5-7.1 mc	2-17/32	1-19/32	2-9/16	0.6	(1-2)	(3-4)	Fig. E
524A		-	30:1 turns	6.4	1540	0.0067	Voice	11/16	9/16	1-5/16	0.8 oz	(1-3)	(4-6)	Fig. A
527A		E	800:75	0.05	0.9	0.0018(3-5) at 100kc	0.05-20 mc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4-5)	Fig. E
530A		-	18,800:600 or 300	48 200	1900	0.3 0.15	200-3500cps	1-19/32	1-5/32	1-13/32	0.2	(R-RW-B1) (GW-Br)	(B1W-G)	Fig. C
530B		-	15:1 turns	2.3	750	2.0 (B1W- G) 10 ma dc	3700 cps	1-19/32	1-5/32	1-13/32	0.2	(R-RW-B1)	(B1W-G)	Fig. C
531A		-	6100+4200:135 (6-5-4):(3-1)	5.5	175	-	44-140 kc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-5-6)	Fig. B
531B		-	18,000+2000:130 (6-5-4):(3-1)	2.5	120	-	164-260 kc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-5-6)	Fig. B
531C		-	15,000+5000: 130 (6-5-4):(3-1)	2.5	120	-	164-260kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-5-6)	Fig. B
531D		-	8500:135	6 av	55 av	-	164-260kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B
531E		-	20,000:15	0.32	11	0.0012 (4-6)	304 kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B

OUTPUT TRANSFORMERS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
531F		-	18,000:9000	18 av	19 av	-	164-260 kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B
531G		-	20,000:15	0.6	14	0.00243 (4-6)	116, 236 or 256 kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B
531H		-	20,000:130	2 each	12	0.00205 (6-8)	184 or 192kc	1-3/16	1-1/32	1-1/2	0.1	(3-7) or (1-2) or (4-5)	(6-8)	Fig. B
534A	D-175892	E	6000:50	1	55	-	100 kc	1-3/4	1-3/4	2-25/32	0.6	(1-2)	(3-4)	
535A	D-176973	-	5000:600	42.5(1-2) 53.5(3-4) 18.0(5-6)	510	14 (7-8) 40 ma dc	60-6000 cps	3-13/32	1-3/4	3-15/32	2.0	(1-2)(3-4) (5-6) mon	(7-8)	
536A		-	21,000:600: 296:45 (7-8):(1-2): (9-10):(3-4)	19.6 15.4	955	20 (7-8) 7 ma dc	Voice	1-3/4	1-3/4	3-1/2	1.4	(1-2) (3-4) mon	(7-8) (9-10) fb	
537A	D-175887	E	30,000:72	1.2	200	0.038(3-5)	94-106 kc	1-3/4	1-3/4	2-25/32	0.6	(1-2)	(3-4-5)	
537B	D-175889	E	24,000:4000	7	90	0.023(4-5)	100 kc	1-3/4	1-3/4	2-25/32	0.6	(1-2-3)	(4-5)	
537C	D-175890	E	16,000:8000	70	250	0.048(4-5)	100 kc	1-3/4	1-3/4	2-25/32	0.6	(1-2-3)	(4-5)	
538A	D-160158	-	2900:110	0.37	4.5	23 μh	100-4500 kc	2-17/32	1-19/32	3-7/16	1.0	(1-2)(5-6)	(7-4)(3-8)	
539A	D-161160	E	6000:50	2	190	-	56 kc	1-11/16	1-11/16	3-9/16	1.3	(1-2)	(4-12) taps	Fig. G
540A	D-161161	E	90,000:40,000	20	25	-	56 kc	3-13/32	2-9/16	3-7/16	1.7	(1-2)	(3-4)	
541A	D-160554	E	4000+497:135 (6-5-4):(3-1)	8.5	230 av	-	12-60 kc	2-17/32	1-11/16	3-7/16	1.0	(1-2-3)	(4-5-6)	
541B	D-161476	E	3600+730:135 (6-5-4):(3-1)	8.5	230 av	-	12-60 kc	2-17/32	1-11/16	3-7/16	1.0	(1-2-3)	(4-5-6)	
542A	D-161163	-	4500:50	18 av	250	-	12-60 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(1-3)	Fig. E
543A	-	E	15,000:1160	163	1240	132 (5-6)	20-20,000 cps	2-5/8	2-9/16	3-1/2	2.5	(1-2)(3-4)	(5-6)	

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
50A		-	1:1 ratio	35.65	42.55	3.0	Voice	20	9-1/2	11-1/2	75	(1-2)	(3-4)	High Voltage Test Between Windings
58C		-	2000:30,000	15.0	230	1.2	Voice	4-3/16	2-9/16	4-5/32	4.5	(3-4)(7-8)	(1-2)(5-6)	Fig U
67C	D-77142	-	1:1 ratio	47	47	2.4	Voice	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
67E		-	1:1 ratio	47	47	2.4	Voice	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Same as 67C except less X-talk. Fig. U
67F	D-86742	E	2000:500	80	135	1.5	1200 cps	4-3/16	2-9/16	4-5/32	4.5	(1-2)(3-4)	(5-6)	Fig. U
74A	Half 93A	-	1:1 ratio	50	52	2.6	Voice	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
74C	D-75135	E	600:600	1.7 (1-2)	1.75(3-4)	0.12	3-33 kc	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
83B	Half 62A	-	1:1 ratio	50	52	1.04	Voice	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
84B		-	1:1 ratio	13.1	18.5	0.28	135 cps	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
91A		-	1:1 ratio	47	47	2.4	Voice	5	4-3/16	4-5/32	9.0	(1-2)(5-6)	(3-4)(7-8)	Two on base. Fig. W
94E		-	900:900	50	50	0.55	Voice	3-1/8	1-23/32	4-1/4	1.8	(2-1)(6-5)	(4-3)(8-7)	Fig. K
94F		-	900:1350	48	73	0.85	Voice	3-1/8	1-23/32	4-1/4	1.8	(4-3)(8-7)	(2-1)(6-5)	Fig. K
94H		E	600:600	24	33	0.64	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
94J		-	30:700+350 30:30+30	1.6	15.7(3-5) 410(5-7)	0.03	Voice	3-1/8	1-23/32	4-1/4	2.2	(1-2) (1-2)	(3-4-5-6-7) (4-6)	Monitor coil. Fig. K
94K		-	25:50	2.5	3.5	0.031	180-1000cps	3-1/8	1-23/32	4-1/4	1.8	(1-2)	(3-4)	Fig. K
94L		-	1:1 ratio	750	750	50h, 15 ma 20 cps	20 cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4)	Fig. K
94M		-	5000:8400	340	400	20h, 20cps 100 v	20 cps	3-1/8	1-23/32	4-1/4	2.2	(1-4) taps	(5-8) taps	Fig. K
94N		-	900:900	12.6	17.0	0.28	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
94P	D-157130	-	10:25	0.55	2.76	0.04 (7-8)	425-1615cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(7-8)	Fig. K
94R		-	1 or 3.3 or 10 or 33:500	1.63	55	0.60 (1-2)	1000 cps	3-1/8	1-23/32	4-1/4	2.2	(3-7) taps	(1-2)	Fig. K
94S		M	30:27,000	4.35	3230	0.25	1000 cps	3-1/8	1-23/32	4-1/4	2.2	(3-4)(7-8)	(1-2)(5-6)	Fig. K
94T		M	600:900	14.5	31.5	0.34 high wdg	Voice	3-1/8	1-23/32	4-1/4	2.2	(4-3)(8-7)	(2-1)(6-5)	Fig. K
94U		-	20:600	0.26	17.8	0.4 (5-6)	270 cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)(3-4)	(5-6)	Fig. K
94W		-	0.5:1000	0.15	110	2.5 high wdg	425-1615cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4)(5-6)	Fig. K
94Y	D-16133B	E	600:600	32	38	1.0	200-3000cps	3-1/8	1-23/32	4-1/4	2.2	(1-2)	(3-4)	Fig. K

REPEATING COILS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
94AA	D-156587	-	600:300	12.5	31	0.32	200-3500cps	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
96B	D-79683	-	1:160,000	0.23	315	1.6 (3-4)	16-425 cps	3-3/16	2-5/8	3-17/32	3.5	(1-2)	(3-4)(5-6)	Fig. T
100A	Half 62A	-	1:1 ratio	50	52	1.04	Voice	3-7/8	2-1/16	3-15/16	4.0	(1-2)(5-6)	(3-4)(7-8)	
100B	Half 62C	-	1:1.62 ratio	48	64	0.64	Voice	3-7/8	2-1/16	3-15/16	4.0	(1-2)(5-6)	(3-4)(7-8)	
102A	Half 75A	-	1:1 ratio	50	52	2.6	Voice	3-7/8	2-1/16	3-15/16	3.1	(1-2)(5-6)	(3-4)(7-8)	
102B	Half 75C	-	1:1.62 ratio	29	51	1.6	Voice	3-7/8	2-1/16	3-15/16	3.1	(1-2)(5-6)	(3-4)(7-8)	
107A	D-87301	E	600:600	13.4	15.0	0.68	5-30 kc	4-9/32	2-9/16	4-3/8	4.5	(1-2)(5-6)	(3-4)(7-8)	
108A		-	600:900	7.7	9.9	1.6	200-3500cps	3-9/32	1-11/16	3-7/16	2.3	(2-1)(6-5)	(4-3)(8-7)	Fig. J
108C		-	1420:1600	20.0	17.4	4.4	200-3500cps	3-9/32	1-11/16	3-7/16	2.3	(2-1)(6-5)	(4-3)(8-7)	Fig. J
111A		E	600:40	2.2	29.3	1.28	35-8500cps	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
111C	D-87653	E	600:600	40.0	40.0	27.0	35-8000cps	4-3/16	2-9/16	4-5/32	4.5	(1-2)(5-6)	(3-4)(7-8)	Fig. U
111D	D-92301	-	1200:600	6.0	12.0	12.0 high wdg	35-10,000 cps	4-3/16	2-9/16	4-5/32	4.5	(3-4)(7-8)	(1-2)(5-6)	Fig. U
119B	D-91918	-	600:37	2.3	40	27.0 high wdg	35-8000cps	4-9/32	2-9/16	4-3/8	4.0	(1-2)(5-6)	(3-4)(7-8)	
119C	D-91913	E	1:1.15 ratio	50	55	27.0	35-8000cps	4-9/32	2-9/16	4-3/8	4.0	(3-4)(7-8)	(1-2)(5-6)	
119E		E	600:600	40	40	27.0	35-8000cps	4-9/32	2-9/16	4-3/8	4.0	(1-2)(5-6)	(3-4)(7-8)	
119F		-	1200:600	6	12	12.0 high wdg	35-20,000 cps	4-9/32	2-9/16	4-3/8	4.0	(4-3)(8-7)	(2-1)(6-5)	
120C		-	900:900	12.7	17.8	0.55	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
120D		-	1350:900	12.7	29.2	0.55	Voice	3-1/8	1-23/32	4-1/4	2.2	(4-3)(8-7)	(2-1)(6-5)	Fig. K
120E		-	600:900	11.5	12.7	0.55 high wdg	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
120F		-	600:1500	5.7	19	0.32	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K
120G		-	600:900 600:1500	5.7	19	0.32	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4L-3)(8-7L) (4H-3)(8-7H)	Fig. K
120H	Similar to 120C but has crosstalk requirements						Voice	3-1/8	1-23/32	4-1/4	2.2			Fig. K
120J	Similar to 120D but has crosstalk requirements						Voice	3-1/8	1-23/32	4-1/4	2.2			Fig. K
120K	Similar to 120E but has crosstalk requirements						Voice	3-1/8	1-23/32	4-1/4	2.2			Fig. K
120L	Similar to 120F but has crosstalk requirements						Voice	3-1/8	1-23/32	4-1/4	2.2			Fig. K
120M		-	1:1.33 ratio 1:86.8 ratio	9.8 ea	14.0 580	0.35(5-6)	Voice	3-1/8	1-23/32	4-1/4	2.2	(1-2) or (3-4)	(5-6) (5-7)	Fig. K

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
120N		-	1:2 ratio	13.1	13.9	0.34	Voice	3-1/8	1-23/32	4-1/4	2.2	(7-8)(9-10)	(1-2)(3-4) (5-6)	Fig. K
120P		-	3:1 ratio 5:1 ratio	15.9	26.7	0.4	Voice	3-1/8	1-23/32	4-1/4	2.2	(7-9)(10-12) (8-9)(10-11)	(1-2)(3-4) (5-6)	Fig. K
120CS		M	900:900	48	48	0.55	200-3500cps	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K. Silicon Steel Core
120DS		M	1350:900	73	48	0.55	200-3500cps	3-1/8	1-23/32	4-1/4	2.2	(4-3)(8-7)	(2-1)(6-5)	Fig. K. Silicon Steel Core
120ES		M	600:900	31	48	0.37	200-3500cps	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K Silicon Steel Core
120FS		M	600:1500	23	94	0.32	200-3500cps	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7)	Fig. K. Silicon Steel Core
120GS		M	600:900 600:1500	23	71 95	0.32	200-3500cps	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4L-3)(8-7L) (4H-3)(8-7H)	Fig. K. Silicon Steel Core
120HS	Similar to 120CS but has crosstalk requirements							3-1/8	1-23/32	4-1/4	2.2			Fig. K
120JS	Similar to 120DS but has crosstalk requirements							3-1/8	1-23/32	4-1/4	2.2			Fig. K
120KS	Similar to 120ES but has crosstalk requirements							3-1/8	1-23/32	4-1/4	2.2			Fig. K
120LS	Similar to 120FS but has crosstalk requirements							3-1/8	1-23/32	4-1/4	2.2			Fig. K
123A		E	600:600	13.4	15	0.68	5-30 kc	4-9/32	2-9/16	4-3/8	4.0	(2-1)(6-5)	(4-3)(8-7)	
124B	D-97583	-	200:600	19.4	56	0.46 high wdg.	Voice	3-9/32	1-11/16	3-7/16	2.0	(4-3)(8-7)	(2-1)(6-5)	Fig. J
124C		E	600:135+135	4.1	8.1	-	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(3-3T-4) (5-6T-6)	(1-0-2)	Fig. J
124F		E	700:135+135	4.1	8.7	0.023(1-2)	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(3-3T-4) (5-6T-6)	(1-0-2)	Low demand. Fig. J
129A		E	15:600	0.74	21	0.82 high wdg	1000 cps	3-9/32	1-11/16	3-7/16	2.0	(2-1)(6-5)	(4-3)(8-7)	Fig. J
134A		E	300:0.75	7.8	4900	0.35	200-3000cps	3-13/32	2-9/16	3-7/16	3.0	(2-1)(6-5)	(4-3)(8-7)	Fig. L
137A	D-93957	E	100:1000	0.5	5.0	0.002 high wdg	0.55-1.5 mc	3-7/16	1-11/16	3-3/4	1.1	(1-2)(5-6)	(3-4)(7-8)	
139A		E	50:800	6.3	100	1.35 high wdg	200-3000cps	2-7/8	2-7/8	3-17/32	2.5	(1-2)	(3-4)	Fig. R
140A		E,M	600:5500	80	570	36.1 high wdg	60-10,000 cps	2	1-1/4	2-19/32	0.5	(1-2)	(3-4)(5-6)	
140B		E,M	600:600	50	59	3.0	60-10,000 cps	2	1-1/4	2-19/32	0.5	(1-2)(3-4)	(5-6)	
140C		E,M	600:6	0.52	54	3.0 high wdg	60-10,000 cps	2	1-1/4	2-19/32	0.5	(1-2)	(3-4)(5-6)	

REPEATING COILS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
146A		E	135:600	1.9	8.8	1.8 high wdg	0.2-150 kc	3-9/32	1-11/16	3-7/16	2.0	(2-1)(6-5)	(4-3)(8-7)	Fig. J
146B		E	20:67.5	0.20	0.60	0.002(3-4)	4-3000 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)	Fig. J
146C		E	125:125	0.6	0.7	-	35-500 kc	3-9/32	1-11/16	3-7/16	2.0	(4-3)(8-7)	(2-1)(6-5)	Fig. J
146D		E	125:125	0.6	0.6	-	35-150 kc	3-13/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)(5-6)	Fig. J
146E	D-99019	E	140:250	0.52	1.5	-	12-108 kc	3-13/32	1-11/16	3-7/16	2.0	(1-2)	(3-4-5)	Fig. J
146F	D-99298	E	600:250	1.5	4.0	-	12-108 kc	3-13/32	1-11/16	3-7/16	2.0	(3-4-5)	(1-2)	Fig. J
146G		E	600:135	0.64	1.75	0.090(3,7- 4,8)	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(2-1)(6-5)	(4-3)(8-7)	Fig. J
146H		E	600:125	0.43	5.1	-	36-84 kc	3-13/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146J		E	125:50	0.47	1.05	0.022(1-2)	35-1000 kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146K		E	125:67	0.51	1.00	0.022(1-2)	35-1000 kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146L		E	125:82	0.61	1.05	0.022(1-2)	35-1000 kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146M		E	125:95	0.65	1.05	0.022(1-2)	35-1000 kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146N		E	125:160	1.00	0.79	0.022 high wdg	35-1000 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)(5-6)	Fig. J
146P		E	100:135+135	0.62	2.3	0.020	60-500 kc	3-9/32	1-11/16	3-7/16	2.0	(1-1T-2)	(3-3T-4) (5-6T-6)	Fig. J
146S	D-157403	E	170:135+135	1.8	3.2	0.070	12-230 kc	3-9/32	1-11/16	3-7/16	2.0	(1-1T-2)	(3-3T-4) (5-6T-6)	Fig. J
146T		E	600:600+600	31	58.6	12.0	200-3500 cps	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4-5) (6-7-8)	Fig. J
146U		E	600:600	17.6	21.0	-	4-31 kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(7-8)	(1-2)(5-6)	Fig. J
146W		E	108:700	0.61	2.03	0.100(5,7- 6,8)	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)(3-4)	(5-6)(7-8)	Low demand. Fig. J
146Y	D-158786	E	72:68	0.77	0.55	0.110(1-2)	60-525 kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146AA	D-158785	E	72:91	0.53	0.85	0.110	60-525 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(5-4)(5-6)	Fig. J
146AB		E	135:135+540	0.72	4.8	-	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4-5)(6-7-8)	Fig. J
146AC		E	285:135	0.68	1.31	0.037	60-300 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)(3-4)	(5-6)(7-8)	Fig. J
146AD		E	72:125	2.0	2.0	0.001,50kc	64-516 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)(5-6)	Fig. J
146AE		E	72:25	0.4	1.0	0.001,(1-2) 50 kc	1556-2044kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146AF		E	72:33	0.5	1.0	0.001,(1-2) 50 kc	620-2356kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
146AG		E	72:46	0.6	1.0	0.001, (1-2) 50kc	564-1052kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146AH		E	72:66	0.7	1.0	0.001 (1-2) 50kc	312-552 kc	3-9/32	1-11/16	3-7/16	2.0	(3-4)(5-6)	(1-2)	Fig. J
146AJ		E	72:75	1.0	0.8	0.001 50kc	68-308 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)(5-6)	Fig. J
146AK		E	135:135+135	1.6	3.2	0.055	10-100 kc	3-9/32	1-11/16	3-7/16	2.0	(I-IT-2)	(3-3T-4) (5-6T-6)	Fig. J
146AL		E	108:600	0.61	1.86	0.084 (5-6)	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)(3-4)	(5-6)(7-8)	Fig. J
146AM		E	72:400	1.0	0.6	0.001, 50kc	2172-2788kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)(5-6)	Fig. J
146AN		E	135:135+600	0.75	5.6	-	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4-5) (6-7-8)	Fig. J
150A	D-99159	-	2000:600	10.3	45.3	0.82 high wdg	4-10 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)(5-6)	Fig. J
150B	D-99160	-	1200:600	9.9	27.6	0.465 high wdg	4-10 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)(5-6)	Fig. J
151A	D-99161	-	1600:600+600	35.0	58.6	3.2 high wdg	250-3000cps	3-1/8	1-23/32	4-1/4	2.5	(3-4)+(7-8)	(2-1)(6-5)	Fig. K
151B	D-97584	-	600:600+600	24.0	36.0	2.5 high wdg	Voice	3-1/8	1-23/32	4-1/4	2.5	(1-2)	(3-3T-4) (7-8T-8)	Fig. K
152A		M	600:200	44.0	110	0.51	100-5000cps	1-3/4	1-3/4	3-1/4	1.0	(R-RW)(B1-B1W)	(G-GW)	Fig. N
154A	D-99122	-	60:6+300	16.2	69	30 high wdg	200-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)	(3-4)(5-6)	Fig. J
154B	D-99123	-	6:300	0.056	30.3	15 high wdg	200-3000cps	3-9/32	1-11/16	3-7/16	2.3	(1-2)	(3-4)	Fig. J
155A		E	100:100	0.30	0.30	0.008	1-1500 kc	3-3/16	3-3/16	1-1/2	1.3	(R-RW)	(B1-B1W)	
157A		E	52.5:600	1.15	7.9	-	5-30 kc	3-1/2	3-1/16	2	2.0	(RW-R)(GW-G)	(B1W-B1) (BrW-Br)	
159A	D-98827	E	1400:400+400	5.0	11	-	64-108 kc	7-25/32	1-11/16	4-3/8	4.0	(3-3T-4)(5-6T-6)	(1-2)	
159B		E	200:1400	0.95	8.7	0.110(1-2)	64-108 kc	7-25/32	1-11/16	4-3/8	4.0	(3-4)	(1-2)	
160A	D-99814	E	125:3550 at 340 kc 26.3:3000 at 120 kc	0.09	10	-	120 and 340 kc	3-9/32	1-11/16	3-7/16	1.8	(2-1)(6-5)	(3-4)	Fig. J
162A		E	1:1.12	38	40	15.0	35-8000cps	5-3/16	5-3/16	3-7/16	8.5	(3-4)(7-8)	(1-2)(5-6)	
165B		E	75:600	0.5	0.75	0.00185 10 kc	312-552 kc	2-17/32	1-11/16	3-7/16	1.3	(1-2)	(3-4-5)	Fig. H
165C		E	15:75	0.06	0.17	-	620-3100kc	2-17/32	1-11/16	3-7/16	1.3	(1-2)	(3-4)	Fig. H

REPEATING COILS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
165D		E	3.8:135	0.09	0.8	-	120 kc	2-17/32	1-11/16	3-7/16	1.3	(1-2)(3-4)	(5-6)	Fig. H
166A		E	600:240	4.6	14.3	2.0	50-10,000cps	4-9/32	2-9/16	4-3/8	3.0	(1-4)	(5-8)	
167A	D-99653	E	125:142	0.75	1.0	-	36-150 kc	3-13/32	2-9/16	4-1/32	2.8	(1-2)	(8-3)(6-13)	
167B	D-99654	E	585:142	1.0	3.8	-	36-150 kc	3-13/32	2-9/16	4-1/32	2.8	(8-3)(6-13)	(1-2)	
168A	D-157351	E	135:25,000	3.5	115	-	58-111 kc	3-9/32	1-11/16	3-7/16	1.5	(1-2)(3-4)	(5-6)	Fig. J
169A		E	135:22,300	1.42	165	-	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)	Fig. J
169C		E	135:18,500	1.60	161	-	60-108 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)	Fig. J
169D	D-160692	E	135:21,000	3.24	234	-	12-60 kc	3-9/32	1-11/16	3-7/16	2.0	(1-2)	(3-4)	Fig. J
170A		E	420:2140	92	500	49	20-15,000cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW)	(B1-B1W)	Fig. N
170B		E,M	600:600	124	100	14	30-10,000cps	1-3/4	1-3/4	3-1/4	1.3	(R-RW)(B1-B1W)	(G-GW-Br)	Fig. N
173B	D-157890	E	3.38:1 ratio	42	43 43	1.1	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7) (10-9)(12-11)	In two-coil hybrid set. Fig. K
173C		E	4.60:1 ratio	42	62 62	1.1	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7) (10-9)(12-11)	In two-coil hybrid set. Fig. K
173D		E	1.20:1 ratio	42	26.6	1.1	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7) (10-9)(12-11)	In two-coil hybrid set. Fig. K
173E		E	2:1 ratio	42	42	1.1	Voice	3-1/8	1-23/32	4-1/4	2.2	(2-1)(6-5)	(4-3)(8-7) (10-9)(12-11)	In two-coil hybrid set. Fig. K
174A		E E	600:100,000 600:100,000	10.3 10.3	1840 1840	375(3-4) 375(7-8)	255-3145cps	3-9/32	1-11/16	3-7/16	2.8	(1-2) (5-6)	(3-4) (7-8)	Two coils in one case. Fig. J
175A		-	1:1 ratio	82	118	12	30-10,000 cps	3-9/32	1-11/16	3-7/16	2.0	(1-2)(3-4)	(5-6)(7-8)	Fig. J
176A		-	600:600	47	47	0.6 high wdg	Voice	3-15/16	2-1/16	3-15/16	2.8	(1-2)(5-6)	(3-4)(7-8)	
177A		E,M	600:46,000	65.4	1885	3.0	Voice	1-11/16	1-11/16	3-9/16	1.3	(1-2)(3-4)	(7-8)	Fig. G
177B		E,M	600:200 600:6000	7.0 av	15.4 av 556 av	0.8	Voice	1-11/16	1-11/16	3-9/16	1.3	(1-2)(3-4) (7-8-9)	(7-8-9) (5-6)	Fig. G
177C		E,M	600:600 or 150:150 or 100:100	13.3 av	13.2 av	2.5	30-15,000 cps	1-11/16	1-11/16	3-9/16	1.3	(1-2-3)(4-5)	(7-8-9) (10-11)	Fig. G
177D		E,M	150:600 600:600 1350:600	33	73	0.8	Voice	1-11/16	1-11/16	3-9/16	1.0	(7-8)(9-10) (6-8)(9-11) (1-2)(3-4)	(1-2)(3-4) (1-2)(3-4) (5-8)(9-12)	Fig. G

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
178B		E	75:75+75:75 (1-2):(3-4) + (5-6):(7-8)	0.28 0.28	0.86 0.86	-	60-3000 kc	4-5/16	2-9/16	3-7/16	3.5	(1-2) (7-8)	(3-4) (5-6)	
179A		E	2700:25,000	23.1	98.4	-	60-108 kc	2-17/32	1-11/16	3-7/16	1.3	(1-2)(3-4)	(5-6-7)	Fig. H
179B		E	70:20,000	0.25	13.0	-	455 kc	2-17/32	1-11/16	3-7/16	1.3	(1-2)(3-4)	(5-6-7)	Fig. H
180A		E	600:870	35.4	23.3	7 (1-2)	35-10,000 cps	4-5/16	2-9/16	4-3/8	4.3	(1-2)(5-6)	(3-4)(7-8)	
181A		E	2000:2000	8.08	8.20	0.00165 (1-2)(3-4)	78 kc	2-17/32	1-11/16	3-7/16	1.0	(1-2)	(3-4)	Fig. H
182A	D-158799	E	72:72+72	0.26	0.81	-	300-2400kc	3-9/32	1-11/16	3-7/16	1.5	(1-2)	(3-4-5)	Fig. J
183A		-	7000:20	0.14	7.2	-	120 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4)(5-6)	Fig. E
183B		E	1800:135	0.81	12	0.00147	60-108 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4)	Fig. E
183C		E	216:1	0.096	21.5	250 μh	79.5-88 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4)(5-6)	Fig. E
185A		E	135:1619	1.1 av	14.6 av	-	60-300 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4-5)	Fig. E
185B	D-161204	E	135:30,000	-	-	-	60-108 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2-3)	(4-5)	Fig. E
185C		E	1800:135	1.35	20	0.40 high wdg	60-108 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2-3)	(4-5)	Fig. E
185D		E	135:18,800	1.0	60	-	60-108 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4)	Fig. E
188A		E,E	72:72	0.10	0.12	750 μh	50-10,000kc	3-13/32	1-11/16	4-1/2	2.0	(1-2) coaxial jack	(3-4) coaxial jack	
189C		-	4000:600+600	61.4	355	0.12 (1-2) (3-4) 60 ma dc	200-3000cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)(3-4) + (5-6)	(7-8)	Fig. F
189D	D-166829	M	43.5:1	11.3	400	5.0 (3-4)	200-3500cps	1-11/16	1-3/16	3-3/4	0.8	(1-2)	(3-4)	Fig. F
189E		M	1:1(1-2):(3-6) 8:1(3-6):(4-5)	50.6	56.0	0.52(3-6)	200-3500cps	1-11/16	1-3/16	3-3/4	0.8	(1-7-2)	(3-4-5-6)	Fig. F
191A		-	2500:72	0.8	13.0	0.00518 (3-4)	64-308 kc	3-9/32	1-11/16	3-7/16	1.5	(1-2)	(3-4)	Fig. J
192A		-	900:25	0.21	38	210 μh	64-108 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2-3)	(4-5)	Fig. E
194A		E	16.25:1 ratio	2.34	1.40	-	79.5-88 kc	2-17/32	1-11/16	3-7/16	0.8	(1-2)(3-4)	(5-6)	Fig. H
195A		-	72:6500	0.8	2.8	548 μh (3-4)	556-808 kc	2-17/32	1-19/32	2-9/16	0.8	(1-2)	(3-4)	Fig. E
196A		E	72:17,400	-	18	1715 μh high wdg	556 kc	1-11/16	1-11/16	3-7/16	0.6	(1-2)	(3-4-5)	
196G		-	40,000:40,000	4.6	6.0	368 μh, 20 kc	520 kc	1-11/16	1-11/16	3-7/16	0.5	(1-2-3)	(4-5-6)	

SECTION AB47.006

REPEATING COILS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
196H		-	80,000:80,000	13	13	1895 μ h, 20 kc	216 kc	1-11/16	1-11/16	3-7/16	0.5	(1-2-3)	(4-5-6)	
197B	197A Rep	E	75:110	0.135	0.11	0.31	17 cps-6 mc	5-3/16	3-7/16	4-13/32	8.0	(1-2)	(3-4-5)	
201A	D-176847	E	75:110	0.12	0.12	0.004, 5kc	5 kc-10 mc	3-9/32	1-11/16	3-7/16	1.4	(1-2)	(3-4-5)	Fig. J
201B	-	E	75:124	0.12	0.2	-	0.1-4.5mc (2kc-10mc)	3-9/32	1-11/16	3-7/16	1.4	(1-2)	(3-4-5)	Fig. J
202A		M	600:600	60	60	0.4	200-3500cps	1-11/16	1-3/16	3-3/4	0.8	(2-1)(6-5)	(4-3)(8-7)	Fig. F
203A	D-176892	E	72:1950	1.0	12	-	94-106 kc	2-17/32	1-11/16	2-19/32	0.8	(1-2)	(3-4)	
203B	D-175884	E	300:1560	1.4	8.0	-	94-106 kc	2-17/32	1-11/16	2-19/32	0.8	(1-2)(3-4)	(5-6)(7-8)	
204A	D-158429	E	72:72+72:72 (3-G):(1-G) + (2-G):(4-G)	0.27 0.27	0.76 0.76	-	64-3200 kc	6-1/16 Including jacks and mounting lugs	3-1/32 4	4	4.0	{3-G} coaxial {4-G} jacks	{1-G} coaxial {2-G} jacks	
205A	-	E	600:100	1.6	3.9	1/40 μ h, 10kc	150-450 kc	2	1-9/16	3-7/16	0.5	(2-4)	(1-3)	
206A		-	600:600	28	43	2.3	200-3500cps	1-19/32	1-5/32	1-13/32	0.2	(R-RW)	(B1-B1W)	Fig. C
207A		E,M	600:2	0.28	82	0.27	50-10,000kc	2-7/8	2-7/8	3-17/32	2.5	(1-2)(3-4)	(5-6)	Fig. R
208A		-	600:600	88.3	88.2	5.4	200-3500cps	1-7/8	1-1/32	2-1/16	0.5	(1-2)(5-6)	(3-4)(7-8)	
210A		-	420:600	64.4	72	0.423	200-3500cps	1-13/16	1-1/32	2-1/16	0.3	(R-RW)	(B1-B1W)	
211A		-	600:800 + 400	22.4	35.6	4.0	200-3500cps	1-13/16	1-1/32	2-1/16	0.3	(R-RW)	(B1-B1W) + (G-GW)	
212A		-	300:750	83	170	0.1 0.5 ma dc	3700 cps	11/16	9/16	1-5/16	0.8oz	(1-2-3)	(4-6)	Fig. A
213C		-	135:3000	5	95	-	44-140 kc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-6)	Fig. B
213D		-	130:3000	3.8	60	-	164-260 kc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-6)	Fig. B
213E		-	135:135	3.0	3.5	-	180-196 kc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-5-6)	Fig. B
213F		-	600:1,000,000	2.0	80	0.01634, 10 kc (4-6)	180-196 kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-5-6)	Fig. B
213G		-	200:153,000	4.5	80	0.01634, 10kc (4-6)	184 or 192kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-5-6)	Fig. B
213H		E	40:400	0.07	0.18	7 μ h, 1 mc (4-6)	12.19-13.09 mc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-6)	Fig. B
213J		E	40:400, 3.29-3.4 mc 75:750, 3.81- 3.91 mc	0.1	0.68	-	3.29-3.4mc or 3.81- 3.91 mc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-5-6)	Fig. B

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
213K	-	-	3000:153,000	13.5	80	0.01634, 10 kc (4-6)	195-205 kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-5-6)	Fig. B
214A	D-175891	E	1560:9000+9000 1560 (1-2):(5-6) + (7-8):(3-4)	-	20	-	94-106 kc	4-1/16	2-7/8	3-3/8	2.5	(1-2)	(5-6)	
				-	20							(3-4)	(7-8)	
215A	-	E,M	600:600	124	100	14	30-10,000 cps	1-3/4	1-3/4	3-1/2	1.3	(1-2)(3-4)	(5-6-7)	

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
2500A	-	E	600:600	6.9	8.2	1.0	0.2-30kc	5-1/8	3-7/16	5-3/16	7.4	(2-1)(6-5)	(4-3)(8-7)	Crosstalk balanced. 20 cps ring-thru.
2500B	-	E	600:1200	6.9	18	1.0	0.2-30kc	5-1/8	3-7/16	5-3/16	7.4	(2-1)(6-5)	(4-3)(8-7)	Crosstalk balanced. 20 cps ring-thru.
2504A	-	E	150:1157	0.48	4.5	620µh	200-8353kc	2-1/8	1-3/8	2-9/32	0.5	(1-3)	(4-5)	
2505A	-	No	1:2 turns	0.025	0.13	100µh	-	1-3/16	1-1/32	1-1/2	0.1	(1-4)	(3-6)	Blocking oscillator. Fig. B.
2506A	-	No	300:300 300:97,200	42 260	6700	1.0	2600 cps	1-19/32	1-5/32	1-13/32	0.5	(R-RW) (B1-B1W)	(G-GW)	Fig. C.
2507A	-	No	135:18,000 + 2000 (3-1):(6-5-4)	7.0	210	0.14 (4-6)	40-196kc	1-3/16	1-1/32	1-1/2	0.1	(1-2-3)	(4-5-6)	Fig. B.
2507D	-	E	75:192	0.06	0.08	50µh, 100kc	2.08-15.6mc	1-3/16	1-1/32	1-1/2	0.1	(2-3)	(4-5-6)	Fig. B.
2507E	-	No	75:1818	1.5	1812	15µh, 300kc	3096-7266kc	1-3/16	1-1/32	1-1/2	0.1	(1-2)	(2-3)	Fig. B.
2507F	-	No	2:18	0.03	0.05	20µh, 100kc (1-4)	4.14mc	1-3/16	1-1/32	1-1/2	0.1	(2-5)	(1-4)	Fig. B.
2507G	-	No	40,000:700,000	1.9	12	7160µh, 10kc (4-6)	280-296kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-5-6)	Fig. B.
2507H	-	E	75:357	0.16	0.55	60µh, 100kc	9.9-12.5mc	1-3/16	1-1/32	1-1/2	0.1	(2-3)	(4-5-6)	Fig. B.
2507J	-	E	75:182	0.035	0.06	40µh, 100kc	9.9-12.5mc	1-3/16	1-1/32	1-1/2	0.1	(2-3)	(4-5-6)	Fig. B.
2507K	-	E	75:133	0.035	0.04	40µh, 100kc	9.9-12.5mc	1-3/16	1-1/32	1-1/2	0.1	(2-3)	(4-5-6)	Fig. B.
2507L	-	No	135:135	4.3av	4.4av	-	40-160kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B.
2507M	-	No	135:600	6.0	25	-	40-160kc	1-3/16	1-1/32	1-1/2	0.1	(1-3)	(4-6)	Fig. B.
2507N	-	E	75:150 + 150	0.06	0.16	32µh, 100kc	13.0-18.2mc	1-3/16	1-1/32	1-1/2	0.1	(2-3)	(4-5-6)	Fig. B.
2508A	D-156667	No	500:20,000 500:20,000	51.4	2610 2990	1.8	100-3000cps	3-13/32	2-9/16	3-7/16	3.0	(1-2)	(3-4) (5-6-7)	Fig. L.
2509A	-	No	75:1818	1.5	1812	15µh, 300kc	3096-7266kc	1-25/32	d1a	1-1/16	0.4	coaxial jack	coaxial plug	
2510A	D-176439	No	72:10,500	0.9av	28av	-	64-3200kc	2-17/32	1-19/32	2-17/32	0.5	coaxial plug Terminal A connected to center conductor of plug.	(4-G)	
2510B	D-176440	No	72:15,000	0.9av	51av	-	64-3200kc	2-17/32	1-19/32	2-17/32	0.5	coaxial plug Terminal A connected to center conductor of plug.	(3-4)	
2510C	D-176441	No	72:18,500	0.9av	58av	-	64-3200kc	2-17/32	1-19/32	2-17/32	0.5	coaxial plug Terminal A connected to center conductor of plug.	(3-4)	

SECTION AB47.006

TRANSFORMERS

Code	Former Spec	Shld	Impedance Ratio Ohms	Max DC Resistance Ohms		Min Induct Low Wdgs Henrys	Frequency Range	Dimensions - Inches			Wt Lbs	Low Windings	High Windings	Remarks
				Low Wdg	High			Length	Width	Height				
2511A	D-17155B	E	74:2880	0.5av	25av	-	60-3200kc	2-17/32	1-19/32	2-17/32	0.5	coaxial plug	(4-G)	
2511B	D-17155B	E	74:2880	0.5av	25av	-	60-3200kc	2-17/32	1-19/32	2-17/32	0.5	coaxial plug	(3-4)	
2512A	-	No	50:170,000	7.2	11,600	0.36	10-20 cps	2	1-7/16	2-1/16	0.75	(1-2)	(3-4)	
2512B	-	No	6800:170,000	1150	11,600	48	10-20 cps	2	1-7/16	2-1/16	0.75	(1-2)	(3-4)	
2517A	-	E	75:192	0.08	0.2	150μh, 1mc, (3-5)	3639-8239kc	1-11/16	1-11/16	2	0.4	coaxial con- nector Terminal 2 connected to center conductor of con- nector.	(3-4-5)	
2518A	-	E	75:75+75:75 (3-G):(1-G) + (2-G):(4-G)	0.1(3-G) 0.1(4-G)	0.3(1-G) 0.3(2-G)	500μh, 200kc (3-G)	0.3-8.3mc	3-13/32	2-9/16	3-15/32	2.0	coaxial con- nectors	coaxial con- nectors	
2518B	-	E	75:75+75 (4-G):(1-G) + (3-G)	0.05 (4-G)	0.17 (1-G) 0.05 (3-G)	-	0.3-8.3mc	3-13/32	2-9/16	3-15/32	2.0	coaxial con- nector Energy into (4-G) divides 3/4 to (1-G) and 1/4 to (3-G)	coaxial con- nectors	
2519A	-	E No	40:400 300:750	0.05 2.5	0.06 0.35	- -	17-26mc 16-17mc	3-7/8	1-13/16	1-11/16	0.8	(1-2-3) (6-0-7)	(G-4) (G-8)	Two transformers in one case.
2520A	-	E	75:2610	0.16	13.8	-	0.3-3.1mc	2-17/32	1-19/32	2-9/16	0.7	(1-2)	(3-4)	Fig. E.
2521A	-	No	18:125	0.04	0.35	-	300-550kc	1-13/32	25/32	3-7/16	0.25	(1-2)	(3-4)	
2521B	-	No	11:125	0.05	0.4	-	420-612kc	1-13/32	25/32	3-7/16	0.25	(1-2)	(3-4)	
2522A	-	No	75:440	1.7av	3.9av	100μh, 100kc	3639-8239kc	1-11/16	1-11/16	2	0.4	(1-2)	(1-3)	
2523A	-	No	75:6000	-	2.4	16.7μh, 1mc (1-3)	8.5 or 8.9mc	1-9/16	1-7/16	2-3/4	0.2	(4.6)	(1-3)	
2524A	-	No	3000:20,000	70	500	-	2-36kc	1-19/32	1-5/32	1-13/32	0.25	(R-RW)	(B1-B1W)	Fig. C.
2524B	-	No	600:19,050 + 950 (G-B1)(RW-R): (BrW-Br-GW) 150:19,050 + 950 (G-B1):(BrW- Br-GW)	9.5 8.0	500	3.0, 10ma dc (GW-BrW)	2-36kc	1-19/32	1-5/32	1-13/32	0.25	(R-RW) (B1-B1W-G)	(GW-Br-BrW)	Fig. C.
2524C	-	No	600:600	45	45	-	2-36kc	1-19/32	1-5/32	1-13/32	0.25	(R-RW-B1)	(B1W-G)	Fig. C.
2524D	-	No	135:3000	8.0	52	-	2-36kc	1-19/32	1-5/32	1-13/32	0.25	(R-RW-B1)	(B1W-G)	Fig. C.

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
186E	Out 3	4000:0.22	255-3145 cps	
94W	Rep 1	0.5:1000	425-1615 cps	
134A	Rep 3	300:0.75	200-3000 cps	
183C	Rep 7	216:1	79.5-88 kc	
94R	Rep 1	1 or 3.3 or 10 or 33:500	1000 cps	
603C	In 3	1:3000	425-1615 cps	
96B	Rep 2	1:160,000	16-425 cps	
500D	Out 4	140:1.6	600-1800 cps	
2507F	Tr 1	2:18	4.14 mc	
207A	Rep 8	600:2	50-10,000 cps	
171D	Out 2	1500:500 or 4 or 2	50-10,000 cps	
520A	Out 5	2000:66.7 or 4 or 2	50-15,000 cps	
171C	Out 2	10,000:600 or 150,30, 17, 8, 2	30-10,000 cps	
189A	Out 3	3500:2.3	120 kc	
94R	Rep 1	1 or 3.3 or 10 or 33:500	1000 cps	
104AQ	Out 1	6000:3.75 6000:10.4	200-3000 cps	
165D	Rep 6	3.8:135	120 kc	
171D	Out 2	1500:500 or 4 or 2	50-10,000 cps	
520A	Out 5	2000:66.7 or 4 or 2	50-15,000 cps	
154B	Rep 5	6:300	200-3000 cps	
140C	Rep 3	600:6	60-10,000 cps	
166A	Out 2	4200: 12 or 6	50-10,000 cps	
154A	Rep 5	60:6+300	200-3000 cps	
166B	Out 2	4130:500 4130:8	50-10,000 cps	
144A	Out 1	6800:8	100-7000 cps	
171B	Out 2	10,000:500 10,000:8	50-6000 cps	
171C	Out 2	10,000:600 or 150, 30, 17, 8, 2	30-10,000 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
174A	Out 2	12,000:8	100-5000 cps	
94P	Rep 1	10:25	425-1615 cps	
94R	Rep 1	1 or 3.3 or 10 or 33:500	1000 cps	
195A	Out 4	6000:10	306-543 kc, tsf	
508A	Out 4	7000:10	463-605 kc	
270G	In 1	300:3000 300:10.3	35-8000 cps	
104AG	Out 1	6000:3.75 6000:10.4	200-3000 cps	
104AH	Out 1	6000:46 6000:10.4	150-5000 cps	
2521B	Tr 2	11:125	420-612 kc	
166A	Out 2	4200:12 or 6	50-10,000 cps	
165C	Rep 5	15:75	620-3100 kc	
129A	Rep 3	15:600	1000 cps	
194B	Out 4	4000:15 4000:62.5	620-2356kc, tsf	
531G	Out 6	20,000:15	116,236 or 256 kc	
531E	Out 5	20,000:15	304 kc	
193A	Out 4	60,000:200 200:100 200:16	58-111 kc, tsf	
171C	Out 2	10,000:600 or 150, 30, 17, 8, 2	30-10,000 cps	
2521A	Tr 2	18:125	300-550 kc	
146B	Rep 4	20:67.5	4-3000 kc	
94U	Rep 1	20:600	270 cps	
181A	Out 3	150+20:750	35-150 kc	
505A	Out 4	5000:20	420-612 kc	
183A	Rep 7	7000:20	120 kc	
94K	Rep 1	25:50	180-1000 cps	
146AE	Rep 4	72:25	1556-2044 kc	
192A	Rep 7	900:25	64-108 kc	

tsf - tuned single frequency

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
160A	Rep 5	125:3550 at 340 kc 26.3:3000 at 120 kc	120 and 340 kc	Monitor coil
94J	Rep 1	30:700+350 30:30+30	Voice	
171C	Out 2	10,000:600 or 150, 30, 17, 8, 2	30-10,000 cps	
174D	Out 2	20,000:250 20,000:30	50-8000 cps	
618B	In 3	600:25,000 30:25,000	30-15,000 cps	
94S	Rep 1	30:27,000	1000 cps	
285F	In 2	250:165,000 30:165,000	30-10,000 cps	Two Transformers in one case
146AF	Rep 4	72:33	620-2356 kc	
94R	Rep 1	1 or 3.3 or 10 or 33:500	1000 cps	
119B	Rep 2	600:37	35-8000 cps	
633D	In 4	600 or 150 or 37.5:50,000	50-15,000 cps	
213J	Rep 8	40:400 at 75:750 at	3.29-3.4 mc 3.81-3.91 mc	Two Transformers in one case
213H	Rep 8	40:400	12.19-13.09 mc	
2519A	Tr 2	40:400 at 300:750 at	17-26 mc 16-17 mc	
111A	Rep 2	600:40	35-8500 cps	
646A	In 5	40:1440	Voice	
521A	Out 5	1600:40	3.5-7.1 mc	Two Transformers in one case
104Y	Out 1	6000:700 6000:40	200-3000 cps	
500A	Out 4	21,000:600 or 296 or 45	Voice	
536A	Out 6	21,000:600:296:45	Voice	
146AG	Rep 5	72:46	564-1052 kc	
104AH	Out 1	6000:46 6000:10.4	150-5000 cps	
146J	Rep 4	125:50	35-1000 kc	Two Transformers in one case
139A	Rep 3	50:800	200-3000 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks	
542A	Out 6	4500:50	12-60 kc	Two Transformers in one case	
539A	Out 6	6000:50	56 kc		
534A	Out 6	6000:50	100 kc		
2512A	Tr 2	50:170,000	10-20 cps		
157A	Rep 5	52.5:600	5-30 kc		
154A	Rep 5	60:6+300	200-3000 cps	Two Transformers in one case	
181F	Out 3	15,000:60	8-150 kc		
194B	Out 4	4000:15 4000:62.5	620-2356 kc		
146AH	Rep 5	72:66	312-552 kc		
520A	Out 5	2000:66.7 or 4 or 2	50-15,000cps		
146K	Rep 4	125:67	35-1000 kc	Two Transformers in one case	
298B	In 3	135+67.5:7500	35-150 kc		
146Y	Rep 4	72:68	60-525 kc		
179B	Rep 7	70:20,000	455 kc		
188A	Rep 7	72:72	50-10,000 kc		Coaxial jacks
182A	Rep 7	72:72+72	300-2400 kc	Two Transformers in one case	
204A	Rep 8	72:72+72:72	64-3200 kc		Coaxial jacks
146AJ	Rep 5	72:75	68-308 kc		
146AA	Rep 4	72:91	60-525 kc		
146AD	Rep 4	72:125	64-516 kc		
146AM	Rep 5	72:400	2172-2788 kc	Two Transformers in one case	
648A	In 5	72:800	150-3500 kc		
649A	In 6	72:800	4.9-8.1 mc		
635A	In 5	72:500+9000	312-552 kc		
649B	In 6	72:1100	4.9-8.1 mc		
648B	In 5	72:1500	150-3500 kc	Two Transformers in one case	
203A	Rep 8	72:1950	94-106 kc		
191A	Rep 7	2500:72	64-308 kc		
514A	Out 4	3000:72	50-3500 kc		
195A	Rep 7	72:6500	556-808 kc		

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
2510A	Tr 1	72:10,500	64-3200 kc	
668A	In 7	72:10,500	60-3200 kc	
2510B	Tr 1	72:15,000	64-3200 kc	
196A	Rep 7	72:17,400	556 kc	
2510C	Tr 1	72:18,500	64-3200 kc	
537A	Out 6	30,000:72	94-106 kc	
510A	Out 4	720,000:72	2064 kc	
2511A	Tr 2	74:2880	60-3200 kc	
2511B	Tr 2	74:2800	60-3200 kc	
2518B	Tr 2	75:75+75	0.3-8.3 mc	Coaxial connectors
178B	Rep 7	75:75+75:75	60-3000 kc	
2518A	Tr 2	75:75+75:75	0.3-8.3 mc	Coaxial connectors
201A	Rep 8	75:110	5 kc-10 mc	
197B	Rep 8	75:110	17 cps-6 mc	
201B	Rep 8	75:124	0.1-4.5 mc (2 kc-10 mc)	
2507K	Tr 1	75:133	9.9-12.5 mc	
2507N	Tr 1	75:150+150	13.0-18.2 mc	
2507J	Tr 1	75:182	9.9-12.5 mc	
2507D	Tr 1	75:192	2.08-15.6 mc	
2517A	Tr 2	75:192	3639-8239 kc	
2507H	Tr 1	75:357	9.9-12.5 mc	
671A	In 7	75:400	70-90 mc	
2522A	Tr 2	75:440	3639-8239 kc	
165B	Rep 5	75:600	312-552 kc	
213J	Rep 8	40:400 at 75:750 at	3.29-3.4 mc 3.81-3.91 mc	
527A	Out 5	800:75	0.05-20 mc	
642B	In 5	75:1470	9.66-12.44mc	
2509A	Tr 1	75:1818	3096-7266 kc	Coaxial jack and plug
2507E	Tr 1	75:1818	3096-7266 kc	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
2520A	Tr 2	75:2610	0.3-3.1 mc	
2523A	Tr 2	75:6000	8.5 or 8.9mc	
146L	Rep 4	125:82	35-1000 kc	
146M	Rep 4	125:95	35-1000 kc	
155A	Rep 5	100:100	1-1500 kc	
177C	Rep 6	600:600 or 150:150 or 100:100	30-15,000 cps	
146P	Rep 4	100:135+135	60-500 kc	
205A	Rep 8	600:100	150-450 kc	
137A	Rep 3	100:1000	0.55-1.5 mc	
509A	Out 4	3470:600 or 100	250-3000 cps	
513A	Out 4	4000:100	50-3500 kc	
181E	Out 3	45,000:100	2000 cps	
193A	Out 4	60,000:200, 200:100, 200:16	58-111 kc, tsf	
633B	In 4	100:200,000	200-3500 cps	
619C	In 4	100:300,000, 150:300,000	128 kc	
146AL	Rep 5	108:600	60-108 kc	
146W	Rep 4	108:700	60-180 kc	
663A	In 6	110:2000	50-4000 kc	
538A	Out 6	2900:110	100-4500 kc	
177B	Out 2	4000:600+120	5-30 kc	
650A	In 6	120:10,000	5 kc, tuned	
651A	In 6	120:10,000	25 & 50 kc, tuned	
652A	In 6	120:10,000	75 kc, tuned & 150 kc	
653A	In 6	120:10,000	200-250 kc, tuned	
146D	Rep 4	125:125	35-150 kc	
146C	Rep 4	125:125	35-500 kc	
167A	Rep 6	125:142	36-150 kc	

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Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
146N	Rep 4	125:160	35-1000 kc	
146H	Rep 4	600:125	36-84 kc	
160A	Rep 5	125:3550 at 26.3:3000 at	340 kc 120 kc	
636A	In 5	125:2000 at 125:12,500 at	420 kc 612 kc	
292B	In 2	125:11,000	308-554 kc	
292C	In 2	125:15,000	400-448 kc	
292G	In 2	125:20,000	92-143 kc	
181B	Out 3	20,000:125	36-150 kc	
621A	In 4	125:50,000	308-364 kc	
213D	Rep 8	130:3000	164-260 kc	
531C	Out 5	15,000+5000:130	164-260 kc	
531B	Out 5	18,000+2000:130	164-260 kc	
531H	Out 6	20,000:130	184 or 192 kc	
2507L	Tr 1	135:135	40-160 kc	
213E	Rep 8	135:135	180-196 kc	
146AK	Rep 5	135:135+135	10-100 kc	
146S	Rep 4	170:135+135	12-230 kc	
146AC	Rep 4	285:135	60-300 kc	
146G	Rep 4	600:135	60-108 kc	
146A	Rep 4	135:600	0.2-150 kc	
2507M	Tr 1	135:600	40-160 kc	
124C	Rep 3	600:135+135	60-108 kc	
146AB	Rep 4	135:135+540	60-108 kc	
146AN	Rep 5	135:135+600	60-108 kc	
124F	Rep 3	700:135+135	60-108 kc	
185A	Rep 7	135:1619	60-300 kc	
183B	Rep 7	1800:135	60-108 kc	
185C	Rep 7	1800:135	60-108 kc	
2524D	Tr 2	135:3000	2-36 kc	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
213C	Rep 8	135:3000	44-140 kc	
541B	Out 6	3600+730:135	12-60 kc	
541A	Out 6	4000+497:135	12-60 kc	
181D	Out 3	6000:135	30 & 40 kc	
531A	Out 5	6100+4200:135	44-140 kc	
298B	In 3	135+67.5:7500	35-150 kc	
531D	Out 5	8500:135	164-260 kc	
674A	In 7	135:200 at 135:26,000 at	12 kc 60 kc	
179B	Out 3	16,000:600 or 135	1-150 kc	
169C	Rep 6	135:18,500	60-108 kc	
185D	Rep 7	135:18,800	60-108 kc	
2507A	Tr 1	135:18,000+2000	40-196 kc	
151F	Out 1	20,000:135+135	60-108 kc	
169D	Rep 6	135:21,000	12-60 kc	
169A	Rep 6	135:22,300	60-108 kc	
168A	Rep 6	135:25,000	58-111 kc	
185B	Rep 7	135:30,000	60-108 kc	
292H	In 2	135:40,000	64 kc	
189B	Out 3	100,000:300:300 50,000:135	4 or 8 kc	
146E	Rep 4	140:250	12-108 kc	
653B	In 6	140:10,000	300-600 kc, tuned	
653C	In 6	140:10,000	600-1200 kc, tuned	
653D	In 6	140:10,000	1200-2500 kc, tuned	
653E	In 6	140:10,000	2500-5000 kc, tuned	
653F	In 6	140:10,000	5000-10,000 kc, tuned	
167B	Rep 6	585:142	36-150 kc	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
637A	In 5	144:4000	620-2350 kc, tsf	
177C	Rep 6	600:600 or 150:150 or 100:100	30-15,000 cps	
177D	Rep 6	150:600, 600:600, 1350:600	Voice	
181A	Out 3	150+20:750	35-150 kc	
2504A	Tr 1	150:1157	200-8353 kc	
517D	Out 5	12,000:600 at 3000:150 at	1100-3400 cps 150-450 cps	
171C	Out 2	10,000:600 or 150, 30, 17, 8, 2	30-10,000 cps	
2524B	Tr 2	600:19,050+950 150:19,050+950	2-36 kc	
633D	In 4	600 or 150 or 37.5:50,000	50-15000 cps	
287C	In 2	150:300,000	100-3000 cps	
619C	In 4	100:300,000 150:300,000	128 kc	
186B	Out 3	30,000:175	Voice	
152A	Rep 5	600:200	100-5000 cps	
124B	Rep 3	200:600	Voice	
159B	Rep 5	200:1400	64-108 kc	
177B	Rep 6	600:200, 600:6000	Voice	
161A	Out 2	25,000:200	30-10,000 cps	
193A	Out 4	60,000:200, 200:100, 200:16	58-111 kc, tsf	
266D	In 1	200:100,000	100-5000 cps	
261B	In 1	200:110,000	35-10,000 cps	
284A	In 2	200:116,000	60-10,000 cps	
213G	Rep 8	200:153,000	184 or 192 kc	
295A	In 3	200+600:450,000	12-60 kc	
500B	Out 4	125,000:220	700-1700 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
166A	Rep 6	600:240	50-10,000 cps	
146F	Rep 4	600:250	12-108 kc	
154B	Out 1	8000:500, 8000:250	40-6000 cps	
157A	Out 1	10,000:500, 10,000:250	35-10,000 cps	
516A	Out 4	15,000:250	250-3000 cps	
174D	Out 2	20,000:250, 20,000:30	50-8000 cps	
297A	In 3	250:25,000	650 kc	
163D	Out 2	100,000:250	200-3000 cps	
285F	In 2	250:165,000, 30:165,000	30-10,000 cps	
500A	Out 4	21,000:600 or 296 or 45	Voice	
536A	Out 6	21,000:600:296:45	Voice	
94AA	Rep 2	600:300	200-3500 cps	
212A	Rep 8	300-750	3700 cps	
2519A	Tr 2	40:400 at 300:750 at	17-26 mc 16-17 mc	Two transformers in one case.
203B	Rep 8	300:1560	94-106 kc	
270G	In 1	300:3000, 300:10.3	35-8000 cps	
187A	Out 3	5000:300	30-8000 cps	
166D	Out 2	6580:300	85 cps	
190A	Out 3	7000:300	4 kc	
270H	In 1	300:7500	100-3000 cps	
157B	Out 1	11,700:600, 12,200:300	250-5000 cps	
530A	Out 5	18,800:600 or 300	200-3500 cps	
157G	Out 1	21,000:1200+300	200-3000 cps	
280A	In 1	300:30,000	60-5000 cps	
608A	In 3	300:30,000	30-8000 cps	
626B	In 4	300:30,000	8-64 kc	

tsf - tuned single frequency

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
670B	In 7	300:30,000	94-106 kc	
2506A	Tr 1	300:300, 300:97,200	2600 cps	
189B	Out 3	100,000:300:300 50,000:135	4 or 8 kc	
151G	Out 1	100,000:300:300	Tuned at 16, 32 or 64 kc	
626E	In 4	300:300, 300:140,000	200-3500 eps	
633E	In 4	300:142,000	200-12,000 cps	
255M	In 1	300:307,200	1000-3000 cps	
626A	In 4	300:357,000	250-3000 cps	
656A	In 6	300:357,000 Input 600:18,000 Output	200-3000 cps	Two transformers in one case.
610A	In 3	350:40,000	200-5000 cps	
159A	Rep 5	1400:400+400	64-108 kc	
605A	In 3	600+400:450,000	5-30 kc	
211A	Rep 8	600:800+400	200-3500 cps	
210A	Rep 8	420:600	200-3500 cps	
170A	Rep 6	420:2140	20-15,000 cps	
171D	Out 2	1500:500 or 4 or 2	50-10,000 cps	
67F	Rep 1	2000:500	1200 cps	
166B	Out 2	4130:500, 4130:8	50-10,000 cps	
677A	In 7	500:5000	5 kc	
154B	Out 1	8000:500, 8000:250	40-6000 cps	
171B	Out 2	10,000:500, 10,000:8	50-6000 cps	
157A	Out 1	10,000:500, 10,000:250	35-10,000 cps	
2508A	Tr 1	500:20,000, 500:20,000	100-3000 cps	
517G	Out 5	70,000:500	500-2000 cps	
281A	In 1	500:100,000	30-7000 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
623A	In 4	500:120,000, 500:600	Voice	
285P	In 2	500:200,000	40-10,000 cps	
626C	In 4	550:240,000	270 cps	
170B	Rep 6	600:600	30-10,000 cps	
215A	Rep 9	600:600	30-10,000 cps	
119E	Rep 2	600:600	35-8000 cps	
111C	Rep 2	600:600	35-8000 cps	
140B	Rep 3	600:600	60-10,000 cps	
94Y	Rep 1	600:600	200-3000 cps	
202A	Rep 8	600:600	200-3500 cps	
206A	Rep 8	600:600	200-3500 cps	
208A	Rep 8	600:600	200-3500 cps	
94H	Rep 1	600:600	Voice	
176A	Rep 6	600:600	Voice	
278C	In 1	600:600	6000 cps	
291A	In 2	600:600	60-108 kc Suppress 200-3100 cps Transmit	
2500A	Tr 1	600:600	0.2-30 kc	
123A	Rep 3	600:600	5-30 kc	
107A	Rep 2	600:600	5-30 kc	
146U	Rep 4	600:600	4-31 kc	
74C	Rep 1	600:600	3-33 kc	
2524C	Tr 2	600:600	2-36 kc	
146T	Rep 4	600:600+600	200-3500 cps	
151B	Rep 5	600:600+600	Voice	
177C	Rep 6	600:600 or 150:150 or 100:100	30-15,000 cps	
177D	Rep 6	150:600 or 600:600 or 1350:600	Voice	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
211A	Rep 8	600:800+400	200-3500 cps	
180A	Rep 7	600:870	35-10,000 cps	
94T	Rep 1	600:900	Voice	
108A	Rep 2	600:900	200-3500 cps	
120E	Rep 2	600:900	Voice	
120K	Rep 2	600:900	Voice	Has crosstalk requirements
120ES	Rep 3	600:900	200-3500 cps	
120KS	Rep 3	600:900	200-3500 cps	Has crosstalk requirements
120G	Rep 2	600:900, 600:1500	Voice	
120GS	Rep 3	600:900, 600:1500	200-3500 cps	
111D	Rep 2	1200:600	35-10,000 cps	
119F	Rep 2	1200:600	35-20,000 cps	
2500B	Tr 1	600:1200	0.2-30 kc	
150B	Rep 5	1200:600	4-10 kc	
120F	Rep 2	600:1500	Voice	
120L	Rep 2	600:1500	Voice	Has crosstalk requirements
120FS	Rep 3	600:1500	200-3500 cps	
120LS	Rep 3	600:1500	200-3500 cps	Has crosstalk requirements
151A	Rep 5	1600:600+600	250-3000 cps	
150A	Rep 5	2000:600	4-10 kc	
123G	Out 1	6000:600+600 2300:600+600	100-3000 cps	
626F	In 4	600:3000	50-5000 cps	
509A	Out 4	3470:600 or 100	250-3000 cps	
189C	Rep 7	4000:600+600	200-3000 cps	
177B	Out 2	4000:600+120	5-30 kc	
178D	Out 3	4500:600	35-15,000 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
535A	Out 6	5000:600	60-6000 cps	
140A	Rep 3	600:5500	60-10,000 cps	
174C	Out 2	6000:600	200-3000 cps	
177B	Rep 6	600:200, 600:6000	Voice	
162B	Out 2	7200:600	200-4500 cps	
500F	Out 4	10,000:600	50-5000 cps	
171C	Out 2	10,000:600 or 150, 30, 17, 8, 2	30-10,000 cps	
157B	Out 1	11,700:600, 12,200:300	250-5000 cps	
517D	Out 5	12,000:600 at 3000:150 at	1100-3400 cps 150-450 cps	
154C	Out 1	15,200:600	25-15,000 cps	
179B	Out 3	16,000:600 or 135	1-150 kc	
104T	Out 1	18,000:600	200-3000 cps	
530A	Out 5	18,800:600 or 300	200-3500 cps	
2524B	Tr 2	600:19,050+950 150:19,050+950	2-36 kc	
656A	In 6	300:357,000 Input 600:18,800 Output	200-3000 cps	Two transformers in one case.
517A	Out 5	20,000:600	200-3500 cps	Not potted.
517F	Out 5	20,000:600	200-3500 cps	Same as 517A but filled with compound.
157C	Out 1	20,000:600	6-9 kc	
163A	Out 2	20,000:600	5-30 kc	
151B	Out 1	20,000:600	60-108 kc	
163C	Out 2	21,000:600	4-10 kc	
500A	Out 4	21,000:600 or 296 or 45	Voice	
536A	Out 6	21,000:600:296:45	Voice	
197A	Out 4	24,000:600	30-15,000 cps	
618B	In 3	600:25,000, 30:25,000	30-15,000 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
285E	In 2	600:25,000	35-10,000 cps	
285S	In 2	600:25,000	50-10,000 cps	
517C	Out 5	25,000:600	200-3000 cps	
628A	In 4	600:25,000	255-3145 cps	
255D	In 1	600:29,400	35-8000 cps	
292A	In 2	600:30,000	64-108 kc	
139B	Out 1	30,700:600	250-2750 cps	
292F	In 2	600:40,000	120 kc	
177A	Rep 6	600:46,000	Voice	
633D	In 4	600 or 150 or 37.5:50,000	50-15,000 cps	
675A	In 7	600:60,000	12-60 kc	
157F	Out 1	60,000:600	200-3200 cps	
157H	Out 1	60,000:600	200-3600 cps	
186A	Out 3	60,000:600	250-2800 cps	
633C	In 4	600:75,000	40-8500 cps	
242B	In 1	600:80,000	720 cps	
181C	Out 3	80,000:600	4.8-16 kc	
151E	Out 1	80,000:600	16-31 kc	
270D	In 1	600:88,800	30-8000 cps	
673A	In 7	600:100,000	100-6000 cps	
174A	Rep 6	600:100,000 600:100,000	255-3145 cps	Two transformers in one case.
282B	In 1	600:120,000	100-5000 cps	
266C	In 1	600:135,000	375-2350 cps	
277D	In 1	600+600:135,000	300-2700 cps	
603A	In 3	600:150,000	250-2800 cps	
602C	In 3	600:190,000	1000 cps	
282A	In 1	600:240,000	200-3000 cps	
288B	In 2	600:300,000	400-3000 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
666A	In 7	600:360,000	100 kc	
270J	In 1	600:405,600	200-3200 cps	
600A	In 3	600:450,000	4-10 kc	
295A	In 3	200+600:450,000	12-60 kc	
605A	In 3	600+400:450,000	5-30 kc	
667B	In 7	600:10,000, 600:450,000	200-3500 cps	
667C	In 7	600:644,000	200-3500 cps	
213F	Rep 8	600:1,000,000	180-196 kc	
647B	In 5	600+600:160,000 600+600:1,000,000	200-3500 cps	
104Y	Out 1	6000:700, 6000:40	200-3000 cps	
661A	In 6	800:800	0.05-20 mc	
94E	Rep 1	900:900	Voice	
94N	Rep 1	900:900	Voice	
120C	Rep 2	900:900	Voice	
120H	Rep 2	900:900	Voice	Has crosstalk requirements
120CS	Rep 3	900:900	200-3500 cps	
120HS	Rep 3	900:900	200-3500 cps	Has crosstalk requirements
660A	In 6	900:1000	90 mc	Double tuned
94F	Rep 1	900:1350	Voice	
120D	Rep 2	1350:900	Voice	
120J	Rep 2	1350:900	Voice	Has crosstalk requirements
120DS	Rep 3	1350:900	200-3500 cps	
120JS	Rep 3	1350:900	200-3500 cps	Has crosstalk requirements
626D	In 4	1000:3200	600-1800 cps	
647C	In 5	1000:9000	200-3500 cps	
169A	Out 2	12,000:1000	60-10,000 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
186C	Out 3	12,000:1000	Voice	
543A	Out 6	15,000:1160	20-20,000 cps	
108C	Rep 2	1420:1600	200-3500 cps	
214A	Rep 9	1560:9000+9000:1560	94-106 kc	
287B	In 2	1600:500,000	230-3000 cps	High side terminated internally
181A	Rep 7	2000:2000	78 kc	
663B	In 6	2000:2000	10-2000 kc	
58C	Rep 1	2000:30,000	Voice	
638C	In 5	2000:100,000	64 kc	
179A	Rep 7	2700:25,000	60-108 kc	
2524A	Tr 2	3000:20,000	2-36 kc	
669A	In 7	3000:20,000	44-140 kc	
669B	In 7	3000:20,000	164-260 kc	
213K	Rep 9	3000:153,000	195-205 kc	
294D	In 2	4000:4000	300-550 kc	
645A	In 5	4000:4000	11.5-15 mc	
537B	Out 6	24,000:4000	100 kc	
638B	In 5	4000:25,000	3096 kc	
638A	In 5	4000:160,000	2064 kc	
173E	Out 2	8500:4200	100-4500 cps	
94M	Rep 1	5000:8400	20 cps	
638E	In 5	5000:300,000	556 kc	(1-a):(3-a)
667A	In 7	5000:664,000	200-3500 cps	
2512B	Tr 2	6800:170,000	10-20 cps	
605B	In 3	8000:8000	1-150 kc	
537C	Out 6	16,000:8000	100 kc	
672A	In 7	8250:63,000	100 kc	
531F	Out 6	18,000:9000	164-260 kc	
517E	Out 5	9000:144,000	500-3400 cps	

Code	Table	Impedance Ratio, Ohms	Frequency Range	Remarks
294C	In 2	10,000:10,000	300-550 kc	
517B	Out 5	90,000:10,000	300-3000 cps	
273A	In 1	10,000:140,000	100-5000 cps	
294B	In 2	15,000:15,000	35-150 kc	
288G	In 2	15,000:67,000	50-6000 cps	
285K	In 2	15,000:80,000	50-10,000 cps	
188A	Out 3	200,000:15,000	61 kc	
233D	In 1	20,000:50,000	60-5000 cps	
646B	In 5	20,000:80,000	200-3000 cps	
276A	In 1	20,000:605,000	100-5000 cps	
294A	In 2	25,000:25,000	60-108 kc	
619A	In 4	25,000:175,000	58-80 kc, tsf	
619B	In 4	25,000:175,000	92-143 kc, tsf	
602B	In 3	30,000:100,000	4 kc Transmit 8 kc Suppress	
196G	Rep 7	40,000:40,000	520 kc	
634B	In 5	40,000:60,000	200-5000 cps	
678A	In 7	40,000:80,000	25 cps	
633A	In 4	40,000:80,000	200-3500 cps	
540A	Out 6	90,000:40,000	56 kc	
2507G	Tr 1	40,000:700,000	280-296 kc	
670A	In 7	50,000:50,000	94-106 kc	
639A	In 5	50,000:50,000	2064 kc	
639B	In 5	50,000:50,000	3096 kc	
199A	Out 4	150,000:50,000	255-3145 cps	
620A	In 4	60,000:420,000	40 kc	
631A	In 4	60,000:540,000	200-4000 cps	
277E	In 1	60,000:1,500,000	500-3000 cps	
676A	In 7	70,000:600,000	56 kc	

tsf - tuned single frequency

Code	Table	Ratio of Turns	Frequency Range	Remarks
278A	In 1	-	800 cps	Oscillator coil
606A	In 3	-	6-13 kc, tsf	Oscillator coil
607A	In 3	-	17.5-30 kc, tsf	Oscillator coil
94L	Rep 1	1:1	20 cps	
184A	Out 3	1:1	20 cps	
624A	In 4	1:1	85 cps	
84B	Rep 1	1:1	135 cps	
602A	In 3	1:1	1300 cps	
654B	In 6	1:1	1400 cps	Oscillator coil
602D	In 3	1:1	1800 cps	
50A	Rep 1	1:1	Voice	High voltage insulating transformer
67C	Rep 1	1:1	Voice	
67E	Rep 1	1:1	Voice	Less crosstalk than 67C
74A	Rep 1	1:1	Voice	Half 93A repeat
83B	Rep 1	1:1	Voice	
91A	Rep 1	1:1	Voice	
100A	Rep 2	1:1	Voice	Half 62A repeat
102A	Rep 2	1:1	Voice	Half 75A repeat
627A	In 4	1:1	Voice	
627B	In 4	1:1	Voice	
627C	In 4	1:1	Voice	
627D	In 4	1:1	Voice	
175A	Rep 6	1:1	30-10,000 cps	
633F	In 5	1:1	200-12,000 cps	
604A	In 3	1:1	5-30 kc	
665A	In 6	1:1:1		Blocking oscillator
620B	In 4	1:1.84	20 kc	

tsf - tuned single frequency

Code	Table	Ratio of Turns	Frequency Range	Remarks
2505A	Tr 1	1:2		Blocking oscillator
600C	In 3	1:3.16	200-3000 cps	
642A	In 5	4:1	463-605 kc	Oscillator coil
296A	In 3	4:1	500-650 kc	Oscillator coil
299A	In 3	1:4.78	7150 cps	Oscillator coil
500E	Out 4	7.5:1, 7.5:1	165-435 cps	
274B	In 1	1:2, 1:10, 5:1	1000 cps	
500C	Out 4	10.5:1, 10.5:1	270 cps	
530B	Out 5	15:1	3700 cps	
255L	In 1	22.4:1	300 cps	
524A	Out 5	30:1	Voice	
654A	In 6	36.6:1	39 kc	Oscillator coil
518A	Out 5	200:200:1	1600 or 2000 cps	

SECTION AB47.006

