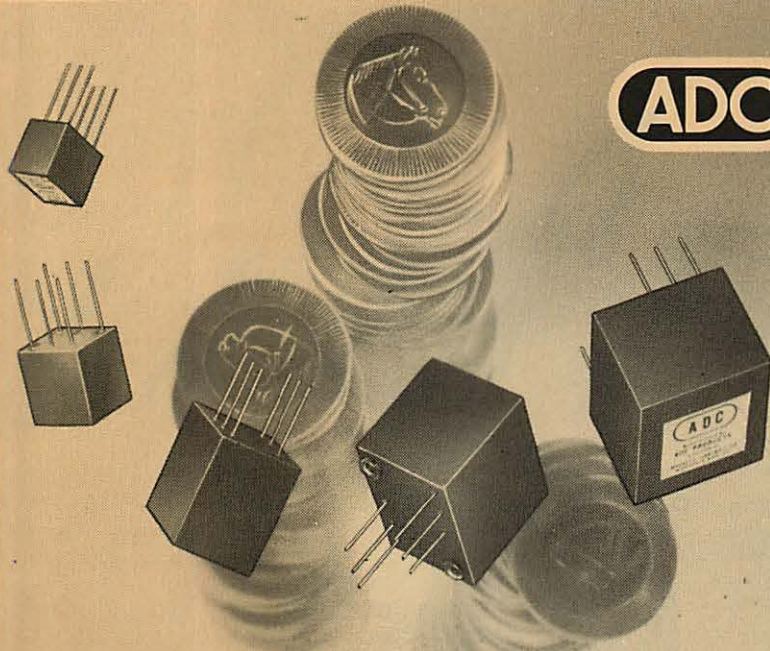




ADC PRODUCTS, INC.

MINNEAPOLIS, MINNESOTA



"BLUE CHIP" TRANSFORMERS

62 TYPES

5 DIFFERENT SIZES

Tiny, plastic cased, Blue Chip transformers for printed circuit applications, are available for a wide choice of power ratings.

Five different sizes, from .10 to 1.2 cubic inches with a total of 62 new ratings are listed below to indicate the available power levels for both voice frequency range and extended frequency operation. These ratings take into account not only power handling capacities at minimum frequencies, but also total harmonic distortion under stated conditions. Within the limits shown on the rating charts, variations in both power and distortion levels are possible depending upon the minimum operating frequency.

Blue Chip transformers meet Mil-T-27A, Grade 5, Class S requirements. These versatile transformers are available from ADC, or through your distributor.

CATALOG NUMBER	PRIMARY IMPED.—OHMS	SECONDARY IMPED.—OHMS	PRIMARY-SECONDARY DC RESISTANCE—OHMS	MAX. DC IN PRIM. MA.	
324-6A	*100K-CT	1000-CT	3300	70	0
324-6B	25K-CT	1000-CT	2800	150	0
124-6C	10K-CT	10K-CT	1100	1400	1
324-6D	10K-CT	1500-CT	1100	180	1
324-6E	10K-CT	600-CT	1100	75	1
224-6F	4000-CT	10K-CT	440	1400	1.5
324-6G	1000-CT	600-CT	110	75	3
324-6H	1000-CT	4	110	0.5	3
224-6J	600-CT	25K-CT	65	3500	4
124-6K	600-CT	600-CT	65	75	4
324-6L	600-CT	60	65	7	4
324-6M	600-CT	4	65	0.5	4
★Max. power level: 10 mw at 300 cps.					
324-5A	100K-CT	1000-CT	6000	60	0
324-5B	25K-CT	1000-CT	2800	120	0
124-5C	10K-CT	10K-CT	1100	1200	1
324-5D	10K-CT	1500-CT	1100	200	1
324-5E	10K-CT	600-CT	1100	75	1
224-5F	4000-CT	10K-CT	440	1200	1.5
324-5G	1000-CT	600-CT	100	60	3
324-5H	1000-CT	4	100	0.4	3
224-5J	600-CT	25K-CT	65	3500	4
124-5K	600-CT	600-CT	65	75	4
324-5L	600-CT	60	65	7	4
324-5M	600-CT	4	65	0.5	4
★Max. power level: 10 mw at 300 cps.					
324-4B	25K-CT	1000-CT	2800	120	0
124-4C	10K-CT	10K-CT	1100	180	1
324-4D	10K-CT	1500-CT	1100	180	1
324-4E	10K-CT	600-CT	1100	75	1
324-4F	10K-CT	4	1100	0.5	1
224-4G	4000-CT	10K-CT	440	1200	1.5
324-4H	1500-CT	15	165	2	2.5
324-4J	1000-CT	600-CT	110	75	3
324-4K	1000-CT	4	110	0.5	3
224-4L	600-CT	25K-CT	65	3000	4
124-4M	600-CT	600-CT	65	75	4
324-4N	600-CT	60	65	7	4
324-4P	600-CT	15	65	2	4
324-4Q	600-CT	4	65	0.5	4
224-4R	250	600-CT	30	75	7
★Max. power level: 2.5 w.					
324-3A	10K-CT	10K-CT	800	1100	1
324-3B	10K-CT	600-CT	800	65	1
324-3C	10K-CT	4	800	0.5	1
324-3D	1500-CT	15	110	1.6	2.5
324-3E	1000-CT	600-CT	75	65	3
324-3F	1000-CT	4	75	0.5	3
224-3G	*600-CT	25K-CT	45	2800	4
124-3H	600-CT	600-CT	45	65	4
324-3J	800-CT	60	45	7	4
324-3K	600-CT	15	45	1.6	4
324-3L	600-CT	4	45	0.5	4
224-3M	250	600-CT	20	65	7
★Max. power level: 6 w.					
124-2A	*10K-CT	10K-CT	700	900	1
324-2B	*10K-CT	600-CT	700	55	1
324-2C	*10K-CT	4	700	0.4	1
324-2D	1500-CT	15	100	1.5	2.5
324-2E	1000-CT	600-CT	65	55	3
324-2F	1000-CT	4	65	0.4	3
124-2H	600-CT	600-CT	40	55	4
324-2J	600-CT	60	40	6	4
324-2K	600-CT	15	40	1.5	4
324-2L	600-CT	4	40	0.4	4
224-2M	250	600-CT	16	55	7

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 0.15 oz.

RESPONSE: ± 2 DB 300 to 100,000 CPS.
DISTORTION: 10% at 30 MW, 300 to 100,000 CPS, except as noted.

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 0.4 oz.

RESPONSE: ± 1 DB 200 to 50,000 CPS.
DISTORTION: 10% at 150 MW, 200 to 50,000 CPS.

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 0.9 oz.

RESPONSE: ± 1 DB 200 to 20,000 CPS.
DISTORTION: 10% at 750 MW, 200 to 20,000 CPS.

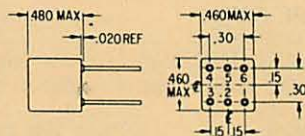
Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 1.5 oz.
Mounting: 2—
4x40 inserts,
0.6"x0.8"

RESPONSE: ± 1 DB 100 to 10,000 CPS.
DISTORTION: 1.5% at 60 MW, 100 to 10,000 CPS, or 10% at 3.5 W, 200 to 10,000 CPS, except as noted.

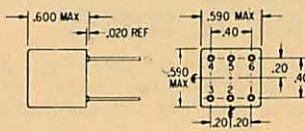
Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 2.5 oz.
Mounting: 2—
4x40 inserts,
0.8"x0.8"

RESPONSE: ± 1 DB 60 to 10,000 CPS.
DISTORTION: 1% at 250 MW, 60 to 10,000 CPS or 10% at 7.5 W, 200 to 10,000 CPS, except as noted.

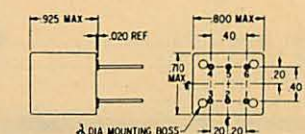
6 SIZE CASE DATA



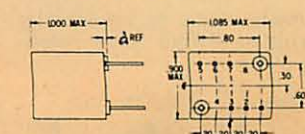
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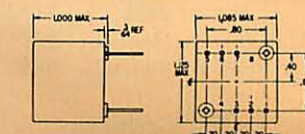
4 SIZE CASE DATA



3 SIZE CASE DATA



2 SIZE CASE DATA



ALL RATINGS BASED UPON MAXIMUM UNBALANCED DC IN PRIMARY AS LISTED
ALL CASED DIMENSIONS ARE MAXIMUM



ADC PRODUCTS, INC.

MINNEAPOLIS, MINNESOTA

POWER TRANSFORMERS FOR MILITARY AND INDUSTRIAL APPLICATIONS

Reliability, minimum size and long life under rugged environmental conditions are prime requisites in today's military electronic equipment. To meet these modern standards, ADC offers a complete line of hermetically sealed power transformers. Designed to meet MIL-T-27A specifications and utilizing MIL cases and mounting dimensions, these units offer our customers a ready source for prototype and produc-

tion applications. All military contractors and commercial electronic engineers with stringent environmental conditions will find these carefully rated units ideally suited. For those applications where hermetic sealing is not necessary, we offer the conservative transformer designs of our hermetically sealed line, in drawn steel cases of MIL size and mounting dimensions with phenolic terminal plates and solder lug terminals.

POWER TRANSFORMERS—60 Cycle

ADC offers these standard power transformer designs to cover a wide range of requirements for electronic circuit application. They are available in standard MIL case sizes, hermetically sealed to meet all requirements of MIL-T-27A, Grade 4, Class R, life expectancy X. Maximum operating altitude is 10,000 feet.

The same electrical ratings are also available as commercial grade fully enclosed units for non-military applications in the same MIL case sizes. This version is furnished with a phenolic terminal board and heavy duty solder lug terminals. Mounting screws and tapped inserts provide the same mounting centers as MIL-T-27A versions.



COMBINATION PLATE AND FILAMENT TRANSFORMERS

PRIMARY: 105/115/125 V., 50-60 CPS

Catalog No.		Plate Winding AC Volts	DC		Filament Windings Volts/Amps	MIL Case
Comm'l Case	Hermetic Seal		Ma	DC Volts		
522A	523A	250-0-250 C Input	20	300	6.3 CT/5 2	FA
522B	523B	300-0-300 C Input	60	310	5 6.3 CT 2	HA
522C	523C	350-0-350 C Input	110	355	5 6.3 CT 4	JA
		L Input		265	6.3 CT 4	
522D	523D	375-0-375 C Input	150	380	5 6.3 CT 5	LA
		L Input		280	6.3 CT 5	
522E	523E	385-0-385 C Input	200	360	5 6.3 CT 5	MA
		L Input		280	6.3 CT 5	
522F	523F	500-0-500 L Input	300	400	6.3/5 6.3 CT 6	NA

FILAMENT TRANSFORMERS

PRIMARY: 105/115/125 V., 50-60 CPS

Catalog No.		Sec. Volts	Sec. Amps.	Insulation Volts RMS	MIL Case
Commercial Case	Hermetic Seal				
522FA	523FA	2.5 CT	5.5	3,500	FA
522FB	523FB	2.5 CT	10.0	7,500	GA
522FC	523FC	2.5 CT	15.0	10,000	JA
522FD	523FD	5.0 CT	4	3,500	GA
522FE	523FE	5.0 CT	10	5,000	HA
522FF	523FF	5.0 CT	20	10,000	MA
522FG	523FG	6.3 CT	3.0	2,500	FA
522FH	523FH	6.3 CT	5.5	2,500	GA
522FJ	523FJ	6.3 CT	10	2,500	JB
522FK	523FK	6.3 CT	20	2,500	KA
522FL	523FL	12.6 CT	2	2,500	GA

POWER TRANSFORMERS—400 Cycle

These items are especially designed for maximum performance in 380 to 1500 CPS applications, with maximum altitude ratings of 50,000 feet. They are hermetically sealed to meet all requirements of MIL-T-27A, Grade 4, Class R. Standard MIL case sizes and construction are used.

COMBINATION PLATE AND FILAMENT TRANSFORMERS

PRIMARY: 115 V., 380-1500 CPS

Catalog No.		Plate Winding AC Volts	Filament Windings		MIL Case
Comm'l Case	Hermetic Seal		DC Ma	Volts / Amps	
512A	513A	240-0-240 C Input	20	6.3 CT	1.5 AJ
512B	513B	250-0-250 C Input	40	6.3 CT	2.5 EA
512C	513C	300-0-300 C Input	80	6.3 CT	5 GA
				6.3/5V	2
512D	513D	350-0-350 C Input	150	6.3 CT	4 HA
				6.3/5V	3
512E	513E	450-0-450 C Input	200	6.3 CT	8 JA
				6.3/5V	3

FILAMENT TRANSFORMERS

PRIMARY: 115 V., 380-1500 CPS

Catalog No.		Sec. Volts	Sec. Amps	Insulation Volts RMS	MIL Case
Com- mercial Case	Hermetic Seal				
512FA	513FA	6.3 CT	1	1,500	AH
512FB	513FB	6.3 CT	3	1,500	AJ
512FC	513FC	6.3 CT	5.5	2,500	EA
512FD	513FD	6.3 CT	10	2,500	FA
512FE	513FE	6.3 CT	20	2,500	GA
512FF	513FF	26 CT	1	2,500	EA
512FG	513FG	26 CT	3	2,500	FA

MILITARY STANDARD TRANSFORMERS

These Military Standard transformers have been specified by ASEA and are established by the three Military Services and the transformer industry as standards for Military transformer applications. Each item is available as either Grade 1 or Grade 4 (ruggedized) as requested. Tests have been conducted in ADC's environmental laboratory which indicate that these units will meet the requirements of MIL-T-27A, Grade 4, Class R operating temperature; life expectancy X 10,000 hours minimum).



MILITARY STANDARD POWER TRANSFORMERS

Military Part No.	Catalog No.	Type Designation	Secondary AC Volts	#1 DC Ma	DC Volts	Sec #2 Volts/ Amps	Sec. #3 Volts/ Amps
			200-100-0-				
MS-90026	521A	TF 4RX 03HA001	100-200	70	140	6.3/5 2	6.3 3
MS-90027	521B	TF 4RX 03JB002	325-0-325	70	250	6.3/5 2	6.3 4
MS-90028	521C	TF 4RX 03KB006	325-0-325	150	240	6.3 5	5 3
MS-90029	521D	TF 4RX 03LB003	400-0-400	175	290	5 3	6.3 8
MS-90030	521E	TF 4RX 03MB004	450-0-450	250	320	5 3	6.3 8
MS-90031	521F	TF 4RX 02KB001	350-0-350	250	250	--	--
MS-90032	521G	TF 4RX 02LB002	550-0-550	250	400	--	--
MS-90036	521H	TF 4RX 02NB003	800-0-800	250	575	--	--

- NOTE: 1. Primaries 105/115/125V., 54-66 CPS.
2. Secondary #1 DC voltage based upon inductive input filter.
3. Max. operating altitude 10,000 ft.
4. These items are also available as Grade 1 components.

MILITARY STANDARD FILAMENT TRANSFORMERS

Military Part No.	Catalog No.	Type Designation	Secondary Volts	Amps	Insulation Volts RMS
MS-90016	521M	TF 4RX 01EB002	2.5	3.0	2500
MS-90017	521N	TF 4RX 01GB003	2.5	10	2500
MS-90018	521P	TF 4RX 01FB004	5.0	3.0	2500
MS-90019	521Q	TF 4RX 01HB005	5.0	10	2500
MS-90020	521R	TF 4RX 01FB006	6.3	2.0	2500
MS-90021	521S	TF 4RX 01GB007	6.3	5.0	2500
MS-90022	521T	TF 4RX 01JB008	6.3	10	2500
MS-90023	521U	TF 4RX 01KB009	6.3	20	2500
MS-90024	521V	TF 4RX 01JB012	2.5	10	10000
MS-90025	521W	TF 4RX 01KB013	5.0	10	10000

- NOTE: 1. Primaries 105/115/125 V., 54-66 CPS.
2. Max. operating altitude 10,000 ft.
3. These items are also available as Grade 1 components.



ADC PRODUCTS, INC.

MINNEAPOLIS, MINNESOTA

INDUCTORS FOR MILITARY AND INDUSTRIAL APPLICATIONS

ADC's line of inductors are circuit running mates to ADC's power transformers. They are available hermetically sealed, to meet MIL-T-27A requirements Grade 4, Class R, life expectancy X. For commercial applications, where hermetic

sealing is not necessary, these same ratings are available in MIL cases and mounting dimensions, but with phenolic terminal board and solder lug terminals.

FOR 50-60 CYCLE POWER SUPPLIES

Catalog No.	Inductance Henries	DC Current MA	DC Resist- ance Ohms	Insulation Volts RMS	MIL Case	
422A	423A	15	20	700	1000	AJ
422B	423B	20	40	475	2500	EB
422C	423C	15	60	230	2500	FA
422D	423D	12	80	175	2500	FA
422E	423E	10	110	175	2500	GA
422F	423F	8	150	100	2500	HA
422G	423G	8	200	85	2500	JA
422H	423H	8	250	85	2500	KB
422J	423J	8	325	55	2500	LA
422K	423K	4	500	30	2500	LA
422L	423L	5/25	250/25	160	2500	KB
422M	423M	5/25	325/30	110	2500	LA



FOR 380-1500 CYCLE POWER SUPPLIES

Catalog No.	Inductance Henries	DC Current Ma	DC Resist- ance Ohms	Insulation Volts RMS	MIL Case	
422V	423V	2.5	50	175	2500	AH
422W	423W	5	50	350	2500	AJ
422X	423X	2	80	250	2500	AJ
422Y	423Y	2	150	100	2500	EB
422Z	423Z	2	200	100	2500	EA

MILITARY STANDARD INDUCTORS (power)

These Military Standard inductors have been specified by ASEA and are established by the three military services and the transformer industry as standards for military inductor applications. They are hermetically sealed to meet all MIL-T-27A requirements Grade 1, Class R, life expectancy X.

Military Part No.	Catalog No.	Type Designation	Inductance Series	Par- allel	DC Resistance Ohms	Insulation Volts RMS	
MS90009	421A	TF 1RX 04FA001	16 hy .08 a	4 hy .16 a	1-2 3-4	295 350	2400
MS90010	421B	TF 1RX 04GA002	25 hy .08 a	6.25 hy .16 a	1-2 3-4	300 370	2400
MS90011	421C	TF 1RX 04HA003	40 hy .08 a	10 hy .16 a	1-2 3-4	450 570	2400
MS90013	421D	TF 1RX 04HA005	16 hy .125 a	4 hy .25 a	1-2 3-4	145 185	3800
MS90014	421E	TF 1RX 04JB006	25 hy .125 a	6.25 hy .25 a	1-2 3-4	225 235	3800
MS90037	421F	TF 1RX 04KA007	40 hy .125 a	10 hy .25 a	1-2 3-4	240 295	5900
MS75000	421G	TF 1RX 04LA009	16 hy .20 a	4 hy .40 a	1-2 3-4	80 100	5900
MS75001	421H	TF 1RX 04MA010	25 hy .20 a	6.25 hy .40 a	1-2 3-4	90 120	5900
MS75002	421J	TF 1RX 04NA012	16 hy .315 a	4 hy .63 a	1-2 3-4	45 60	5900
MS75003	421K	TF 1RX 04YY013	25 hy .315 a	6.25 hy .63 a	1-2 3-4	70 80	5900

NET PRICE LIST (Prices subject to change without notice)

CAT. NO.	NET PRICE	CAT. NO.	NET PRICE	CAT. NO.	NET PRICE	CAT. NO.	NET PRICE	CAT. NO.	NET PRICE		
108A	8.25	222C	25.20	324-2F	6.60	419CU thru		422G	9.60	521A	22.20
103A	3.15	222D	19.80	324-2J	6.60	DA	8.70	422H	10.20	521B	21.30
103B	3.39	222E	19.80	324-2K	6.60	419DC thru		422J	12.90	521C	23.70
103C	3.30	222F	17.40	324-2L	6.60	DG	9.00	422K	12.00	521D	26.70
104A	8.70	222G	17.40	324-3B	7.50	419DJ	9.75	422L	10.20	521E	30.90
104B	9.54	223A	24.90	324-3C	6.90	419DL	10.50	422M	12.90	521F	19.80
114A	23.85	223B	24.90	324-3D	6.30	419EA thru		422N	7.05	521G	24.90
114B	19.80	223C	28.20	324-3E	6.90	EN	6.75	422W	6.00	521H	29.70
114C	23.85	223D	21.60	324-3F	6.30	419EQ thru		422X	6.00	521I	13.80
114E	23.85	223E	21.60	324-3J	6.30	EY	7.50	422Y	6.90	521N	14.10
114F	23.85	223F	18.30	324-3K	6.30	419FA thru		422Z	7.20	521P	12.90
114G	18.00	223G	18.30	324-3L	6.30	FC	8.25	423A	6.60	521Q	15.60
121A	14.40	224-2M	6.60	324-4B	7.80	419FE	8.70	423B	7.65	521R	13.20
121B	14.40	224-3G	7.80	324-4D	7.20	419FG	9.00	423C	8.10	521S	15.60
122A	24.30	224-3M	6.30	324-4E	7.20	419FJ	9.75	423D	8.10	521T	18.00
122B	25.20	224-4G	7.20	324-4F	6.60	419GL thru		423E	9.15	521U	22.05
122C	24.30	224-4L	7.80	324-4H	6.00	GY	7.50	423F	10.20	521V	21.30
122D	16.80	224-4R	6.00	324-4J	6.60	419HA thru		423G	12.00	521W	22.20
122E	19.80	224-5F	6.90	324-4K	6.00	HG	8.25	423H	12.90	522A	13.50
122F	15.90	224-5J	7.80	324-4L	6.00	419HJ thru		423I	15.90	522B	15.00
122G	22.20	224-6F	6.60	324-4N	6.00	HN	8.70	423J	14.70	522C	17.40
123A	26.40	224-6J	7.20	324-4P	6.00	419HQ thru		423K	14.70	522D	18.30
123B	27.30	308E, F	7.50	324-5A	8.70	HS	9.00	423L	12.90	522E	26.70
123C	26.40	308G, H	9.00	324-5B	7.80	419HU	9.75	423M	15.90	522F	26.70
123D	17.40	314A	20.40	324-5D	6.90	419HW	10.50	423V	7.80	522FA	10.80
123E	21.30	314B	18.00	324-5E	6.90	419HY	11.25	423W	7.50	522FB	13.20
123F	16.80	320A thru F	20.85	324-5G	6.90	419KL thru		423X	7.50	522FC	14.40
124-2A	8.10	320Y, Z	20.85	324-5H	5.70	LC	9.75	423Y	8.70	522FD	11.70
124-2H	7.20	321A thru E	12.90	324-5I	5.70	419LE thru		423Z	9.00	522FE	12.90
124-3A	7.80			324-5M	5.70	LJ	10.50	512A	11.70	522FF	21.30
124-3H	6.90	322A	11.70	324-6A	7.50	419LQ thru		512B	12.60	522FG	10.80
124-4C	7.20	322B	16.80	324-6B	7.20	LN	11.25	512C	17.10	522FH	11.70
124-4M	6.60	322C	15.90	324-6D	6.60	419LQ thru		512D	18.90	522FI	14.10
124-5C	6.90	322D	17.40	324-6E	6.60	LS	12.00	512E	20.55	522FJ	14.10
124-5K	6.90	322E	17.40	324-6G	6.00	419LU	12.45	512FA	9.00	522FK	18.30
124-6C	6.60	322F	19.80	324-6H	5.40	419LW	12.90	512FB	9.60	522FL	11.70
124-6K	6.00	322G	21.00	324-6L	5.40	420A thru H	17.64	512FC	9.60	523A	15.90
208A thru F	7.50	322H	20.40	324-6M	5.40	421A	11.10	512FD	10.80	523B	19.80
208G	9.00	322I	22.80	408D	6.75	421B	12.30	512FE	12.90	523C	21.00
214A	23.70	322J	33.90	419AL thru		421C	13.20	512FF	10.65	523D	21.60
214B	16.20	322K	31.50	AW	6.75	421D	14.10	512FG	11.25	523E	21.60
214C	23.70	322L	33.90	419AY thru		421E	14.70	513A	12.60	523F	32.80
214H	15.45	322M	23.70	BE	7.50	421F	20.10	513B	14.25	523FA	12.90
214J	16.80	322N	17.10	419BG thru		421G	21.30	513C	21.45	523FB	16.20
214L	16.80	323A	13.50	BN	8.25	421H	24.90	513D	23.70	523FC	20.10
220A thru D	20.85	323B	20.70	419BQ thru		421I	36.90	513E	25.65	523FD	14.70
221A	15.45	323C	17.40	BS	9.00	421J	36.90	513FA	11.25	523FE	15.90
221B	13.20	323D	21.60	419BU	9.00	421K	30.00	513FB	12.15	523FF	27.60
222A	22.50	324-2B	7.80	419BW	10.50	422A	5.40	513FC	12.90	523FG	12.60
222B	22.50	324-2C	7.20	419CE thru		422B	6.00	513FD	13.50	523FH	14.70
		324-2D	6.60	CS	8.25	422C	6.45	513FE	16.20	523FI	17.10
		324-2E	7.20			422D	6.45	513FF	13.20	523FK	21.30
						422E	6.90	513FG	13.80	523FL	14.70
						422F	7.95				



ADC PRODUCTS, INC.

MINNEAPOLIS, MINNESOTA

AUDIO TRANSFORMERS FOR MILITARY AND COMMERCIAL APPLICATIONS

ADC offers the following designs to cover a wide range of standard audio applications, from low power transistors through heavy duty output circuits. They are conservatively rated at $\pm 1/2$ db from 30 to 15,000 cycles at the maximum rated power. Each is designed for minimum insertion loss, is fully impregnated before potting and rated for dependable continuous duty operation.

These audio transformers are available in standard MIL cases, hermetically sealed to meet all requirements of MIL-T-27A. THE SAME RATINGS ARE ALSO AVAILABLE AS COMMERCIAL GRADE COMPONENTS, featuring the lower cost construction of a phenolic terminal board with solder lug terminals in the same drawn MIL cases.



INPUT TRANSFORMERS Response $\pm 1/2$ db, 30-15,000 cps

Catalog No. Com-Hermetic Case	Case Seal	Application	Primary Impedance Rating (Ohms)	Secondary Impedance Rating (Ohms)	Max. Level	Hum Reduction	Case Size
222A	223A	Line to Single or Push Pull Grids.	600 ¹	60,000 ¹ Split	+ 10 dbm	-65 db	AJ
222B	223B	Low Impedance Line to Grid.	12.5/50/200	80,000	+ 10 dbm	-65 db	AJ
222C	223C	Line and Bridging to Single or Push Pull Grids. 1-4	150/600/15,000	60,000 ¹ Split	+ 10 dbm	-65 db	AJ
222D	223D	High Impedance Pickup or Plate to Push Pull Grids.	10,000 (10MA DC)	80,000 ¹ Split	+ 22 dbm	-35 db	EA
222E	223E	Push Pull Plates to Push Pull Grids.	20,000 ¹ Split	90,000 ¹ Split	+ 24 dbm	-35 db	EA

MILITARY STANDARD AUDIO TRANSFORMERS

These Military Standard audio transformers have been specified by ASES and are established by the three Military Services and the transformer industry as standards for Military transformer applications. Tests have been conducted in ADC's environmental laboratory which indicate that these units will meet the requirements of MIL-T-27A, Grade 1, Class R operating temperature, life expectancy X (10,000 hours minimum).

Cat. No.	MIL-T-27A Classification	MIL-T-27A Part No.	Application	Impedance (Ohms)	Operating Level	Pri. DCMA Bal.	Unbal.
221A	TF 1RX 15AJ001	MS-90000	Push Pull Plates to Push Pull Grids	Pri. 10,000 CT Sec. 90,000 CT 22,500 CT	15 dbm	--	10
121A	TF 1RX 16AJ002	MS-90001	Line to Voice Coll	Pri. 600 CT (150) Sec. 4/8/16	2 W	--	--
221B	TF 1RX 10AJ001	MS-90002	Line to Push Pull Grids	Pri. 600 CT (150) Sec. 135,000 CT	15 dbm	--	--
121B	TF 1RX 16AJ001	MS-90003	Line to Line	Pri. 600 CT (150) Sec. 600 CT (150)	15 dbm	--	--
321A	TF 1RX 13AJ001	MS-90004	Plate to Line	Pri. 7600/4800 Sec. 600 CT (150)	2 W	--	40
321B	TF 1RX 13AJ002	MS-90005	Plate to Voice Coll	Pri. 7600/4800 Sec. 4/8/16	2 W	--	40
321C	TF 1RX 13AJ003	MS-90006	Push Pull Plates to Line	Pri. 15,000 CT Sec. 600 CT (150)	2 W	--	10
321D	TF 1RX 13AJ004	MS-90007	Push Pull Plates to Line	Pri. 24,000 CT Sec. 600 CT (150)	1 W	20	1
321E	TF 1RX 13AJ005	MS-90008	Push Pull Plates to Line	Pri. 60,000 CT Sec. 600 CT (150)	.5 W	20	1

OUTPUT TRANSFORMERS Response $\pm 1/2$ db, 30-15,000 cps (Power Response at Rated Output)

Catalog No. Com-Hermetic Case	Case Seal	Application	Primary Impedance Rating (Ohms)	Secondary Impedance Rating (Ohms)	Max. Level	Case Size
322A	323A ⁴	Plate to Line	15,000 (10 MA DC)	600/250 (150/62.5) ²	+ 20 dbm (.1 W)	EB
322B ³	323B ³	Plate to Voice Coll	5,000 (40 MA DC)	16/8/4	+ 37 dbm (5 W)	FA
322C	323C	Push Pull Plates to Line	20,000 CT	600/250 (150/62.5) ²	+ 30 dbm (1 W)	EB
322D	323D	Push Pull Plates to Line and Voice Coll	10,000 CT	600 (150) ²	+ 40 dbm (10 W)	GA
322E	323E ¹	Push Pull Plates to Voice Coll ⁴	9,000/2,250 Split ²	16/8/4	+ 40 dbm (10 W)	GA
322F	323F ¹	Push Pull Plates to Voice Coll ⁴	10,000 Split ²	16/8/4	+ 43 dbm (20 W)	JA
322G	322G ¹	Push Pull Plates to Voice Coll ⁴	8,000/1,600 Split ²	16/8/4	+ 42 dbm (15 W)	JB
322H	323H ¹	Push Pull Plates to Voice Coll ⁴	5,000/3,000 Split ²	16/8/4	+ 43 dbm (20 W)	JA
322J	323J ¹	Push Pull Plates to Voice Coll ⁴	6,600/1,650 Split ²	16/8/4	+ 45 dbm (30 W)	KA
322K	323K ¹	Push Pull Plates to Voice Coll ⁴	3,500/700 Split ²	16/8/4	+ 48 dbm (70 W)	LA
322L	323L ¹	Push Pull Par Plates to Voice Coll	2,500/1,500 Split ²	16/8/4	+ 49 dbm (80 W)	MA
322M	323M ¹	Push Pull Class A Transistors to Voice Coll	48/16/8 Split ²	16/8/4	+ 47 dbm (50 W)	KA
322N	323N ¹	Class A Transistor to Voice Coll (1.25a. DC)	10	16/8/4	+ 38 dbm (7 W)	JB
322P	323P ¹	Push Pull Transistors to Voice Coll	48/32 CT	16/8/4	+ 40 dbm (10 W)	GA

NOTES:

- These items are not normally carried in stock.
- "Split" indicates 2 separate, symmetrical windings. Impedances shown are for series connection. Where impedances are shown in parenthesis, they indicate the impedances resulting when windings are connected in parallel.
- Balanced, for Williamson type circuit operation.
- Has primary taps suitable for Screen loading.
- Power response $\pm 1/2$ db, 50-15,000 cps.
- Response is ± 1 db, 30-15,000 cps.

All of these designs are available on special order with output impedances of other values than shown above.



2-56 Screws
Bottom View



MINIATURE AUDIO TRANSFORMERS

These transformers offer a variety of special design features on a catalog basis for particular circuit and chassis applications. They are available for plug-in and printed circuit applications as well as standard installations. The special cases shown allow the maximum of electrical performance for each type as well as variety and flexibility in mechanical arrangement. All electrical ratings are shown for continuous duty at full specified power levels. Dia. $7/8$ ", Ht. $1 1/8$ ", 2-56 Mtg. screws on $11/16$ " centers.

MINIATURE SERIES

Cat. No.	Type	Application	Primary Impedance (Ohms)	Secondary Impedance (Ohms)	Max. Level	Response
108A	Impedance	Line to Line	50/250/600	50/250/600	+ 8 dbm	± 1 db 30-15,000
208A	Input	Line to Single Grid	50/250/600	80,000	+ 10 dbm	± 1 db 30-15,000
208B	Input	Line to Push Pull Grids	50/250/600	80,000CT	+ 10 dbm	± 1 db 30-15,000
208C	Input	Low Impedance to Grid	7.5/30	80,000	+ 8 dbm	± 1 db 30-15,000
208D	Interstage	Plate (O DC) to Push Pull Grids	15,000	60,000CT	+ 10 dbm	± 2 db 30-10,000
208E	Interstage	Plate (3MA DC) to Push Pull Grids	15,000	60,000CT	+ 10 dbm	± 2 db 200-10,000
208F	Input	Line to Single Grid	50/250/600	500,000	+ 10 dbm	± 3 db 200-3000
208G	Interstage	Transistor to Transistors (20 MA DC)	10,000 (2500) Split	4000/1000CT	+ 10 dbm	± 2 db 100-10,000
308E	Output	Plate to Line (O DC)	15,000	50/250/600	+ 10 dbm	± 1 db 40-15,000
308F	Output	Plate to Line (3MA DC)	15,000	50/250/600	+ 10 dbm	± 2 db 100-15,000
308G	Output	Push Pull Plates to Line	30,000CT	50/250/6600	+ 10 dbm	± 1 db 30-15,000
308H	Output	Class B Transistors to Voice Coll	2000/500CT	16/8/4	+ 23 dbm	± 1 db 100-10,000
408D	Inductor		200 Hy @ 0 DC; 100 Hy @ 2MA DC; 50 Hy @ 4MA DC; 16 Hy @ 10MA DC; 6000 Ohms Resistance			

NOTE: These items are also available, on special request, as plug-in transformers with:

- Mumetal case $15/16$ " dia. by $1-5/16$ " high. 35 db shielding.
- Mumetal case plus 1 Mumetal shield $1-1/16$ " dia. by $1 1/2$ " high. 65 db shielding.





ADC PRODUCTS, INC.

MINNEAPOLIS, MINNESOTA

TELEPHONE COILS

For many years, ADC has been a dependable source of transformers and filters for the telephone and telegraph industry. Recently, we have designed and tooled for additional items in a series of "coils" which are electrically and physically interchangeable with similar components made by Western Electric. These items are listed below with the equivalent Western Electric number. All items in this series can be supplied in MIL cases if desired.

ADC Inductors	W.E. Indr. or Ret.	Fig.	ADC Imped. Trans.	W.E. Repeat Coil	Fig.	ADC Imped. Trans.	W.E. Repeat Coil	Fig.
409BB	149B	2	118A	67E	0	119C	177C	0
409BC	149C	2	113A	91A	5	119D	177D	0
409BD	149D	2	113A	93A	5	112G	189A	1
409E	149E	2	113B	93B	5	112B	189D	1A
409G	149G	2	113F	93F	5	112C	189E	1A
409H	149H	2	113G	93G	5			
409J	149J	2	113H	93H	5			
409K	149K	2	113J	93J	5			
409M	149M	2	109S ¹	94E	2	ADC Imped. Trans.	W.E. Auto Trans.	Fig.
409N	149N	2	109T	94F	2	109A	23A	0
409P	149P	2	109J	94G	2	112A ¹	181B	1
409R	149R	2	109K ¹	93H	2	112E	181C	1
405A	152B	0	109V	94K	2	112H	D166840	1A
405H	225A	0	109W	94L	2			
405E	250C	0	109Y	94N	2			
412AC	274C	1A	109Z	94P	2			
412AD	274D	1A	109BB	94S	2			
412AG	274G	1A	109BC	94T	2			
412AH	274H	1A	109BD	94U	2			
412AJ	274J	1A	109BE	94W	2			
412AL	274L	1A	109BF	94Y	2			
412AR	274R	1A	109BG ¹	94AA	2			
412AS	274S	1A	118F	106A	0			
412BB	274AB	1A	118S	119C	0			
412T	307B	1A	118U	119E	0			
412C	307C	1A	109B ¹	120C	2			
412F	307F	1A	109C ¹	120D	2			
412G	307G	1A	109D ¹	120E	2			
412H	307H	1A	109E ¹	120F	2			
412J	307J	1A	109F ¹	120H	2			
412K	307K	1A	109G ¹	120J	2			
412L	307L	1A	109H ¹	120K	2			
412M	307M	1A	109P ¹	120L	2			
412B	307N	1A	109L	146A	0			
412A ¹	307P	1A	109M	146U	0			
412R	307R	1A	119P	170A	0			

¹These represent most commonly used items and are normally carried in stock.

⁰Space did not permit outline drawings for all types. Dimensions will be sent on your request.

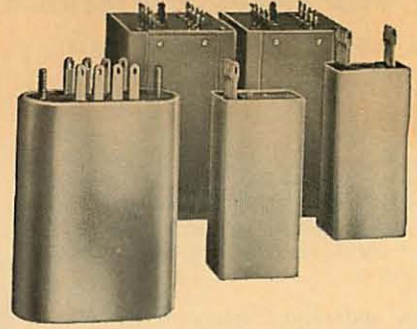


Fig. 1 and 1A

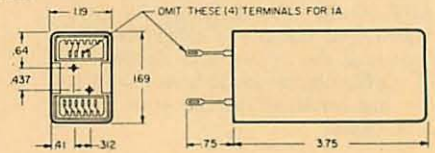


Fig. 2

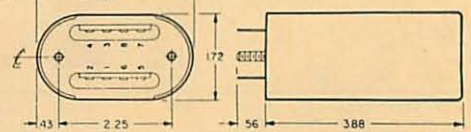
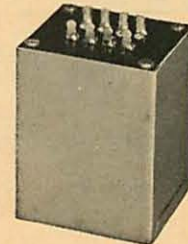
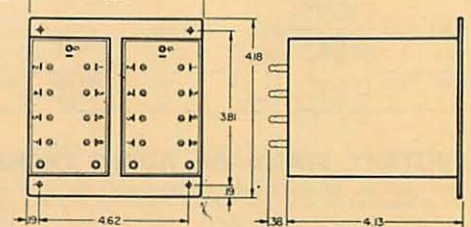


Fig. 5



ADC REPEATING COILS

104A—Cord Circuit. This repeating coil is designed to have good transmission efficiency for voice frequencies. Low frequency ringing currents are attenuated and circuit will not ring through. Case is heavy steel to eliminate all cross-talk. Core will not saturate at maximum normal current.

104B—Phantom. The 104B Repeating Coil is a 4-winding coil, for use in phantom circuits. The phantom winding (5-6-7-8) is parallel wound. Heavy Formvar wire is used for maximum surge voltage or lightning protection. This coil has good transmission efficiency at both ringing and voice frequencies.

Type	PRI. DCR		SEC. DCR		Case	Screw	Mounting Centers
	1-2	3-4	5-6	7-8			
104A	10.3	16.5	12.5	14.5	2½x1½x3½ high	(4) 6-32	1½x1½
104B	16.5	20	24	24	2½x2½x3½ high	(4) 8-32	1½x2½

INDUCTION COILS

103A—Induction Coil is a 2-winding coil for local battery telephones.

103B—Anti-Sidetone Induction Coil is similar to 103A, but with an additional winding for anti-sidetone connection.

103C—Anti-Sidetone Induction Coil is designed for common battery telephone use.

