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23V24	44	D	23V107	34	A	23V330	30	C	23V410	35	B	23V466	37	C
23V25	46	B	23V115	35	A	23V338	44	B	23V411	35	B	23V467	37	C
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23V36	47	A	23V119	35	A	23V342	44	D	23V415	35	C	23V471	35	E
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The information and specifications contained in this catalog have been checked for accuracy. However, Thordarson Meissner assumes no responsibility for any improper operation or consequential damage to equipment due to use of the items and or information listed herein.



WORLD'S OLDEST AND MOST COMPLETE SOURCE FOR YOUR MAGNETIC COMPONENT REQUIREMENTS

THORDARSON was founded in 1895 and has been a continuous supplier of transformers and chokes to the electrical and electronic industries since their inception. We pioneered radio magnetics and early military electronic systems for use in World Wars I and II. Continuing on a post-war basis, we further developed technology in engineering and manufacturing and now serve the broad and diverse requirements of electronic users throughout the world with over 85 YEARS experience.

THORDARSON maintains two large plants in Illinois devoted to the production and testing of transformers, inductors, reactors, coils, and related items. As the oldest and largest independent manufacturer of these products in the world, we sustain over 8000 pre-engineered items to meet the immediate demands of OEM, MRO, and military customers. In addition, these complete manufacturing facilities are available to meet the special item needs of these customers.

THORDARSON engineering leads the industry in the design and development of magnetic components for OEM and replacement applications. In such fields as biomedical, information display and monitor, and control instrumentation, our engineers developed design and construction advancements which further reinforced our technological leadership. These engineering groups are constantly working on state-of-the-art improvements and new items. Our unsurpassed engineering capabilities are used on **ALL CUSTOMER REQUIREMENTS**, large and small.

THORDARSON quality assures that every order receives constant quality surveillance. We support a complete program in accordance with all applicable specifications for acceptance testing, test equipment, calibration, inspection records, and many more. Our quality program has been surveyed and approved by the Government as well as hundreds of OEM customers. This commitment to quality extends throughout our organization to perpetuate the **THORDARSON** tradition.

The **THORDARSON** tradition also includes **SERVICE**. We maintain the world's largest inventory of catalog and replacement magnetic components and provide fast processing and shipment. In addition, all our efforts in engineering, manufacturing, and quality are focused by our customer service personnel for prompt action on any inquiry. In these times of machine-made and computerized responses, we are proud to add a personal touch to customer contacts.

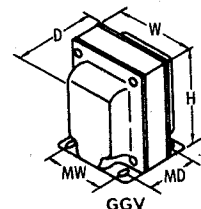
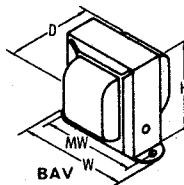
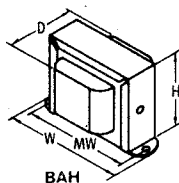
AUDIO TRANSFORMERS

The following transformers present complete coverage of units for use in audio or related applications. The output types are listed first, followed by 70 and 25 volt line units for use in speaker systems. The section is concluded with input, interstage, driver, and other audio-related transformers. Please note that any of these units may be used in applications other than those named in the headings if the ratings are observed. The transformers are listed in order of increasing primary impedance.

OUTPUT: SINGLE PLATE TO VOICE COIL AND/OR LINE

Section	TM Part No.	Impedance in Ohms		Max. Pri. MADC	Audio Watts	Overall Turns Ratio	DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.				Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
A	24S127	1000	4	90	4	15.8:1	54	0.56	200-20000	500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.5
	24S53	2000	3.5	50	3	25:1	130	0.42	200-1000	1000	BAH	Leads	Leads	1 3/16	2 1/8	1 1/8	1 1/4	—	0.2
	24S50	2000	3.5	60	5	23.7:1	90	0.4	50-20000	2000	BAH	Leads	Leads	1 3/8	2 3/8	1 1/8	2	—	0.5
	26S58	2500	3.5	50	3	27.6:1	200	0.55	100-1000	500	BAV	Leads	Leads	1 3/8	1 1/8	1 1/4	1 1/2	—	0.20
	22S45	1500-3000	3.5	55	5	22.3:1	172	0.6	100-10000	1100	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.50
B	22S46	2000-3000	3.5	35	5	27.6:1	512	0.7	100-5000	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.50
	22S22	3000†	3-4	50	2-3	27.3:1	207	0.31	—	1000	BAH	Leads	Leads	1 3/16	2 1/16	1 1/2	1 1/4	—	0.21
	24S89	3000†	3.5	50	5	29.8:1	200	0.7	200-20000	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	0.5
	26S50	3500	3.5	60	8	31.6:1	160	0.35	100-10000	500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2 3/8	—	0.75
	24S48	4000-5000	3.5	10	5	39.5:1	240	0.42	30-20000	1000	BAH	Leads	Leads	1 1/4	2 1/8	1	1 1/4	—	0.4
C	24S51	5000	3.5	40	5	37.8:1	280	0.38	200-20000	1000	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.5
	22S35	5000	3.5	50	5	30.7:1	283	.275	200-1500	1000	BAH	Leads	Leads	1 3/16	3 1/4	1 3/4	2 3/16	—	1.0
	26S49	5000	3.5	50	8	37.7:1	250	0.33	200-20000	500	BAH	Leads	Leads	1 3/8	2 13/16	1 5/8	2 3/8	—	0.5
	24S173	5000	3-4	35	3	37.3:1	340	0.50	200-15000	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 3/8	1 3/4	—	0.4
	22S54	5000 C.T.	3-4	60	18	36.4:1	209	0.4	200-15000	1500	BAV	Leads	Leads	2 11/16	3 3/8	2	2 3/16	—	1.6
D	24S92	5000	4/8/16	50	8	16.7:1	350	1.34	—	1500	BAH	Leads	Leads	2	3 1/4	1 3/4	2 3/16	—	1.0
	24S150	5000	6-8	40	10	25.8:1	290	0.72	200-20000	1500	BAV	Leads	Leads	2 3/8	2 7/8	1 7/8	2 3/8	—	0.75
	24S91	5000	4/8/16/500	55	20	3.16:1	400	39.4	50-20000	1500	GGV	Leads	Leads	3 1/8	2 3/8	2 3/8	2	1 11/16	2.5
	26S48	7000	3.5	40	8	44.7:1	332	0.35	100-10000	500	BAH	Leads	Leads	1 3/8	2 7/8	1 3/8	2 3/8	—	.60
	24S52	7000-10000	3.5	30	5	44.5:1	350	0.41	200-20000	500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	0.5
E	24S135	7000-10000	1/2/4	35	4	50:1	270	0.44	200-15000	1000	BAH	Lugs	Lugs	1 3/8	2 3/8	1 3/8	2	—	0.5
	24S49	7000-8000	3.5	10	3	47.6:1	372	0.44	200-15000	1000	BAH	Leads	Leads	1 1/4	2 1/16	1 1/8	1 3/4	—	0.4
	24S83	10000	3.5	30	3	53.7:1	500	0.32	—	1000	BAH	Leads	Leads	1 3/16	2 1/8	1 1/4	1 3/4	—	0.2
	24S98	10000	4	30	5	57.1:1	290	0.26	200-20000	1000	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.5
	24S54	15-20000	3.5	10	5	65.1:1	820	0.40	200-20000	1000	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	0.5
	24S99	25000	4	5	5	80.3:1	1160	0.6	200-25000	1000	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.5

† 3% and 6% Primary Humbucking Tap.



THORDARSON has additional standard and stocked **AUDIO TRANSFORMERS** which are not listed in this catalog. Contact factory for additional information.

AUDIO TRANSFORMERS

OUTPUT: PUSH-PULL PLATES TO VOICE COIL AND/OR LINE

Section	TM Part No.	Impedance in Ohms		Max. Pri. MADC	Audio Watts	Overall Turns Ratio	Nominal DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.				Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
A	24S79	3300/3800 C.T.	4/8/250/800	125	75	2.7:1	74	10.1	50-20000	2000	GGV	Leads	Leads	4 1/4	4	3 1/8	3	2 1/16	8.0
	22S21	4000 C.T.	8/16/32	75	7.5	11.1:1	170	1.4	100-15000	1000	BAH	Leads	Leads	2 1/4	3 3/4	2	3 3/8	—	1.4
	24S77	4400 C.T.	4/8/16/250/500	70	30	3.16:1	343	20.48	—	1500	GGV	Leads	Leads	3 3/8	3	3 1/8	2	2 1/4	3.5
	24S27	5000/10000/20000 C.T.	50/125/333/500	15	10	6.25:1	1325	50	40-15000	1500	BAH	Lugs	Lugs	2	3 1/8	1 1/4	2 1/16	—	1.0
	24S17	5000 C.T.	4/8/16	80	15	18.6:1	205	0.68	—	1500	BAV	Leads	Leads	2 3/8	2 1/8	1 1/4	2 3/8	—	1.0
B	22S70	5000 C.T.	3.5/8/16/250/500	80	25	3.1:1	230	0.75	100-10000	1600	GGV	Leads	Leads	3 1/16	2 1/2	1 1/16	2	1 1/16	2.5
	22S71	5000 C.T.	4/8/16/250/500	80	30	2.4:1	250	53.5	20-20000	1500	GGV	Leads	Leads	3 3/8	3	3 3/8	2	2 1/4	3.7
	22S39	6600 C.T.	4/8/16	100	20	20:1	200	0.6	30-15000	1500	TAV	Lugs	Lugs	4 1/16	3 11/16	4 7/16	2 3/4	3 3/8	4.0
	24S57	6600 C.T.	4/8/16/250/500	150	35	3.6:1	120	8.9	30-20000	1600	GGV	Leads	Leads	4	3 1/4	3 3/8	2 1/2	2 3/16	4.5
	22S67	6600 C.T.	8/16	125	50	11.8:1	120	1.1	20-20000	1600	GGV	Leads	Leads	4 1/16	3 1/16	4 1/4	2 3/4	3 1/16	6.5
C	24S58	7000/10000 C.T.	3.5/8/16/500	60	25	5.5:1	365	14.73	—	1600	GGV	Leads	Leads	3 3/16	2 3/8	2 3/8	2 3/4	1 1/16	2.7
	24S179	10000 C.T.	4/8/16/500	70	25	4.8:1	425	0.6/21.2	60-20000	1500	GGV	Leads	Leads	3 1/2	2 13/16	2 1/4	2 1/4	2	4.5
	24S44	10000 C.T.	2 1/4/8/16/250/500	45	15	4.48:1	344	22.3	—	1000	BHH	Lugs	Lugs	2	3 1/4	1 1/4	2 13/16	—	1.0
	24S56	10000 C.T.	2 1/4/8	75	8	23.5:1	290	0.72	100-15000	1000	BAH	Leads	Lugs	1 1/8	2 7/8	1 1/2	2 3/8	—	0.7
	24S19	10000 C.T.	4/8/16/3.5/8/16	40	12	24.1:1	575	1.2	100-15000	1500	BAV	Leads	Leads	2 3/8	2 7/8	1 1/4	2 3/8	—	1.0
D	25S41	10000 C.T.	4/8/16/150/600	200	15	4.6:1	580	70	50-10000	2000	TTV	Terminals	Terminals	3 3/8	3 3/4	4	2 1/4	3 1/2	5.0
	22S64	10000 C.T.	4/8/16/250/500	50	25	4.3:1	560	28.7	60-2000	1600	GGV	Leads	Leads	3 3/8	2 3/8	2 3/8	2	1 1/4	2.5
	22S59	15000	500 C.T.	10	4	54.7:1	1450	43	60-8000	1100	BGH	Leads	Leads	1 1/8	2 7/8	1 1/8	2 3/8	—	0.60
	24S114	18000 C.T.	50/250/600	20	2	5.5:1	1200	43	70-10000	500	BHH	Leads	Leads	1 1/8	2 13/16	1 1/2	2 3/8	—	0.5
	24S59	25000 C.T.	3.5	10	5	79:1	850	0.3	200-10000	500	BAH	Leads	Leads	1 1/8	2 3/8	1 1/8	2	—	0.4

UNIVERSAL OUTPUT: SINGLE OR PUSH-PULL PLATE TO VOICE COIL

Section	TM Part No.	Impedance of Ohms		Max. Pri. MADC	Audio Watts	Overall Turns Ratio	DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.				Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
E	24S64	1500 to 10000	.02 to .30	55	10	18.3:1	230	1.2	—	1600	BHH	Lugs	Lugs	1 1/8	2 7/8	1 1/2	2 3/8	—	0.7
	22S61	2000 to 10000 C.T.	.64 to 21.3	30	2	25:1	420	0.95	—	1500	BAH	Leads	Lugs	1 1/16	2 1/16	1 1/4	1 3/4	—	0.21
	24S05	2000 to 13000 C.T.	0.1 to 50	50	4	22:1	207	1.24	—	1500	BHH	Leads	Lugs	1 3/8	2 3/8	1 1/4	2	—	0.5
	22S86	2000 to 14000	3.5 to 8	50	3	40:1	740	0.65	200-15000	1500	BAH	Leads	Lugs	1 3/8	2 3/8	1 3/8	2	—	0.5
	22S88	2000 to 14000	3.5 to 8	50	8	42:1	375	0.8	100-10000	1500	BAH	Leads	Lugs	1 15/16	3 3/4	1 1/4	2 13/16	—	1.0
F	24S11	2500 to 14000 C.T.	0.1 to 30	50	10	19.5:1	512	1.31	—	1500	BHV	Leads	Lugs	2 3/8	2 7/8	1 1/2	2 3/8	—	1.0
	24S174	3000/10000 C.T.	.09 to 65.4	60	20	18.1:1	160	0.7	—	1000	BHV	Leads	Leads	2 3/4	3 3/8	2 1/8	2 13/16	—	1.8
	24S55	3000 to 10000 C.T.	1.0 to 30	60	20	15.8:1	214	0.7	—	1000	BHV	Lugs	Lugs	2 3/8	2 1/4	3 1/16	2 13/16	—	1.8
	24S42	3000 to 10000 C.T.	0.17 to 32	70	24	15.9:1	279	0.91	—	1000	BHH	Leads	Lugs	2 1/4	3 11/16	2 1/8	3 3/8	—	1.8
	24S12	3500 to 14000 C.T.	0.1 to 50	40	18	22.4:1	500	0.79	—	1500	BHV	Leads	Lugs	2 3/8	2 7/8	2	2 3/8	—	1.2
G	24S60	4000 to 14000 C.T.	0.1 to 30	35	4	21.9:1	350	0.81	—	500	BHH	Leads	Lugs	1 3/8	2 3/8	1 1/4	2	—	0.5
	26S46	4000 to 14000	0.1 to 30	40	18	21:1	350	0.6	60-15000	1100	BHV	Leads	Lugs	2 3/8	2 7/8	2 1/4	2 3/8	—	1.0

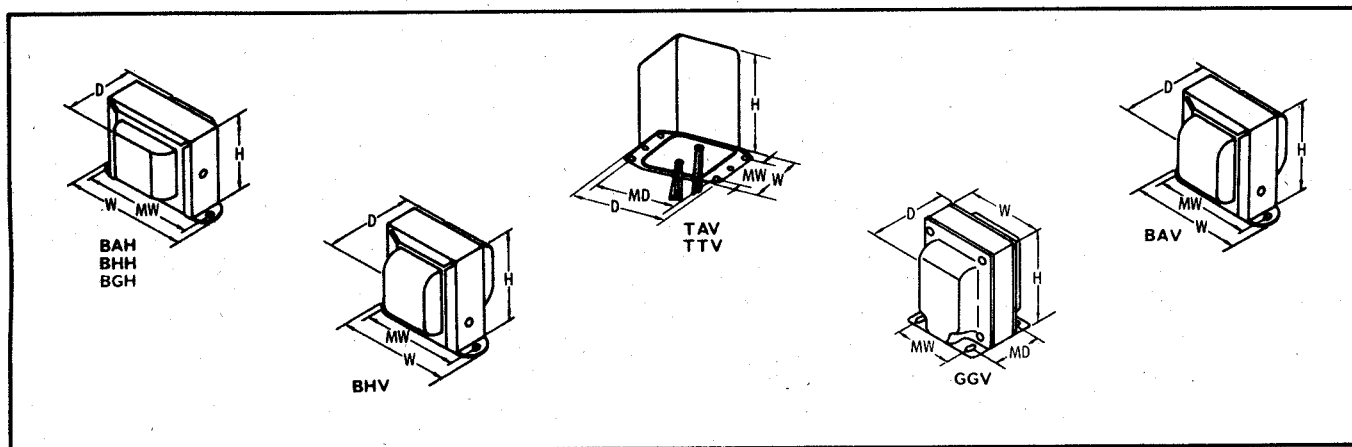
AUDIO TRANSFORMERS

UNIVERSAL OUTPUT: SINGLE OR PUSH-PULL PLATE TO VOICE COIL (Cont'd)

Section	TM Part No.	Impedance in Ohms		Max. Pri. MADC	Audio Watts	Overall Turns Ratio	DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.				Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
A	24S06	4000 to 14000 C.T.	0.1 to 50	40	8	18.1:1	500	2.1	—	1500	BHH	Leads	Lugs	1 $\frac{5}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{2}$	2 $\frac{3}{8}$	—	0.75
	24S04	4000 to 14000 C.T.	0.1 to 50	35	4	18.3:1	300	1.1	—	1500	BHH	Leads	Lugs	1 $\frac{3}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{4}$	2	—	0.5
	24S61	4000 to 14000 C.T.	0.1 to 30	40	8	22:1	182	0.835	—	1500	BHH	Lugs	Lugs	1 $\frac{5}{8}$	2 $\frac{3}{8}$	2	2 $\frac{3}{8}$	—	1.0
	24S181	4000 to 14000	0.02 to 122	40	15	18.2:1	350	1.0	—	1500	BHH	Lugs	Lugs	2 $\frac{3}{8}$	3 $\frac{3}{4}$	2 $\frac{3}{8}$	3 $\frac{3}{8}$	—	1.7
	24S14	4000 to 14000 C.T.	0.1 to 50	50	18	18.1:1	540	1.8	—	1500	BHH	Lugs	Lugs	2	3 $\frac{1}{8}$	2	2 $\frac{3}{16}$	—	1.25
B	24S08	4000 to 20000 C.T.	0.5 to 50	50	8	32.2:1	420	0.85	—	1500	BHV	Leads	Lugs	2	2 $\frac{3}{8}$	1 $\frac{1}{2}$	2	—	0.75
	24S180	6000 to 10000	0.6 to 4.0	75	8	44:1	175	0.5	—	1500	BHH	Leads	Lugs	2	3 $\frac{1}{4}$	2	2 $\frac{3}{16}$	—	1.4

OUTPUT: HIGH FIDELITY

Section	TM Part No.	Impedance in Ohms		Max. Pri. MADC	Audio Watts	Overall Turns Ratio	DC Resistance		Frequency Response ± 1 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.				Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
C	22S14	4500 C.T.	4/8/16	150	100	16.2:1	170	0.5	20-20000	2500	GGV	Leads	Leads	5 $\frac{9}{16}$	4 $\frac{9}{16}$	5 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{8}$	14.7
	22S63	5000 C.T.	8/16	150	50	10.2:1	105	1.05	20-20000	1600	GGV	Leads	Leads	4 $\frac{9}{16}$	3 $\frac{9}{16}$	4 $\frac{1}{4}$	2 $\frac{3}{4}$	3 $\frac{1}{16}$	6.0
	22S67	6000 C.T.	8/16	125	50	11.8:1	125	1.1	20-20000	1600	GGV	Leads	Leads	4 $\frac{5}{16}$	3 $\frac{9}{16}$	4 $\frac{1}{4}$	2 $\frac{3}{4}$	3 $\frac{1}{16}$	6.0
	22S65	7600 C.T.	4/8/16	100	25	14.3:1	260	1.8	20-50000	1500	GGV	Leads	Leads	4 $\frac{5}{16}$	3 $\frac{9}{16}$	4 $\frac{1}{4}$	2 $\frac{3}{4}$	3 $\frac{1}{16}$	6.0



REPLACEMENT PARTS

THORDARSON maintains the most complete line of replacement transformers in the industry. Television flybacks, yokes, vertical output and power transformers are stocked in-depth plus thousands of other hard-to-get transformers and chokes for consumer, commercial, industrial, medical, and military applications. Your THORDARSON distributor has up-to-date TV replacement information.



AUDIO TRANSFORMERS

25 VOLT LINE TO VOICE COIL (SPEAKER)

Section	TM Part No.	Impedance in Ohms		Audio Watts	Overall Turns Ratio	DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.			Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
A	24S22	39/78/156/312.5/625/1250	4/8/16	16/8/4/2/1/0.5	8.8:1	70	1.8	100-6000	1500	BHV	Lugs	Lugs	2 3/4	3 1/4	2 1/8	2 1/16	—	1.75
	24S21	78/156/312.5/625/1250	4/8/16	8/4/2/1.5	8.8:1	125	1.1	100-10000	1000	BHV	Lugs	Lugs	2	2 3/8	1 1/4	2	—	1.0
	24S24	125/250/500/1000/2000	4/8	5/2.5/1.25/0.62/0.31	15.8:1	85	0.50	30-20000	500	BHH	Lugs	Lugs	1 3/8	2 3/8	1 1/4	2	—	0.4
	24S169	125/312/625/1250	8	5/2/1/0.5	12.8:1	65	0.75	—	900	BAH	Leads	Leads	1 3/8	2 13/16	1 3/8	2 3/8	—	0.7
	24S129	156/312/625/1250/2500/5000	8	4/2/1/0.5/0.25/0.12	24.3:1	200	0.86	40-20000	1000	BAH	Leads	Leads	1 3/8	2 13/16	1 3/4	2 3/8	—	0.7
B	24S126	312/625/1250	4/8	2/1/0.5	12.5:1	80	0.84	50-15000	500	BHH	Lugs	Lugs	1 1/4	2 1/8	1 3/8	1 3/4	—	0.3
	24S109	312/625/1250	4/8	2/1/0.5	12.4:1	80	0.62	40-15000	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.45

70.7 VOLT LINE TO VOICE COIL (SPEAKER)

Section	TM Part No.	Impedance in Ohms		Audio Watts	Overall Turns Ratio	Nominal DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.			Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
C	24S172	82/166/312/625	8	60/30/15/7.5	8.8:1	15	0.42	—	1000	LAH	Leads	Leads	3 1/8	3 3/4	3	3 3/8	2 1/4	4.0
	24S167	100/125/200/333	4/8/16	50/40/25/15	4.6:1	23	1.2	40-20000	1500	BAV	Lugs	Lugs	2 3/8	2 7/8	2	2 3/8	—	1.25
	24S171	166/312/625/1250	8	30/15/7.5/3.8	12.6:1	27	0.5	—	1000	BAH	Leads	Leads	2 3/8	4	2 1/4	3 9/16	—	2.5
	24S166	166/250/500/1000	4/8/16	30/20/10/5	7.9:1	36	9.1	40-20000	1500	BAV	Lugs	Lugs	2 3/8	2 7/8	1 3/4	2 3/8	—	1.2
	24S02	208/416/832/1664/3230	4/8/16	24/12/6/3/1.5	13.9:1	60	0.68	40-20000	1500	BHH	Lugs	Lugs	2 3/16	3 11/16	2	3 1/8	—	2.5
D	24S105	250/500/1000/2000	4/8/16	20/10/5/2.5	11.2:1	63	0.72	50-20000	1000	BHV	Lugs	Lugs	2 3/8	2 7/8	1 3/4	2 3/8	—	1.0
	24S72	312.5/625/1250/2500/5000/10000	4/8/16	16/8/4/2/1/0.5	25.1:1	480	0.88	100-5000	1000	BHV	Lugs	Lugs	2 3/8	3 3/8	2 1/4	2 13/16	—	1.75
	24S123	333/357/384/417/555	8/16	15/14/13/12/11	5.3:1	29	1.1	50-20000	1000	BHV	Lugs	Lugs	2 3/16	2 7/8	1 3/4	2 3/8	—	1.2
	24S124	500/555/625/715/833	8/16	10/9/8/7/6	6.9:1	69	1.2	50-20000	1000	BHV	Lugs	Lugs	2	2 3/8	1 3/8	2	—	0.7
	24S101	500/1000/2000/4000	4/8/16	10/5/2.5/1.25	15.8:1	157	0.84	40-20000	1000	BAV	Leads	Leads	2	2 3/8	1 1/2	2	—	0.6
E	24S151	500/1000/2000/4000/8000	4/8/16	10/5/2.5/1.25/0.62	21.5:1	760	1.7	50-20000	1000	BHH	Lugs	Lugs	1 3/8	2 13/16	1 3/8	2 3/8	—	0.75
	24S170	500/1000/2000/4000	8	10/5/2.5/1.25	22.2:1	200	1.2	—	1000	BAV	Leads	Leads	2 1/4	3 1/8	1 3/4	2 3/8	—	1.0
	24S71	625/1250/2500/5000/10000	4/8/16	8/4/2/1/0.5	25:1	830	1.4	50-20000	1000	BHV	Lugs	Lugs	2	2 1/2	1 3/8	2	—	1.0
	24S168	1000/2500/5000/10000	8	5/2/1/0.5	35.1:1	600	0.73	—	900	BAH	Leads	Leads	1 3/8	2 13/16	1 3/8	2 3/8	—	0.7
	24S74	1000/2000/4000/8000/16000	4/8	5/2.5/1.25/0.62/0.31	44.7:1	850	0.54	50-20000	1000	BHH	Lugs	Lugs	1 3/8	2 3/8	1 1/4	2	—	0.5
F	24S125	1000/1250/1667/2500/5000	8/16	5/4/3/2/1	79.1:1	265	1.9	50-20000	1000	BHH	Lugs	Lugs	1 3/8	2 3/8	1 3/8	2	—	0.5
	24S128	1250/2500/5000/10000/20000/40000	8	4/2/1/0.5/0.25/0.12	64.6:1	1820	1.1	50-20000	1000	BAH	Leads	Leads	1 3/8	2 7/8	1 1/2	2 3/8	—	0.7
	24S153	2500/5000/10000	4/8	2/1/0.5	34.5:1	550	0.87	50-15000	1000	BHH	Lugs	Lugs	1 1/4	2 1/8	1 3/8	1 3/4	—	0.2
	24S176	2500/5000/10000	8	2/1/0.5	34.6:1	650	0.74	50-2000	1000	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.4
	24S01	2500/5000/10000/20000/40000	4/8	2/0/1/0/0.5/0.25/1.25	66:1	1225	1.04	—	1000	BHH	Lugs	Lugs	1 1/4	2 1/16	1 1/4	1 3/4	—	0.2

*Autoformer

TV EXACT REPLACEMENTS

THORDARSON has the most complete line of TV exact replacement transformers in the industry. Color television flybacks, yokes, vertical output and power transformers are designed and manufactured as exact replacements for virtually all popular makes and models and many older black and white types are available too. Contact your THORDARSON distributor for FREE up-to-date TV replacement information.

AUDIO TRANSFORMERS

MISCELLANEOUS LINE TO VOICE COIL (SPEAKER)

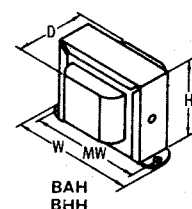
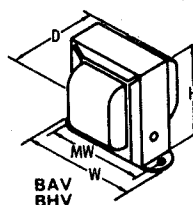
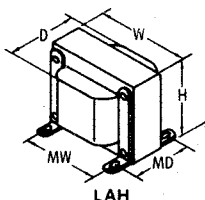
Section	TM Part No.	Impedance in Ohms		Audio Watts	Overall Turns Ratio	Nominal DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.			Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
A	22S81	45/50	3.5/8	8	2.3:1	4.4	0.43	100-20000	500	BAH	Leads	Leads	1 $\frac{1}{8}$	2 $\frac{7}{8}$	1 $\frac{1}{8}$	2 $\frac{1}{8}$	—	0.7
	24S75	500	3.2/6/8	5	8.1:1	50	0.85	60-20000	1000	BAH	Leads	Lugs	1 $\frac{1}{8}$	2 $\frac{7}{8}$	1 $\frac{1}{4}$	2	—	0.45
	22S103	500	4/8	5	7.95:1	33.6	0.7	300-7000	500	BAH	Leads	Leads	1 $\frac{3}{8}$	2 $\frac{3}{8}$	1 $\frac{3}{8}$	1 $\frac{3}{8}$	—	0.45
	24S46	500/1000/1500/2000	3.5/8	8	15.4:1	200	0.6	60-15000	1500	BHH	Lugs	Lugs	1 $\frac{1}{8}$	2 $\frac{7}{8}$	1 $\frac{1}{8}$	2 $\frac{3}{8}$	—	0.7
	24S66	500/1000/1500/2000	3.5/8	10	16.7:1	128	0.76	—	1100	BHV	Lugs	Lugs	2	2 $\frac{1}{2}$	1 $\frac{1}{8}$	2	—	1.0
B	22S109	500/1000/1500/2000/3000	4/8/16	10	12.9:1	220	1.3	50-15000	1500	BHV	Lugs	Lugs	2 $\frac{1}{8}$	2 $\frac{1}{2}$	1 $\frac{1}{4}$	2 $\frac{3}{8}$	—	1.5
	22S83	500/1000/1500/2000	3.5/8/16	15	10.6:1	100	1.1	70-7000	1500	BAH	Leads	Lugs	2 $\frac{1}{8}$	3 $\frac{1}{4}$	2	3 $\frac{1}{8}$	—	2.25

MATCHING 25-VOLT LINE TO 70.7-VOLT LINE OR 70.7-VOLT LINE TO 25-VOLT LINE

Section	TM Part No.	Matching Impedance		Audio Watts	DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Primary	Secondary		Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
C	24S113	25V Line to 70.7V Line or 70.7V Line to 25V Line 30 Watts	20.8 C.T. to 166 C.T. \pm or 166 C.T. to 20.8 C.T. \pm	30	1.8	16.7	20-2000	1500	BAV	Leads	Leads	3 $\frac{1}{16}$	3 $\frac{3}{8}$	3 $\frac{3}{8}$	3 $\frac{1}{8}$	—	2.3

LINE TO LINE

Section	TM Part No.	Impedance in Ohms		Audio Watts	Frequency Response ± 3 DB	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Primary	Secondary				Pri.	Sec.	H	W	D	MW	MD	
D	20A07	50/125/200/333/500	50/125/200/333/500	10	200-15000	BHH	Lugs	Lugs	2	3 $\frac{1}{4}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	—	1.0
	20A103	600 C.T./150 (Split WDG)	600 C.T./150 (Split WDG)	1	100-10000	BAH	Leads	Leads	1 $\frac{1}{8}$	2 $\frac{1}{8}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	—	0.21



THORDARSON has additional standard and stocked AUDIO TRANSFORMERS which are not listed in this catalog. Contact factory for additional information.

AUDIO TRANSFORMERS

HIGH FIDELITY, INPUT/INTERSTAGE (SHIELDED-CASED)

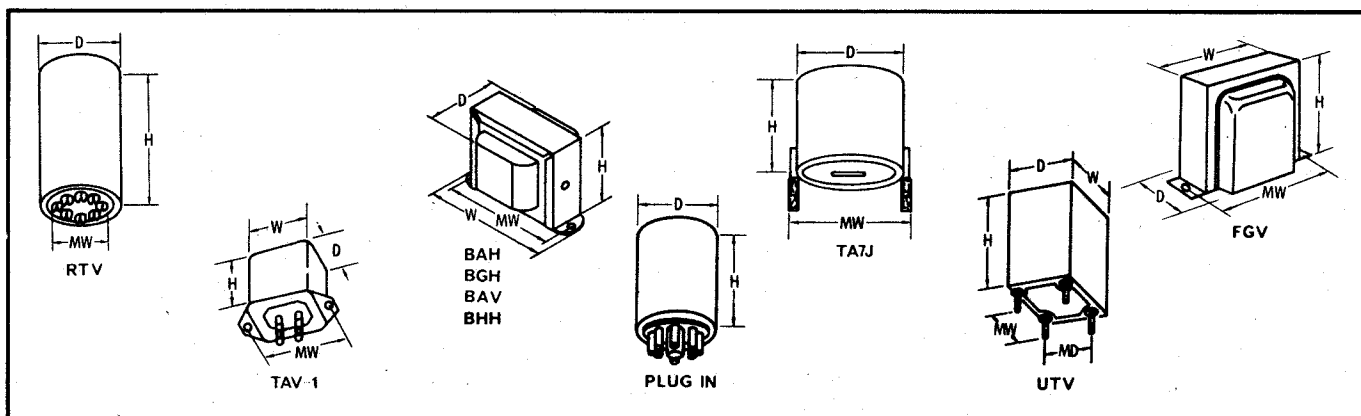
Section	TM Part No.	Application	Impedance in Ohms		Audio Watts	Nominal DC Resistance		Overall Turns Ratio	Freq. Res. ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Pri.	Sec.		Pri. Ohms	Sec. Ohms					Pri.	Sec.	H	W	D	MW	MD	
A	25A46	—	125/500*	125/500*	250 MW	43.3	75.2	1:1	100-20000	500	RTV	Term.	Term.	1 $\frac{1}{16}$	$\frac{7}{8}$	Dia.	1 $\frac{1}{16}$	—	0.4
	25A54	—	50-200/250	50-200/250-500/600	35 MW	11.64	43.3	1:1.55	30-20000	500	Plug-in	Octal	Plug	1 $\frac{1}{32}$	1 $\frac{1}{32}$	Dia.	8 Pin	Octal	0.4
	25A63	—	150/600*	150/160**	30 MW	21.96	42.92	1:1	20-30000	500	UTV	Term.	Term.	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{32}$	1 $\frac{1}{32}$	0.5
	25A60	Line to Line	50-200/250-500/600	50-200/250-500/600	30 MW	29.3	41.6	1:1	30-30000	500	UTV	Term.	Term.	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{32}$	1 $\frac{1}{32}$	0.3
	25A22	—	50/125/200/250/333/500	50/125/200/250/333/500	30 MW	32	32	1:1	40-50000	500	UTV	Term.	Term.	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{32}$	1 $\frac{1}{32}$	0.5
B	25A59	Mike, Pickup or Line to P.P. Grids	50/200/500	50000 C.T.	5 MW	51.8	3920	1:10	20-20000	500	UTV	Term.	Term.	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{32}$	1 $\frac{1}{32}$	0.5
	25A58	Mike, Pickup or Line to S. or P.P. Grids	50-125/150-200/250-333-500/600	50000 C.T.*	100 MW	28.63	1440	1:10	20-20000	500	UTV	Term.	Term.	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{32}$	1 $\frac{1}{32}$	0.5
	25A16	Mike, Pickup or Line to Grid	50-125/150-200/250-333-500/600	50000	15 MW	17.1	2370	1:10	30-20000	500	UTV	Term.	Term.	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{32}$	1 $\frac{1}{32}$	0.5

*Split windings

**Dual split windings

MICROPHONE, PICKUP, VOICE COIL, OR LINE TO GRID(S)

Section	TM Part No.	Application	Impedance in Ohms		Audio Watts Max.	Nominal DC Resistance		Overall Turns Ratio	Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Pri.	Sec.		Pri. Ohms	Sec. Ohms					Pri.	Sec.	H	W	D	MW	MD	
C	20A15	V.C. to Grid	3.5	50000	—	0.58	701	1:124	150-10000	500	TA7J	Leads	Leads	1 $\frac{1}{32}$	—	1 $\frac{1}{32}$	1 $\frac{1}{16}$	—	0.3
	20A04	V.C. to Grid	3/6	38400	—	0.32	1100	1:80	100-10000	500	BAH	Leads	Leads	1 $\frac{1}{16}$	2 $\frac{3}{8}$	1 $\frac{1}{4}$	2	—	0.5
	20A35	Mike or Mixer to Grid	50	50000	1	8.8	6500	1:31.6	200-20000	500	BAH	Leads	Leads	1 $\frac{1}{16}$	2 $\frac{1}{8}$	1 $\frac{1}{4}$	1 $\frac{3}{4}$	—	0.4
	20A31	Mike, or Line to P.P. Grids	50/125/200/333/500	89000 C.T.	10	8.93	4185	1:13.3	60-10000	500	BHH	Lugs	Lugs	2	3 $\frac{1}{4}$	1 $\frac{3}{4}$	2 $\frac{1}{16}$	—	1.0
	20A08	Mike, Pickup or Line to Grid	50/67.5 C.T. 200 C.T. 333/500 C.T.	72000	1	37.4	1335	1:12	100-20000	500	BAH	Lugs	Leads	1 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{1}{4}$	1 $\frac{3}{4}$	—	0.21
D	20A32	Mike to S. Grid	70/200	80000	5	13.6	2650	1:20	200-5000	500	BAH	Leads	Leads	1 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{8}$	2	—	0.5
	20A33	Mike to Grid	100	60000	5	10.3	4480	1:24.5	200-5000	500	BAH	Leads	Leads	1 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{2}$	2	—	0.5
	20A99	Line or Mike to Grid	400 C.T.	195000	1	5.45	1330	1:22.2	200-10000	500	BAH	Leads	Leads	1 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{1}{4}$	1 $\frac{3}{4}$	—	0.21
	20A00	Line to S. or P.P. Grids	50/200/600 C.T.	60000 C.T.	1	18.1	1225	1:10	100-10000	500	BAH	Leads	Leads	1 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{4}$	2	—	0.5
	20A102	Line to S. or P.P. Grids	500/600 C.T.	60000 C.T.	1	24	1325	1:10	100-10000	1500	BAH	Leads	Leads	1 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{3}{8}$	2	—	0.5
	20A01	Line to Grid	500/600 C.T.	240000	—	13	3330	1:20	20-5000	1500	FGV	Leads	Leads	2 $\frac{3}{8}$	2 $\frac{7}{8}$	2 $\frac{1}{8}$	2 $\frac{3}{8}$	—	0.8
	20A11	Line to P.P. Grids	500/600 C.T.	240000 C.T.	—	11.7	3120	1:20	60-10000	1500	BGH	Leads	Leads	2	3 $\frac{1}{4}$	2 $\frac{1}{8}$	2 $\frac{1}{16}$	—	1.0



AUDIO TRANSFORMERS

INTERSTAGE: PLATE(S) TO GRID(S)

Section	TM Part No.	Impedance in Ohms		Max. Primary MADC	Turns Ratio	DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Primary	Secondary			Pri.	Sec.				Pri.	Sec.	H	W	D	MW	MD	
A	20A16	7000-15000	28000-60000 C.T.	10	1:2	431	1158	100-10000	750	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	0.4
	20A18	7000-15000	63000-135000 C.T.	10	1:3	530	2160	100-10000	500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	0.5
	20A22	7000-15000	63000-135000 C.T.	10	1:3	1250	3750	70-10000	500	BAH	Leads	Leads	2	3 1/4	2 3/8	2 13/16	—	1.0
	20A58	7000-22000	63000-180000	10	1:3	400	1500	100-10000	1000	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.5
	20A45	10000	90000	8	1:3	357	1447	60-10000	500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.4
B	20A19	10000 C.T.	90000 C.T.	8	1:3	553	2140	60-10000	500	BAH	Leads	Leads	1 3/8	2 13/16	1 3/8	2 3/8	—	0.8
	20A14	15000 C.T. 15000 3750	33700 135000 C.T. 135000 C.T.	20	1:1.5 1:3 1:6	1225	3650	70-10000	1500	BAV	Leads	Leads	2 3/8	2 7/8	2 1/8	2 3/8	—	1.0

DRIVER

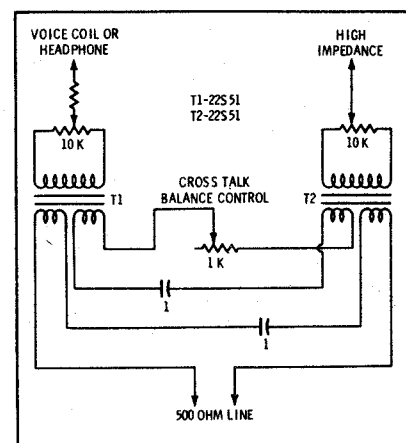
Section	TM Part No.	Impedance in Ohms		Max. Pri. MADC	Ratio Pri. 1/2 Sec.	Audio Watts	Nominal DC Resistance		Frequency Response ± 3 DB	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Pri.	Sec.				Pri. Ohms	Sec. Ohms				Pri.	Sec.	H	W	D	MW	MD	
C	20D89	7000	15800 C.T.	40	1.33:1	10	485	720	70-7000	1000	BAH	Leads	Leads	1 3/8	2 13/16	1 1/2	2 3/8	—	0.6
	20D76	8000	1200 C.T.	15	5.2:1	10	400	1400	300-3000	750	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	0.5
	20D23	8000-12000	8000-12000	30	2:1	5	1300	1620	100-20000	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2 3/8	—	0.75
	20D88	15000	8500 C.T.	15	2.66:1	.5	1026	223	300-3000	1000	BAH	Leads	Leads	1 3/16	2 1/16	1 1/4	1 3/4	—	0.2

TRANSCEIVER/TELEPHONE PATCH/INTERCOM

Section	TM Part No.	Application	Impedance in Ohms		Audio Watts	Nominal DC Resistance		Overall Turns Ratio	Frequency Response ± 3 DB	RM Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Pri.	Sec.		Pri. Ohms	Sec. Ohms					Pri.	Sec.	H	W	D	MW	MD	
D	22S118	Line to Voice Coil	45-50	3.5/6-8	3	3.9	0.52	2.5:1	100-20000	1000	BHH	Lugs	Lugs	1 3/8	2 3/8	1 1/2	2	—	0.5
	24S177	Line to Voice Coil	45-50	3-4/6-8	8	3.7	0.4	2.5:1	100-20000	1000	BHH	Lugs	Lugs	1 3/8	2 3/8	2 3/8	2 13/16	—	0.7
	22S51	Telephone Patch Circuit	10000	500 ea.	5	470	96	4.5:1	200-4000	500	TAV-1	Leads	Leads	1 15/16	1 9/16	2 1/4	1 15/16	—	1.0

The circuit shown at the right is a typical "Patch" hybrid circuit using two 22S51 transformers.

This circuit is ideally suited for use in duplex radio communications where two way communication to and from a remote point is desired. It may also be adapted to operate sound distribution systems or speech amplifier and modulator for transmission from remote point. The output from a radio receiver may then be connected to the transformer marked T2 so that the received signal may be transmitted (through the 500 ohm line) to the remote point.



TRANSISTOR TRANSFORMERS

THORDARSON introduced the worlds first line of transistor transformers in 1956. With our pioneering efforts and continuing advancement, we are able to offer a complete selection of units for every application. The units may be used for applications other than those listed provided the specified ratings are observed. Transistor transformers are listed in order of increasing primary impedance.

TRANSISTOR TRANSFORMERS—AUDIO/LOW LEVEL GENERAL USE: WITH LEADS

Section	TM Part No.	Application	Impedance in Ohms		Max. Primary MADC	Nominal DC Resistance		Audio Watts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Primary	Secondary		Primary Ohms	Secondary Ohms			H	W	D	MW	MD	
A	TR 163	S	9	3.5	920	1.5	1.0	10	BCH-1	2	2 ¹⁵ / ₁₆	1 ¹ / ₂	1 ¹⁵ / ₁₆	1 ¹³ / ₁₆	1.0
	TR 300	S	20 C.T.	8	500	.55	.35	10	BAH	1 ³ / ₈	2 ⁷ / ₁₆	1 ¹ / ₂	2	—	0.45
	TR 304	S	25	4	400	1.5	0.4	4.0	BAH	1 ³ / ₈	2 ¹³ / ₁₆	1 ¹ / ₂	2 ³ / ₈	—	0.60
	TR 61	S†	48 C.T.	3.2/8/16	550	1.9	1.4	5.0	BHV	1 ¹¹ / ₁₆	2	1 ¹ / ₄	1 ¹ / ₂	—	0.05
	TR 60	S†	48 C.T.	3.2/8/16	550	3.6	1.4	10	BHV	2 ³ / ₁₆	2 ⁷ / ₈	2	2 ³ / ₈	—	0.90
B	TR 196	S	48 C.T.	8/16	275	4.5	1.4	8.0	BAH	1 ¹⁵ / ₁₆	3 ¹ / ₈	1 ³ / ₈	2 ¹³ / ₁₆	—	1.0
	TR 305	A	50/100	10	50	6.77	.711	5.0	BAH	3 ¹ / ₄	1 ³ / ₈	1 ⁵ / ₁₆	1 ³ / ₈	—	0.15
	TR 64	D	100	100 C.T.	200	6.5	8.5	0.5	BAH	1 ¹ / ₄	2 ¹ / ₈	1	1 ³ / ₄	—	—
	TR 195	D	100	100 C.T.	100	9.1	10	4.0	BAH	1 ³ / ₈	2 ³ / ₁₆	1 ¹ / ₂	2 ³ / ₈	—	0.60
	TR 65	D	100	200 C.T.	200	6.5	16.5	0.5	BAH	1 ¹ / ₄	2 ¹ / ₈	1	1 ³ / ₄	—	0.20
C	TR 296	J	100 C.T.	10 C.T.	100	4.3	0.8	0.25	BAH	1 ¹ / ₄	2 ¹ / ₈	1 ¹ / ₁₆	1 ¹ / ₄	—	0.25
	TR 63	S	100 C.T.	3.2/8/16	500	6.6	1.5	10	BAV	2 ³ / ₁₆	2 ⁷ / ₈	2	2 ³ / ₈	—	0.95
	TR 67	S	125 C.T.	8	50	7.5	0.9	1.5	XAV	1 ³ / ₄	1 ¹ / ₄	1 ¹ / ₄	1 ¹ / ₄	—	0.30
	TR 246	J	200 C.T.	2000 C.T.	2	29	233	0.2	BAH	3 ¹ / ₄	1 ¹ / ₈	1	1 ³ / ₈	—	0.08
	TR 66	D	500 C.T.	200 C.T.	50	37	17	0.5	BAH	1 ¹ / ₄	2 ¹ / ₈	1	1 ³ / ₄	—	0.20
D	TR 259	J	500 C.T.	5000 C.T.	12	40	245	1.0	BAH	1 ³ / ₈	2 ³ / ₈	1 ³ / ₈	2	—	0.37
	TR 295	A	600 C.T.	10	20	40	0.8	.05	BAH	1 ³ / ₁₆	1 ⁹ / ₁₆	1 ⁵ / ₁₆	1 ³ / ₈	—	0.07
	TR 116	S	1000	4/8/16	10	120	1.6	0.3	BAH	3 ¹ / ₄	1 ³ / ₈	1	1 ³ / ₈	—	0.07
	TR 263	J	2000 C.T.	500 C.T.	2.0	140	65	0.2	BAH	3 ¹ / ₄	1 ³ / ₈	1	1 ³ / ₈	—	0.07
	TR 258	S	2000 C.T.	4/8/16	10	260	1	0.2	BAH	3 ¹ / ₄	1 ³ / ₈	1	1 ³ / ₈	—	0.08

†Applications—(A) Input, (D) Driver, (J) Interstage, (M) Modulation, (S) Output to Line, or V.C.

† Has Lugs On Sec.

MINIATURE AUDIO: .150 WATT WITH MOUNTING TABS (3/16" WIDE) AND LEADS

Section	TM Part No.	Application	Impedance in Ohms		Nominal DC Resistance		Overall Turns Ratio	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Primary	Secondary	Primary Ohms	Secondary Ohms			H	W	D	MW	MD	
E	TR 12	J	100 C.T.	10 C.T.	13	1.5	3.16:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05
	TR 5	D	490 C.T.	150 C.T.	30	16	1.8:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05
	TR 27	S	500 C.T.	3.2	30	0.3	125:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.06
	TR 102	S	500 C.T.	4/8/16	75	3.5	5.52:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.06
	TR 103	S	600 C.T.	4/8/16	73	3.2	5.65:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.06
F	TR 104	S	825 C.T.	4/8/16	74	2.7	6.75:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.06
	TR 105	S	1250	4/12	132	1.4	9.78:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.06
	TR 4	D, S	1500	500 C.T.	100	45	1.73:1	BCH	1 ¹¹ / ₁₆	1 ¹¹ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05
	TR 107	S	2500	4/16	370	2.3	11.81:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.06
	TR 3	D, J	5000 C.T.	10000 C.T.	550	1100	1:1.4	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05
G	TR 108	A, J	5000 C.T.	80000 C.T.	573	5740	1:4	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05
	TR 13	A, J	5000 C.T.	80000	260	1520	1:4	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05
	TR 23	D, S	10000	2000	900	11	7.05:1	BCH	1 ¹³ / ₁₆	1 ⁷ / ₁₆	1	1 ³ / ₈	—	.05
	TR 7	J	10000	2000 C.T.	740	300	2.24:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.04
	TR 6	D, J	10000	3000 C.T.	820	660	1.8:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05
H	TR 109	S	10000 C.T.	4/8/16	1174	2.6	24.54:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.06
	TR 26	A, D	50000	500 C.T.	1300	30	10:1	BCH	1 ¹¹ / ₁₆	1 ¹³ / ₁₆	5 ¹ / ₈	1 ¹³ / ₁₆	—	.05

Applications—(A) Input, (D) Driver, (J) Interstage, (M) Modulation, (S) Output to Line, or V.C.

TRANSISTOR TRANSFORMERS

MINIATURE AUDIO: .300 WATT WITH BAH MOUNTING AND LEADS

Section	TM Part No.	Application	Impedance in Ohms		Nominal DC Resistance		Overall Turns Ratio	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Primary	Secondary	Primary Ohms	Secondary Ohms			H	W	D	MW	MD	
A	TR 111	S	100 C.T.	4/8/16	11	1.5	2.5:1	BAH	3/4	1 1/8	13/16	1 1/8	—	0.12
	TR 112	S	160	4/8/16	19	1.5	3.27:1	BAH	3/4	1 1/8	13/16	1 1/8	—	0.12
	TR 1	D, S	500 C.T.	500 C.T.	40	55	1:1	BAH	3/4	1 1/8	13/16	1 1/8	—	0.12
	TR 114	S	500 C.T.	4/8/16	47	.85	2.78:1	BAH	3/4	1 1/8	13/16	1 1/8	—	0.12
	TR 36	A	500000	200 C.T.	7000	8.5	1:50	BAH	3/4	1 1/8	13/16	1 1/8	—	0.12
B	TR 24	A, J	100000	1500 C.T.	3000	45	8.6:1	BAH	3/4	1 1/8	13/16	1 1/8	—	0.12
	TR 28	A	200000	1000	3000	30	14.1:1	BAH	3/4	1 1/8	13/16	1 1/8	—	0.12

Application—(A) Input, (D) Driver, (J) Interstage, (S) Output to Line, or V.C.

MINIATURE AUDIO: .150 WATT WITH PRINTED CIRCUIT MOUNTING

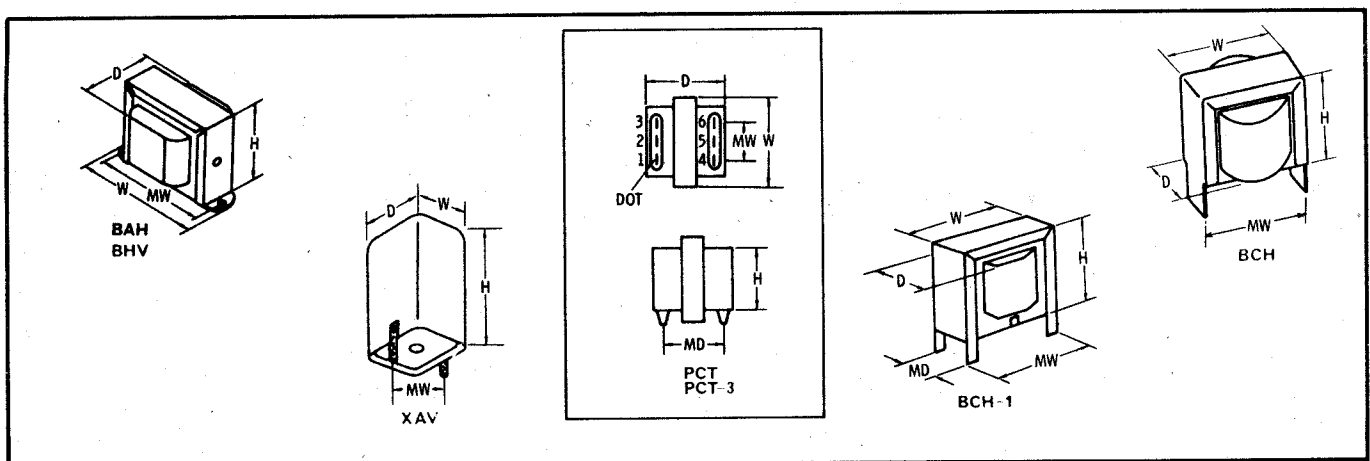
Section	TM Part No.	Application	Impedance in Ohms		DC Resistance		Overall Turns Ratio	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Primary	Secondary	Primary Ohms	Secondary Ohms			H	W	D	MW	MD	
C	TR 315	D	490 C.T.	150 C.T.	65	20	1.8:1	PCT	1 1/16	3/4	9/16	.36	.42	0.05
	TR 312	D, J	5000 C.T.	7500	550	980	1:1.23	PCT	1 1/16	3/4	9/16	.36	.42	0.05
	TR 316	D, J	10000	3000 C.T.	820	660	1.83:1	PCT	1 1/16	3/4	9/16	.36	.42	0.05

Application—(D) Driver, (J) Interstage, (S) Output.

MINIATURE AUDIO: .300 WATT WITH PRINTED CIRCUIT MOUNTING

Section	TM Part No.	Application	Impedance in Ohms		DC Resistance		Overall Turns Ratio	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Primary	Secondary	Primary Ohms	Secondary Ohms			H	W	D	MW	MD	
D	TR 311	D, S	500 C.T.	500 C.T.	40	55	1:1	PCT-3	13/16	1	7/8	.50	.72	0.10

Application—(D) Driver, (S) Output.



FLYBACKS AND YOKES FOR DISPLAY INFORMATION SYSTEMS AND MONITORS

THORDARSON designs and manufactures flybacks and yokes to customer specifications for a broad range of display applications. Our high voltage transformers feature flame retardant construction in all configurations. Contact factory with your display requirements.



TRANSISTOR TRANSFORMERS

MINIATURE AUDIO: LOW LEVEL/SPECIAL APPLICATION

Section	TM Part No.	Application	Impedance in Ohms		DC Resistance		Overall Turns Ratio	Max. Unbal. Pri. MAOC	Audio Watts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Primary	Secondary	Primary Ohms	Secondary Ohms					H	W	D	NW	MD	
A	TR 111	Output	100 C.T.	4/8/16	11	1.5	2.5:1	2.0	0.3	BAH	3/4	1 5/8	13/16	1 5/8	—	0.07
	27S93	TR or Voice Coil	150 C.T.	12	16	3.0	3.4:1	10	0.05	M3‡						0.01
	TR 240	Output	500 C.T.	125/500*	50	55	1:1.1	5.0	0.02	BAH	5/8	1 7/32	3/4	1	—	0.02
	27S100	Output or Mixing	500 C.T.	600	60	90	1:1.1	3.0	0.05	M3‡						0.01
	TR 114	Output	500 C.T.	4/8/16	47	0.85	2.78:1	2.0	0.3	BAH	3/4	1 5/8	13/16	1 5/8	—	0.07
B	27S111	TR or Line/Line	600 C.T.	600 C.T.	65	85	1:1	3.0	.05	M3‡						0.01
	MIT 166	Line to Line	600/250/50	600/250/50	80	85	1:1	2	.012	BAH	5/8	1 7/32	3/4	1 1/16	—	0.05
	25A113	Line to Line Mike to Line	150/600*	150/600*	40	40	1:1	3.0	0.05	TAJ	1 3/4	1 5/8	Dia.	3/8	—	0.5
	TR 405	Interstage	600 C.T.	1200 C.T.	39.2	97	1:1.41	16	0.15	BAH	15/32	1 7/16	13/32	1	—	0.05
	MIT 153	Input	600/250/50	50000	80	3200	1:1	—	0.012	BAH	5/8	1 1/4	3/4	1 1/16	—	0.05
C	25A103	Mike/Line to Grid	150/600*	60000	50.3	4870	1:10	—	0.01	TAJ	1 3/4	1 5/8	Dia.	3/8	—	0.1
	27S101	TR to Line	900 C.T.	600	100	90	1.2:1	4.0	0.05	M3‡						0.01
	27S102	TR to Line	1500 C.T.	600	150	100	1.6:1	3.0	0.05	M3‡						0.01
	TR 250	Interstage	2000 C.T.	8000 C.T.	200	550	1:2	4.0	0.2	BAH	3/4	1 5/8	1	1 5/8	—	0.07
D	MIT 167	Interstage	5000 C.T.	5000 C.T.	1710	2425	1:1	—	.012	BAH	5/8	1 7/32	3/4	1 1/16	—	0.05
	27S110	Output or Isolation	10000 C.T.	10000 C.T.	1050	1100	1:1	1.0	0.05	M3‡						0.01
	27D38	Driver	10000 C.T.	2000 C.T.	1100	500	2.2:1	1.0	0.05	M3‡						0.01
	27A112	TR Interstage	10000 C.T.	1500 C.T.	1100	275	2.6:1	1.0	0.05	M3‡						0.01
	27D37	Driver	10000 C.T.	1200 C.T.	1100	400	2.9:1	1.0	0.05	M3‡						0.01
E	27D39	Driver	10000 C.T.	500 C.T.	1100	75	4.5:1	0.5	0.05	M3‡						0.01
	MIT 165	Interstage	12000 C.T.	600 C.T.*	1000	60	4.5:1	2	.012	BAH	5/8	1 1/4	3/4	1 1/16	—	0.05
	27A111	TR Interstage	25000 C.T.	1000 C.T.	1500	100	5:1	0.5	0.04	M3‡						0.01
	27A108	TR Interstage	50000 C.T.	1000 C.T.	3500	70	7.1:1	0	0.025	M3‡						0.01
	27A109	Input	200000	1000	4870	90	14.1:1	0	0.01	M3‡						0.01
F	27A107	Chopper Input	200000 C.T.	1000 C.T.	4870	90	14.1:1	0	0.01	M3‡						0.01
	27C80	Inductor	1.25 Hys.	—	180	—	—	2.0	—	M3‡						0.01
	TR 466	Magnetic Shield for Style M3 Housings									.422	.453	.344			—

‡M3 Style: H-0.465, W-0.410, D-0.310 Mounting is P.C. with 3/32" Grid Spacing.

*Split Center Tap Winding

MIL-T-27 MINIATURE

Designed and built to meet MIL-T-27, grade 5, class R specifications. Ruggedly constructed, these units have exceptional reliability along with the highest ratings available in an extremely reduced size. They can be used for different impedances than specified by keeping the primary to secondary impedance ratio constant. Usable frequency range is 100 to 20,000 Hertz. Dimensions shown in the RAV drawing are nominal.

STYLE RAV-6 D = 11/32 H = 15/32

Section	TM Part No.	Application	Overall Turns Ratio	Impedance in Ohms		Max. Pri. MAOC	Primary Resistance Ohms	Power in Milliwatts
				Primary	Secondary			
G	MIT 241	J, S, P	1:1	400/500 C.T.	400/500*	8/6	47	500
	MIT 209	D, S	4.5:1	10000/12000	500/600 C.T.	1	708	100

*Split Center Tap Winding

THORDARSON has additional standard and stocked TRANSISTOR TRANSFORMERS which are not listed in this catalog. Contact factory for additional information.

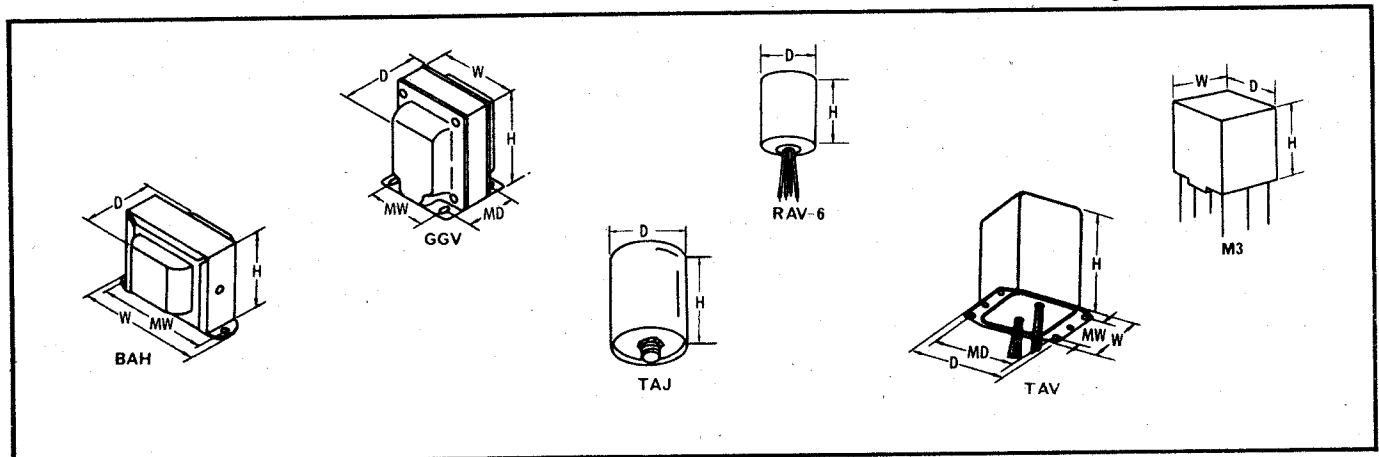
INDUCTORS

THORDARSON inductors provide total coverage of power supply and special application requirements. Smoothing, swinging, high current, toroidal, and alignaire variable inductors are listed in order of increasing current ratings. The rated inductance in henries of smoothing chokes can be varied slightly if the rated current is changed.

FILTER CHOKES: SMOOTHING

Section	TM Part No.	MADC	Nominal Inductance Henries	DC Res. Ohms	RMS Test Volts	Style	Termination	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
								H	W	D	MW	MD	
A	26C40	10	1.5	95	2500	BAH	Leads	1 ¹ / ₄	2 ¹ / ₈	1 ¹ / ₈	1 ³ / ₄	—	0.5
	20C102	15	2.0	70	1500	BAH	Leads	1 ³ / ₁₆	2 ³ / ₁₆	1 ¹ / ₄	1 ³ / ₄	—	0.4
	20C43	15	20	900	1500	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.75
	20C51	15	35	1850	1200	BAH	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₄	2	—	0.5
	20C04	15	50	3500	1500	BAH	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₂	2	—	0.5
B	20C05	20	15	1000	1000	BAH	Leads	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ³ / ₄	2 ³ / ₈	—	0.6
	20C35	40	8.0	250	1500	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.75
	20C52	40	8.0	450	1500	BAH	Leads	1 ⁵ / ₈	2 ³ / ₈	1 ¹ / ₄	2	—	0.5
	20C47	50	4.5	300	1500	BAH	Leads	1 ³ / ₈	2 ³ / ₈	1 ³ / ₈	2	—	0.5
	26C42	50	4.5	200	1500	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ⁵ / ₈	2 ³ / ₈	—	0.8
C	20C59	55	7.0	200	1600	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ⁵ / ₈	2 ³ / ₈	—	0.75
	20C84	50	7.0	550	1500	BAH	Leads	1 ³ / ₈	2 ³ / ₈	1 ³ / ₈	2	—	0.5
	20C81	50	8.5	400	1500	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.75
	20C66	50	9.0	500	2500	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.75
	26C87	50	16	580	1500	BAH	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.2
D	26C86	75	15	400	1500	BAH	Leads	2 ¹ / ₄	3 ³ / ₄	2 ⁵ / ₈	3 ¹ / ₈	—	1.5
	20C53	80	12	375	2000	BAH	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	20C71	80	16	360	1500	GGV	Leads	3 ³ / ₁₆	2 ⁵ / ₈	2 ⁵ / ₈	2	1 ¹¹ / ₁₆	2.5
	20C48	80	8.0	250	2000	BAH	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	20C06	90	10	270	1000	BAH	Leads	2	3 ⁵ / ₁₆	2	2 ¹³ / ₁₆	—	1.3
E	20C67	100	5.0	300	1500	TAV	Leads	2 ³ / ₄	2 ¹ / ₄	2 ¹¹ / ₁₆	2 ³ / ₈	1 ¹ / ₂	1.5
	26C85	110	10.5	225	3000	BAH	Leads	2 ⁵ / ₈	4	2 ¹ / ₂	3 ⁹ / ₁₆	—	1.75
	20C89	110	12	250	2500	GGV	Leads	3 ¹ / ₈	3	2 ⁵ / ₈	2	1 ¹¹ / ₁₆	2.5
	20C09	125	9.0	250	1000	BAH	Leads	2 ⁵ / ₁₆	3 ³ / ₄	2	3 ¹ / ₈	—	1.5
	26C88	130	2.5	100	2000	BAH	Leads	2	3 ¹ / ₄	1 ³ / ₄	2 ¹³ / ₁₆	—	1.2
F	20C64	130	4.0	100	1600	BAH	Leads	2 ¹ / ₄	3 ³ / ₄	2 ⁵ / ₈	3 ¹ / ₈	—	1.5
	26C89	150	2.3	60	1500	BAH	Leads	2	3 ¹ / ₄	1 ³ / ₄	2 ¹³ / ₁₆	—	1.0
	20C54	150	8	145	1700	GGV	Leads	3 ¹ / ₈	2 ⁵ / ₁₆	2 ³ / ₄	2	1 ¹¹ / ₁₆	2.2
	25C33	150	12	150	2500	TAV	Leads	3 ⁷ / ₈	3 ¹ / ₄	4	2 ¹ / ₄	3 ¹ / ₂	5.5

Listing continued on next page



INDUCTORS

FILTER CHOKES SMOOTHING (Cont'd)

Section	TM Part No.	MADC	Nominal Inductance Henries	DC Res. Ohms	RMS Test Volts	Style	Termination	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
								H	W	D	MW	MD	
A	20C12	160	3.0	75	1500	BAH	Leads	2 ⁵ / ₁₆	3 ³ / ₄	2 ¹ / ₈	3 ¹ / ₈	—	1.75
	26C41	200	1.5	90	1600	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ⁵ / ₈	2 ³ / ₈	—	0.75
	26C43	200	2.0	50	1500	BAH	Leads	2	3 ¹ / ₈	1 ⁵ / ₈	2 ¹³ / ₁₆	—	1.0
	26C94	200	2.0	60	1500	BAH	Leads	2 ¹ / ₄	3 ³ / ₄	2 ¹ / ₄	3 ¹ / ₈	—	1.5
	20C13	200	6.0	150	1500	GGV	Leads	3 ³ / ₃₂	2 ¹ / ₃₂	2 ⁵ / ₈	2	1 ¹ / ₈	2.5
B	20C14	200	6.0	150	1500	BAH	Leads	2 ⁵ / ₈	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.3
	26C45	200	10	140	3000	GGV	Leads	3 ¹ / ₂	2 ¹ / ₈	4 ¹ / ₈	2 ⁷ / ₈	2 ¹ / ₄	4.9
	26C76	240	1.0	50	1500	BAH	Leads	1 ⁵ / ₈	2 ⁷ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.75
	26C90	250	4.0	60	3000	GGV	Leads	3 ⁵ / ₈	3	3 ¹ / ₂	2 ¹ / ₄	2 ³ / ₈	4.3
	26C80	300	0.5	30	1500	BAH	Leads	1 ⁵ / ₈	2 ³ / ₈	1 ¹ / ₂	2	—	0.5
C	26C44	300	1.0	60	1500	BAH	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	26C77	290	0.7	30	1500	BAH	Leads	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ¹ / ₂	2 ³ / ₈	—	0.75
	26C91	300	2.8	60	1500	BAH	Leads	2 ³ / ₈	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.5
	20C69	300	8.0	80	3000	GGV	Leads	4 ³ / ₄	4	3 ⁷ / ₈	3	2 ¹³ / ₁₆	7.8
	20C18	300	10	105	3000	GGV	Leads	4 ¹ / ₄	3 ⁵ / ₈	4 ¹ / ₈	2 ³ / ₄	3	7.75
D	26C79	350	0.6	35	1500	BAH	Leads	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ¹ / ₂	2 ³ / ₈	—	0.6
	26C78	350	1.0	35	1500	BAH	Leads	2	3 ⁵ / ₈	2	2 ¹³ / ₁₆	—	1.35
	20C20	350	8.0	105	5000	GGV-2	Leads	4 ⁵ / ₈	3 ¹⁵ / ₁₆	4	3	2 ⁷ / ₈	8.0
	26C92	375	0.8	25	1500	BAH	Leads	2 ³ / ₁₆	3 ¹¹ / ₁₆	2	3 ¹ / ₈	—	1.5
	20C21	375	1.5	50	1500	BAH	Leads	2 ⁵ / ₁₆	3 ¹¹ / ₁₆	2	3 ¹ / ₈	—	1.5
	26C81	600	0.32	10	1500	BAH	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.3

HIGH CURRENT CHOKES

Section	TM Part No.	Notes	Amps DC	Induct. M. H.	DC Res. Ohms	RMS Test Volts	Style	Termination	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
									H	W	D	MW	MD	
E	TR153	—	1.0	3	0.25	1000	BCH-1	Leads	1 ¹ / ₄	1 ¹ / ₂	1	1 ¹ / ₄	7 ¹ / ₁₆	0.2
	TR154	—	1.0	11	0.75	1000	BCH-1	Leads	1 ¹ / ₄	1 ¹ / ₂	1	1 ¹ / ₄	7 ¹ / ₁₆	0.2
	20C25	Dual Winding*	1.0 2.0	300 75	3.0 0.75	1500	LAV	Leads	3 ¹ / ₂	2 ⁷ / ₈	3 ³ / ₁₆	2 ¹ / ₄	2 ³ / ₈	3.5
	20C00	—	2.0	35	0.75	1500	LAH	Leads	2 ³ / ₈	2 ³ / ₈	2 ³ / ₄	2 ³ / ₁₆	2	1.9
	20C26	Dual Winding*	2.5 5.0	80 20	0.60 0.15	1500	LAV	Leads	3 ¹³ / ₁₆	3 ³ / ₁₆	3 ⁹ / ₁₆	2 ¹ / ₂	3 ¹ / ₁₆	6.0
F	20C01	—	4.0	25	0.425	1500	LHH	Lugs	3	3 ³ / ₈	2 ⁷ / ₈	2 ¹³ / ₁₆	2 ³ / ₈	3.4
	20C02	—	8.0	10	0.15	1500	LAH	Leads	3 ¹ / ₄	3 ³ / ₄	3 ³ / ₁₆	3 ¹ / ₈	2 ¹ / ₂	5.3
	20C03	—	12.5	10	0.11	1500	LAH	Leads	3 ¹ / ₂	4 ¹ / ₈	3 ¹ / ₁₆	3 ⁷ / ₁₆	2 ³ / ₈	6.0
	20C100	—	22.5	5.0	0.03	1500	LHH	Lugs	3 ³ / ₈	4 ¹ / ₂	4 ¹ / ₂	3 ¹ / ₄	3 ¹ / ₂	11.9
	20C182	Dual Winding*	20.0 40.0	24 6.0	0.12 0.029	1500	LAV	Leads	5 ¹ / ₄	4 ⁷ / ₁₆	5 ¹ / ₄	3 ¹ / ₂	4 ¹ / ₄	21.2

*May be connected in "Series" or "Parallel" for values listed.

REPLACEMENT PARTS

THORDARSON maintains the most complete line of replacement transformers in the industry. Television flybacks, yokes, vertical output and power transformers are stocked in-depth plus thousands of other hard-to-get transformers and chokes for consumer, commercial, industrial, medical, and military applications. Your THORDARSON distributor has up-to-date TV replacement information.

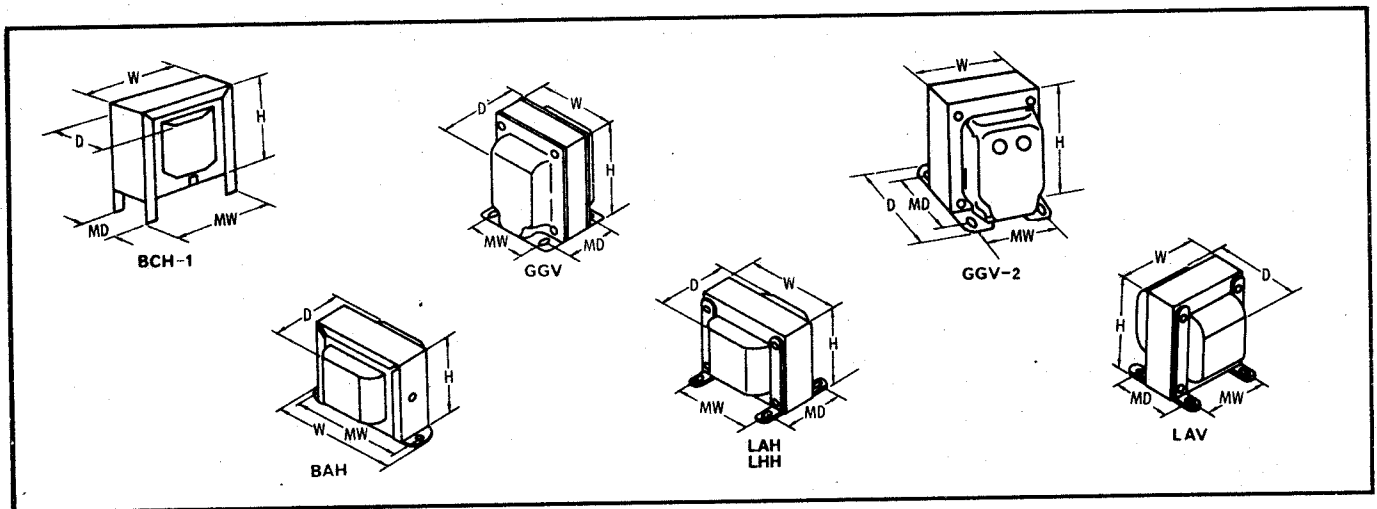
INDUCTORS

MINIATURIZED HIGH CURRENT CHOKES

Section	TM Part No.	DC Amps	Nominal Induct. M.H.	DC Res. Ohms	RMS Test Volts	Style	Termination	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
								H	W	D	MW	MD	
A	20C191	.550	125	6.0	1500	BAH	Leads	1 $\frac{1}{8}$	2 $\frac{1}{8}$	1 $\frac{1}{16}$	2 $\frac{3}{8}$	—	0.7

SWINGING CHOKES

Section	TM Part No.	Notes	MADC	Induct. Henries	DC Res. Ohms	RMS Test Volts	Style	Termination	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
									H	W	D	MW	MD	
B	20C78	—	250-25	2-12	60	3000	GGV	Leads	3 $\frac{3}{8}$	3	3 $\frac{1}{2}$	2 $\frac{1}{4}$	2 $\frac{3}{8}$	4.25
	20C31	—	300-30	5-25	105	3000	GGV	Leads	4 $\frac{1}{4}$	3 $\frac{5}{8}$	4 $\frac{1}{8}$	2 $\frac{1}{4}$	3	7.6
	20C41	—	500-50	5-25	65	3000	GGV	Leads	5 $\frac{5}{16}$	4 $\frac{1}{2}$	5 $\frac{1}{8}$	3 $\frac{1}{2}$	4 $\frac{1}{8}$	16.75



SPECIAL APPLICATION FLYBACKS AND YOKES

THORDARSON has over 500 stock TV flybacks and over 200 stock yokes which could solve your high voltage transformer or deflection yoke requirements off-the-shelf. There are many advantages using a stock item in special circuit applications including low prototype cost and fast delivery. Also, future availability, even in small quantities, can be assured. Your THORDARSON distributor has a complete list of available items.



POWER TRANSFORMERS

LOW VOLTAGE TRANSFORMER INDEX

At a glance, a transformer with the required voltage and current ratings can be quickly located by using this index.

All voltage and current ratings are listed in RMS (AC) and may be operated at these full range values in AC circuits. In addition, these transformers may be used in rectified output circuits by simply adding a correction factor to the RMS current rating. This factor depends upon the type of rectifier and filter circuit as shown in the chart below. Multiply the DC current required by the percentage factor shown for the appropriate rectifier-filter combination to obtain the corrected RMS rating.

RECTIFIER-FILTER CHART

Filter Type	Rectifier Type	RMS Current Equals
Capacity Input	Half Wave	300% x DC current
	Full Wave CT	110% x DC current
	Bridge	150% x DC current
Choke Input	Full Wave CT	70% x DC current
	Bridge	100% x DC current

LISTED IN ORDER OF INCREASING
SECONDARY VOLTAGES



TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
	Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
21F191	2.5 C.T.	0.3	117	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 5/16	1 3/4	—	0.3
21F192	2.5	1.0	117	1500	BAH	Leads	Leads	1 3/8	2 1/8	1 3/8	2	—	0.4
21F34	2.5	1.5	117	1500	BAH	Leads	Leads	1 3/8	2 1/8	1 1/2	2 3/8	—	0.7
21F120	2.5 C.T.	3.0	117	1500	BAH	Leads	Leads	1 3/8	2 1/8	1 3/4	2 3/8	—	0.6
21F31	2.5 C.T.	5.0	117	7500	BAV	Leads	Leads	2 11/16	3 3/16	2 1/4	2 13/16	—	1.5
21F92	2.5 C.T.	6.0	117	1500	BAH	Leads	Leads	2	3 3/16	1 7/8	2 13/16	—	1.0
21F93	2.5 C.T.	10.0	117	1500	BAH	Leads	Leads	2 5/16	3 3/4	2 1/8	3 1/8	—	1.5
21F01	2.5 C.T.	10.0	117	2500	BAV	Leads	Leads	2 11/16	3 3/16	2	2 13/16	—	1.5
21F103	2.5 C.T.	10.0	107/117	7500	BAV	Leads	Leads	3 1/8	3 3/8	2 1/2	3 1/8	—	2.5
21F02	2.5 C.T.	10.0	117	10000	CAV	Leads	Leads	3 1/8	2 1/2	2 1/4	2	1 3/4	2.75
21F58	2.5 C.T.	10.0	117	10000	LHV	Lugs	Lugs	3 1/2	2 1/8	2 1/2	2 1/4	1 1/8	2.5
21F36	5.0 C.T.	3.0	117	5000	GGV	Leads	Leads	3 1/8	2 5/8	2 1/2	2	1 1/2	2.5
21F94	5.0 C.T.	3.0	117	1500	BAH	Leads	Leads	2	3 3/16	2	2 13/16	—	1.3
21F03	5.0 C.T.	3.0	117	2500	BAV	Leads	Leads	2 3/8	2 1/8	1 3/4	2 3/8	—	1.0
21F37	5.0 C.T.	6.0	117	2500	LHV	Lugs	Lugs	3 1/8	2 1/2	2 1/2	2	2	2.25
21F183	5.0 C.T.	6.0	107/117	2500	GGV	Leads	Leads	3 1/8	2 1/2	2 1/8	2	1 3/16	2.25
21F04	5.0 C.T.	8.0	117	2500	CAV	Leads	Leads	3 1/8	2 1/2	2 1/4	2	1 3/4	2.5
21F13	5.0 C.T.	10.0	117	2500	CAV	Leads	Leads	3 1/8	2 1/8	2 1/2	2	2 3/8	3.0
26F66	5.0 C.T.	15	117	2500	CAV	Leads	Leads	3	2 1/2	2 1/8	2	2 1/8	3.5
21F20	5.0 C.T.	15.0	117	10000	CAV	Leads	Leads	4 5/8	3 3/4	3 1/4	3	2 1/2	6.75
21F07	5.0 C.T.	21.0	117	2500	CAV	Leads	Leads	3 7/8	3 3/16	3	2 1/4	2 1/2	5.0
21F07A	5.0 C.T.	29	117	2500	CAV	Leads	Leads	3 7/8	3 3/16	3 1/4	2 1/2	2 1/2	5.5

Listing continued on next page

THORDARSON has additional standard and stocked power transformers which are not listed in this catalog. Contact factory for additional information.

POWER TRANSFORMERS

LOW VOLTAGE TRANSFORMER INDEX

LISTED IN ORDER OF INCREASING
SECONDARY VOLTAGES



LISTING STARTS
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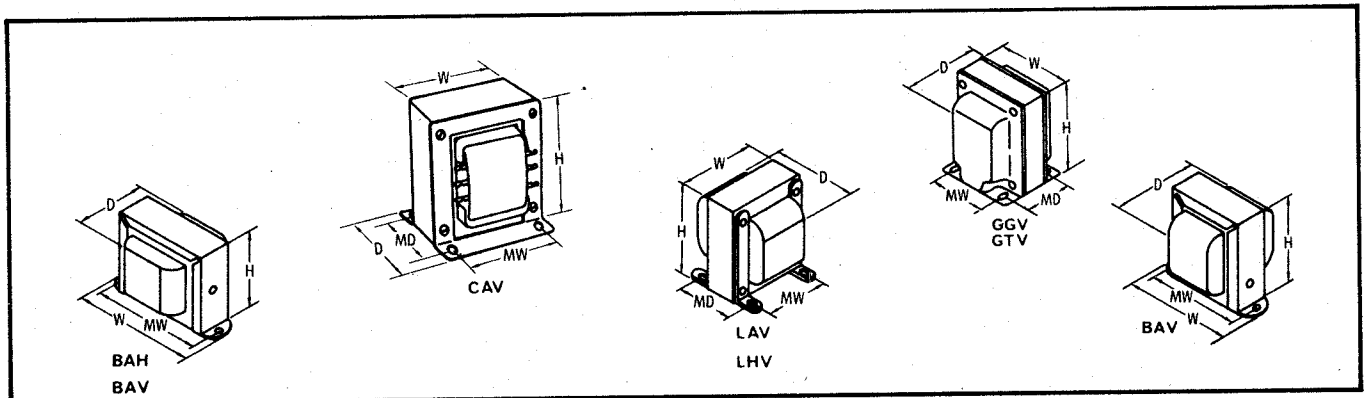
TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
	Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
21F155	±5.0 C.T.	30.0	117	2500	GGV	Leads	Leads	4 ¹ / ₈	3 ³ / ₄	4	3	2 ¹ / ₈	7.5
21F33	5.0 C.T.	30.0	110/115/120	2500	GTV	Terms	Terms	3 ¹ / ₈	3 ¹ / ₁₆	4 ¹ / ₈	2 ¹ / ₂	2 ¹¹ / ₁₆	6.2
21F67	5.2 C.T.	24.0	117	1500	LAV	Leads	Leads	3 ¹³ / ₁₆	3 ³ / ₁₆	3 ⁹ / ₁₆	2 ¹ / ₂	3	6.75
21F69	±6.3/5.0 Tap	2.0	117	5000	BAH	Leads	Leads	2	3 ³ / ₁₆	2	2 ¹³ / ₁₆	—	1.25
21F14	6.3/5/2.5	2.5	117	1600	BAH	Leads	Leads	2	3 ¹ / ₄	1 ³ / ₄	2 ¹³ / ₁₆	—	1.5
26F73	6.3 C.T.	0.3	117	1500	BAH	Leads	Leads	1 ¹ / ₄	2 ¹ / ₈	1 ¹ / ₈	1 ³ / ₄	—	0.3
21F21	6.3	0.6	117	1500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₄	2	—	0.75
21F162	6.3 C.T.	0.6	117	1500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₂	2	—	0.4
21F156	6.3 C.T.	0.6	117	1500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₈	2	—	0.4
21F167	6.3 C.T.	0.6	115/230	1500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₈	2	—	0.6
21F200	6.3 C.T.	0.6	230	1500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₂	2	—	0.4
21F143	6.3 C.T.	1.0	117	1500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.6
21F08	6.3 C.T.	1.2	117	2500	BAV	Leads	Leads	2	2 ³ / ₈	1 ¹ / ₂	2	—	0.7
21F09	6.3 C.T.	1.2	117	2500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.7
21F212	±6.3	1.2	117	2500	BAH	Leads	Leads	1 ¹ / ₈	2 ³ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.7
26F60	6.3	1.2	117	5000	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.25
21F168	6.3 C.T.	1.2	115/230	2500	BAH	Leads	Leads	1 ¹ / ₈	2 ¹³ / ₁₆	1 ¹ / ₈	2 ³ / ₈	—	0.5
21F184	±6.3 C.T.	3.0	117	2500	LHV	Lugs	Lugs	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₂	2	1 ¹ / ₄	2.0
21F10	6.3 C.T.	3.0	117	2500	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.25
21F108	6.3	3.0	107/117	7000	BAV	Leads	Leads	3 ¹ / ₈	3 ⁹ / ₁₆	2 ³ / ₈	3 ¹ / ₈	—	2.0
21F169	6.3 C.T.	3.0	115/230	2500	BAH	Leads	Leads	1 ¹⁵ / ₁₆	3 ¹ / ₁₆	2	2 ¹³ / ₁₆	—	1.3
21F71	6.3	4.0	117	1500	BAH	Leads	Leads	2	3 ⁵ / ₁₆	2	2 ¹³ / ₁₆	—	1.25
21F70	6.3	4.0	117	5000	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.1
21F41	6.3 C.T.	4.0	107/117	2500	GGV	Leads	Leads	3 ¹ / ₈	2 ³ / ₈	2 ³ / ₈	2	1 ¹¹ / ₁₆	2.75
21F204	6.3 C.T.	5.0	117	1500	BAH	Leads	Leads	2 ³ / ₈	3 ³ / ₄	2 ¹ / ₈	3 ¹ / ₈	—	1.8
21F148	6.3 C.T.	6.0	117	2000	BAV	Leads	Leads	3 ¹ / ₈	3 ⁹ / ₁₆	2 ¹ / ₂	3 ¹ / ₈	—	2.0
21F59	6.3 C.T.	6.0	117	2500	LHV	Lugs	Lugs	3 ¹ / ₈	2 ⁷ / ₈	2 ¹ / ₂	2	2	2.75
21F11	6.3 C.T.	6.0	117	1500	CAV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₂	2	1 ¹ / ₄	2.5
21F42	6.3 C.T.	6.0	107/117	2500	GGV	Leads	Leads	3 ⁵ / ₈	3	3 ¹ / ₈	2	2 ¹ / ₄	3.5
21F72	6.3 C.T.	6.0	107/117	2000	BAH	Leads	Leads	2 ¹ / ₄	3 ⁵ / ₈	2 ¹ / ₂	3 ¹ / ₈	—	2.0
21F170	6.3 C.T.	6.0	115/230	1500	BAH	Leads	Leads	2 ¹⁹ / ₃₂	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.3
21F96	6.3 C.T.	8.0	117	1500	BAH	Leads	Leads	2 ³ / ₈	4	2 ¹ / ₂	3 ⁹ / ₁₆	—	2.5
21F74	6.3 C.T.	10.0	117	1500	GGV	Leads	Leads	3 ¹ / ₂	3	3 ¹ / ₈	2 ¹ / ₄	2	3.8
21F12	6.3 C.T.	10.0	117	2500	CAV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₂	2	2	3.25

† Has Faraday Shield.

•• 2¹/₂" Leads From Top of Coil.

* Same As 21F09 Except No Secondary C.T.

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POWER TRANSFORMERS

LOW VOLTAGE TRANSFORMER INDEX

LISTED IN ORDER OF INCREASING
SECONDARY VOLTAGES

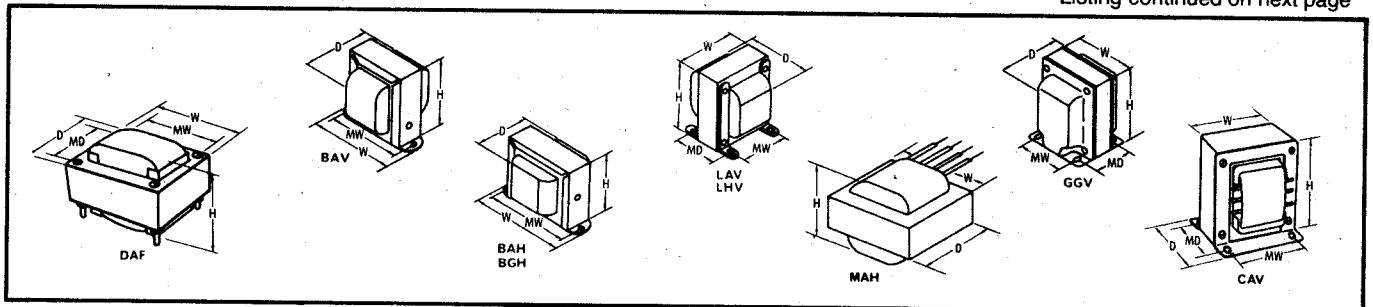


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TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
	Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
21F43	6.3 C.T.	10.0	107/117	2500	LAV	Leads	Leads	3 1/2	2 7/8	2 3/4	2 1/4	2 1/16	3.5
21F109	*6.0 C.T./6.5 C.T./ 7.0 C.T.	13	117	2000	LHV	Lugs	Cu. Tabs.	3 3/8	2 13/16	3 3/8	2 1/4	2 11/16	4.5
21F77	6.3 C.T.	20.0	117	2500	GGV	Leads	Leads	3 3/8	3 9/32	4 1/4	2 1/2	2 15/16	7.0
21F25	6.3 C.T.	20.0	107/117	2500	LAV	Leads	Leads	4 5/8	3 13/16	3 3/4	3	2 3/8	6.7
21F79	*6.3 C.T./7.5 C.T.	25.0	117	3000	LHV	Leads	Lugs	4 5/8	3 13/16	3 7/16	3	3 1/16	7.5
21F15	7.5 C.T.	4.0	117	2500	BAV	Leads	Leads	2 3/4	3 1/8	2 1/8	2 13/16	—	2.0
21F45	7.5 C.T.	4.0	117	2500	LHV	Lugs	Lugs	3 3/8	2 3/8	2 3/4	2	2 1/8	2.7
21F110	7.5 C.T.	5.0	107/117	2500	GGV	Leads	Leads	3 3/8	3	3	2 1/4	1 3/8	3.4
21F62	7.4 C.T.	8.0	117	2500	LAV	Leads	Leads	3 3/8	3 1/8	2 7/8	2 1/2	2 3/8	4.7
21F16	7.5 C.T.	8.0	117	2500	CAV	Leads	Leads	3 3/8	2 3/4	2 1/2	2	2	3.25
21F111	7.5 C.T.	21.0	107/117	2500	GGV	Leads	Leads	4 1/2	3 3/4	4	2 3/4	3	8.0
21F205	10.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	1 3/8	2 13/16	—	0.9
21F206	10.0 C.T.	2.0	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.3
26F71	10.0 C.T.	3.0	117	1500	BAH	Leads	Leads	2 3/8	3 3/4	2 1/4	3 3/8	—	1.6
21F171	10.0 C.T.	3.0	117	2000	BAH	Leads	Leads	2 9/32	3 3/4	2 3/8	3 3/8	—	1.7
21F61	10.0 C.T.	4.0	117	2500	LHV	Lugs	Lugs	3 7/16	2 7/8	2 5/8	2 1/4	2 1/8	3.25
21F172	10.0 C.T.	5.0	117	2000	LAV	Leads	Leads	3	2 1/2	2 3/8	2 1/16	2	2.5
21F18	10.0 C.T.	5.0	117	2500	CAV	Leads	Leads	3 3/8	2 9/16	2 1/2	2	1 3/4	2.25
21F47	10.0 C.T.	5.0	107/117	2500	GGV	Leads	Leads	3 3/8	3 3/4	3 3/8	2 1/2	1 15/16	4.0
21F208	10.0 C.T.	6.0	117	1500	LAV	Leads	Leads	3 3/8	2 1/2	2 3/4	2	2 3/16	3.1
21F28	10.0 C.T.	8.0	117	2500	CAV	Leads	Leads	3 3/8	3 3/8	3 3/8	2 1/2	2 3/8	4.9
21F173	10.0 C.T.	10.0	117	2000	LAV	Leads	Leads	4 1/8	3 3/2	3 3/4	2 3/4	2 7/16	7.5
21F112	10.0 C.T.	10.0	117	2000	GGV	Leads	Leads	3 3/8	3 3/4	3 3/8	2 1/2	2 7/16	5.2
21F68	*10.0 C.T./ 11.0 C.T./ 12.0 C.T.	11.0	115	3000	LAV	Leads	Leads	4 3/8	3 1/2	3 1/16	2 3/4	2 3/16	6.5
23V252	12.0	0.150	117	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 1/8	1 3/4	—	0.25
23V253	12.0	0.300	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.35
23V254	12.0	0.700	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2 3/8	—	0.6
23V255	12.0	1.2	117	1500	BAH	Leads	Leads	2	3 1/4	1 3/8	2 13/16	—	0.85
23V415	12.0	2.0	117	1500	BAH	Leads	Leads	2	3 1/4	2 3/8	2 13/16	—	1.3
23V416	12.0	4.0	117	1500	BAH	Leads	Leads	2 5/8	4	2 1/4	3 9/16	—	2.3
23V417	12.0	6.0	117	1500	LAV	Leads	Leads	3 7/16	2 13/16	2 5/8	2 1/4	2 1/8	3.4
23V418	12.0	8.0	117	1500	LAV	Leads	Leads	3 3/16	3 3/8	2 3/4	2 1/2	2 1/8	4.3
23V360	12.0 C.T.	10.0	117	1500	LAV	Leads	Leads	3 3/4	3 3/8	3 1/2	2 1/2	2 7/8	6.2
23V267	12.6	1.0	117	1500	DAF	Leads	Leads	1 7/8	2 1/4	1 3/8	1 7/32	—	0.9
21F174	12.6 C.T.	1.0	117	1500	BAH	Leads	Leads	1 15/16	3 3/16	1 3/4	2 13/16	—	0.9
26F72	12.6 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	1 3/4	2 13/16	—	0.9
21F149	12.6 C.T.	1.5	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.0
21F175	12.6 C.T.	1.5	115/230	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.0
26F67	12.6 C.T.	2.0	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.1
21F176	12.6 C.T.	2.0	115/230	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.1

*Secondary Voltage varies by means of Primary Taps.

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POWER TRANSFORMERS

LOW VOLTAGE TRANSFORMER INDEX

LISTED IN ORDER OF INCREASING
SECONDARY VOLTAGES



LISTING STARTS
ON PAGE 18

TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
	Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
21F201	12.6 C.T.	2.0	230	1500	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	1.75
21F177	12.6 C.T.	2.5	115/230	1500	BAH	Leads	Leads	2 5/16	3 11/16	2	3 3/8	—	1.5
21F81	12.6 C.T.	2.5	117	1500	BAH	Leads	Leads	2 1/4	3 5/8	2 1/8	3 3/8	—	1.6
21F150	12.6 C.T.	3.0	117	1500	BAH	Leads	Leads	2 5/16	3 11/16	2 1/4	3 3/8	—	1.2
21F50	12.6 C.T.	3.0	117	2000	LAV	Leads	Leads	3 1/16	2 9/16	2 7/8	2	2	3.5
21F193	12.6 C.T.	4.0	117	1500	BAH	Leads	Leads	2 5/8	4	2 3/8	3 3/16	—	2.5
21F194	12.6 C.T.	6.0	117	1500	GGV	Leads	Leads	3 1/2	2 13/16	3 3/8	2 1/8	2 1/4	3.5
21F52	(Parallel) 12.6/12.6	3.5/3.5	117	2500	GGV	Leads	Leads	3 1/2	2 7/8	3 3/8	2 1/4	2 5/8	5.0
21F195	12.6 C.T.	8.0	117	1500	GGV	Leads	Leads	3 3/8	3 1/8	3 3/8	2 3/16	2 1/2	4.5
21F196	12.6 C.T.	10.0	117	1500	GGV	Leads	Leads	4 1/4	3 1/8	3 3/8	2 11/16	2 3/4	5.5
23V470	14.0 C.T.	1.0	117	1500	BAH	Leads	Leads	1 5/16	3 1/4	1 3/4	2 13/16	—	1.2
23V471	14.0 C.T.	2.0	117	1500	BAH	Leads	Leads	2 1/4	3 11/16	1 5/16	3 3/8	—	1.5
23V472	14.0 C.T.	6.0	117	1500	LAV	Leads	Leads	3 1/2	2 1/2	2 3/4	2 1/4	2 5/8	4
23V210	18.4 C.T.	0.9	115	1500	BAH	Leads	Leads	2	3 1/16	1 3/4	2 13/16	—	0.75
23V473	20.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2 1/4	3 11/16	1 5/16	3 3/8	—	1.5
23V474	20.0 C.T.	2.0	117	1500	BAH	Leads	Leads	2 5/16	4	2 1/4	3 3/16	—	2.5
23V475	20.0 C.T.	6.0	117	1500	LAV	Leads	Leads	3 3/8	3 5/16	3 3/8	2 1/2	2 5/8	5.7
23V476	20.0 C.T.	10.0	117	1500	LAV	Leads	Leads	4 1/4	3 1/2	3 1/2	2 3/4	2 3/4	7.4
23V153	24.0	0.04	115	500	MAH	Leads	Leads	7/8	1 1/16	1	—	—	0.1
23V256	24.0 C.T.	0.085	117	1500	BAH	Leads	Leads	1 3/4	2 1/8	1 1/4	1 3/4	—	0.25
23V401	24.0 C.T.	0.085	230	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 1/4	1 3/4	—	0.25
23V257	24.0 C.T.	0.2	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.35
23V402	24.0 C.T.	0.2	230	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.35
23V258	24.0 C.T.	0.4	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.6
23V403	24.0 C.T.	0.4	230	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2 3/8	—	0.6
23V477	24.0 C.T.	0.4	115/230	1500	BAH	Leads	Leads	1 3/8	2 13/16	1 1/2	2 3/8	—	.75
23V259	24.0 C.T.	0.7	117	1500	BAH	Leads	Leads	2	3 1/4	1 3/4	2 13/16	—	0.85
23V404	24.0 C.T.	0.7	230	1500	BAH	Leads	Leads	2	3 1/4	1 3/4	2 13/16	—	0.85
21F84	24.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.5
26F68	24.0	1.0	117	2500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.5
21F181	24.0 C.T.	1.0	115/230	1500	BAH	Leads	Leads	2 5/16	4	2 1/4	3 9/16	—	2.3
23V478	24.0 C.T.	2.0	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	1.5
23V419	24.0 C.T.	4.0	117	1500	LAV	Leads	Leads	3 13/16	3 3/8	2 13/16	2 1/2	2 1/8	4.0
23V420	24.0 C.T.	6.0	117	1500	LAV	Leads	Leads	4 3/16	3 7/16	3	2 3/4	2 1/4	5.7
23V421	24.0 C.T.	8.0	117	1500	LAV	Leads	Leads	4 3/16	3 7/16	3 3/8	2 3/4	2 3/4	7.3
21F153	24.0 C.T.	10.0	117	1500	CAV	Leads	Leads	4 9/16	3 3/4	3 3/4	3	2 3/4	7.5
23V422	24.0 C.T.	12.0	117	1500	LAV	Leads	Leads	4 9/16	3 3/4	4 5/8	3	3 1/4	11.5
*21F100	*24.5 to 29.0 C.T.	0.04	117	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 3/8	1 3/4	—	0.25
*21F101	*24.5 to 29.0 C.T.	0.25	117	1500	BAH	Leads	Leads	1 3/8	2 13/16	1 3/8	2 3/8	—	0.6
*21F189	*24.5 to 29.0 C.T.	0.25	117	2500	BAH	Leads	Leads	1 3/8	2 13/16	1 3/8	2 3/8	—	0.6
21F51	25.2	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	1.5
21F159	25.2	1.0	230	1500	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	1.5
21F142	25.2 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	1.5
21F186	25.2 C.T.	1.0	117	1500	BGH	Leads	Leads	2	3 1/4	2 3/8	2 13/16	—	1.5

*Secondary Voltage varies by means of Primary Taps.

POWER TRANSFORMERS

LOW VOLTAGE TRANSFORMER INDEX

LISTED IN ORDER OF INCREASING
SECONDARY VOLTAGES



LISTING STARTS
ON PAGE 18

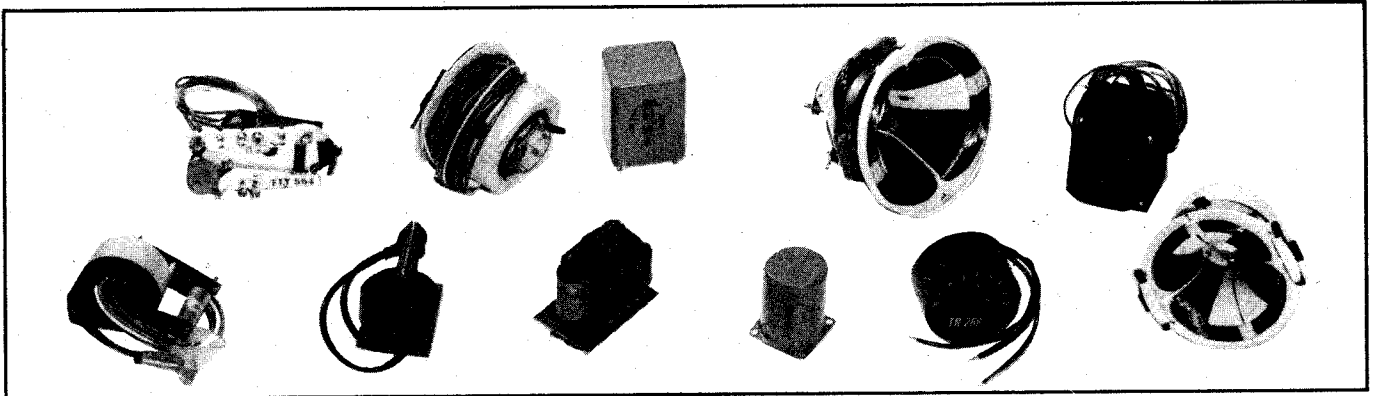
TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
	Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
21F83	25.2 C.T.	2.0	117	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
21F180	25.2 C.T.	2.0	115/230	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
21F114	25.2 C.T.	3.0	117	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
	(Series)												
21F52	12.6/12.6	3.5/3.5	117	2500	GGV	Leads	Leads	3 ¹ / ₂	2 ⁷ / ₈	3 ⁷ / ₈	2 ¹ / ₄	2 ⁵ / ₈	5.0
21F197	25.2 C.T.	5.0	117	1500	GGV	Leads	Leads	4 ¹ / ₄	3 ⁷ / ₁₆	3 ⁷ / ₈	2 ³ / ₄	2 ¹¹ / ₁₆	5.5
21F198	25.2 C.T.	7.5	117	1500	GGV	Leads	Leads	4 ¹ / ₄	3 ⁷ / ₁₆	4 ¹ / ₄	2 ³ / ₄	3 ¹ / ₁₆	7.5
21F199	25.2 C.T.	10.0	117	1500	GGV	Leads	Leads	4 ⁹ / ₁₆	3 ³ / ₄	5	3	3 ¹³ / ₁₆	10.0
21F27	26.5 C.T.	0.6	117	3000	BAH	Leads	Leads	2	3 ³ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.6
21F82	26.8 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 ³ / ₄	2	2 ¹³ / ₁₆	—	1.6
21F178	26.8 C.T.	1.0	115/230	1500	BAH	Leads	Leads	2	3 ³ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.7
23V270	26.8 C.T.	1.7	115	1500	BAH	Leads	Leads	2 ⁵ / ₈	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
23V379	28.0 C.T.	0.085	117	1500	BAH	Leads	Leads	1 ¹ / ₄	2 ¹ / ₈	1 ¹ / ₄	1 ³ / ₄	—	0.25
23V380	28.0 C.T.	0.175	117	1500	BAH	Leads	Leads	1 ³ / ₈	2 ³ / ₈	1 ³ / ₈	2	—	0.35
23V381	28.0 C.T.	0.3	117	1500	BAH	Leads	Leads	1 ³ / ₈	2 ¹ / ₈	1 ¹ / ₈	2 ³ / ₈	—	0.6
23V382	28.0 C.T.	0.8	117	1500	BAH	Leads	Leads	2	3 ³ / ₄	2	2 ¹³ / ₁₆	—	1.0
23V423	28.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 ³ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.4
23V424	28.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₂	2	2 ¹ / ₈	2.9
23V425	28.0 C.T.	4.0	117	1500	LAV	Leads	Leads	3 ¹³ / ₁₆	3 ³ / ₈	3 ¹ / ₄	2 ¹ / ₂	2 ¹ / ₂	5.3
23V426	28.0 C.T.	6.0	117	1500	LAV	Leads	Leads	4 ³ / ₁₆	3 ⁷ / ₁₆	3 ¹ / ₂	2 ³ / ₄	2 ⁵ / ₈	7.0
21F190	30.0	3.0	117	1500	GGV	Leads	Leads	3 ¹ / ₂	2 ¹³ / ₁₆	3 ⁵ / ₈	2 ¹ / ₄	2 ¹ / ₈	4.2
23V479	30.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2 ¹ / ₄	3 ¹¹ / ₁₆	2	3 ¹ / ₈	—	1.5
23V480	30.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ¹ / ₈	2 ⁹ / ₁₆	2 ⁵ / ₈	2	2 ⁵ / ₈	3.2
23V481	30.0 C.T.	6.0	117	1500	LAV	Leads	Leads	4 ¹ / ₄	3 ¹ / ₂	3 ¹ / ₂	2 ³ / ₄	2 ³ / ₄	7.4
23V461	35.0 C.T.	0.1	117	1500	BAH	Leads	Leads	1 ³ / ₈	2 ¹³ / ₁₆	1 ⁷ / ₁₆	2 ³ / ₈	—	.35
23V462	35.0 C.T.	0.5	117	1500	BAH	Leads	Leads	2 ¹ / ₄	3 ¹¹ / ₁₆	1 ⁷ / ₈	3 ¹ / ₈	—	1.0
23V463	35.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ¹ / ₂	2 ⁷ / ₈	2 ³ / ₄	2 ¹ / ₄	2 ³ / ₈	3.5
23V384	36.0 C.T.	0.065	117	1500	BAH	Leads	Leads	1 ¹ / ₄	2 ¹ / ₈	1 ¹ / ₄	1 ³ / ₄	—	0.25
23V405	36.0 C.T.	0.065	230	1500	BAH	Leads	Leads	1 ¹ / ₄	2 ¹ / ₈	1 ¹ / ₄	1 ³ / ₄	—	0.25
23V385	36.0 C.T.	0.135	117	1500	BAH	Leads	Leads	1 ³ / ₈	2 ³ / ₈	1 ³ / ₈	2	—	0.35
23V386	36.0 C.T.	0.3	117	1500	BAH	Leads	Leads	1 ³ / ₈	2 ¹ / ₈	1 ¹ / ₂	2 ³ / ₈	—	0.6
23V387	36.0 C.T.	0.55	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	1 ³ / ₈	2 ¹³ / ₁₆	—	1.0
23V427	36.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2 ⁵ / ₈	3 ³ / ₄	2 ¹ / ₄	3 ¹ / ₈	—	2.0
23V428	36.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ⁷ / ₁₆	2 ¹³ / ₁₆	2 ³ / ₄	2 ¹ / ₄	2 ¹ / ₈	3.5
23V429	36.0 C.T.	4.0	117	1500	LAV	Leads	Leads	4 ³ / ₁₆	3 ⁷ / ₁₆	2 ¹ / ₈	2 ³ / ₄	2 ³ / ₈	6.0
23V430	36.0 C.T.	6.0	117	1500	LAV	Leads	Leads	4 ⁹ / ₁₆	3 ³ / ₄	3 ¹ / ₂	3	2 ⁵ / ₈	8.3
23V458	40.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.6
23V459	40.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ¹ / ₂	2 ⁷ / ₈	2 ³ / ₄	2 ¹ / ₄	2 ³ / ₈	4.0
23V460	40.0 C.T.	6.0	117	1500	LAV	Leads	Leads	4 ³ / ₈	3 ¹³ / ₁₆	3 ³ / ₄	3	3	10.0
21F187	*45 to 54 C.T.	1.0	117	2500	BAH	Leads	Leads	2 ⁵ / ₈	4	2 ³ / ₈	3 ⁹ / ₁₆	—	2.3
23V377	50.0 C.T.	1.0	117	1500	GGV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₂	2 ³ / ₄	2	1 ³ / ₄	2.3
23V466	50.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.4
23V467	50.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ¹ / ₈	3 ⁵ / ₁₆	2 ⁷ / ₈	2 ¹ / ₂	2 ³ / ₈	4.7
21F211	50.0 C.T.	5.0	117	1500	GGV	Leads	Leads	4 ³ / ₈	3 ¹³ / ₁₆	4 ³ / ₈	3	3 ⁷ / ₁₆	10.0
23V464	60.0 C.T.	1.0	117	1500	LAV	Leads	Leads	3 ¹ / ₈	2 ⁹ / ₁₆	2 ⁵ / ₈	2	2 ³ / ₈	3.4
23V465	60.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ⁷ / ₈	3 ⁵ / ₁₆	3 ¹ / ₈	2 ¹ / ₂	2 ⁵ / ₈	5.6
23V215	64.0 C.T.	0.9	115	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	1.75
23V468	70.0 C.T.	1.0	117	1500	LAV	Leads	Leads	3 ¹ / ₂	2 ⁷ / ₈	2 ⁵ / ₈	2 ¹ / ₄	2 ¹ / ₄	4.0
23V469	70.0 C.T.	2.0	117	1500	LAV	Leads	Leads	3 ¹ / ₈	3 ⁵ / ₁₆	3 ³ / ₈	2 ¹ / ₂	2 ¹ / ₈	6.0
23V89	72.0 C.T.	0.075	115	1500	BAH	Leads	Leads	1 ³ / ₈	2 ¹³ / ₁₆	1 ³ / ₈	2 ³ / ₈	—	0.6
23V122	80.0 C.T.	1.2	117	1500	GGV	Leads	Leads	3 ¹ / ₂	2 ⁷ / ₈	3 ¹ / ₂	2 ¹ / ₂	2 ³ / ₈	4.5

*Secondary Voltage Varies By Means of Secondary Taps.



CAPABILITIES

Thordarson Makes It . . .



And We've Been Making It For Over 85 Years.

That's right! Thordarson was founded in 1895. For over 85 years we have been a supplier of quality transformers, chokes and other magnetic components to the electronic and electrical industries.

Thordarson is the leading designer and developer of transformers. Transformers that meet the needs of industrial, M.R.O. and O.E.M. users. Transformers built with the reliability requirements for applications such as aerospace, bio-medical, control instrumentation, monitor information display systems and many others.

Whatever your transformer specifications, you can be sure that the product you receive from us has passed tough, thorough Thordarson quality control standards.

You are invited to review our capabilities in the following pages and let us know your area of interest. We would be pleased to furnish more information concerning a specific requirement or general catalog material covering any of our products. For your convenience a form is provided at the end of this section. Call or write us today.

THORDARSON MEISSNER, INC.

Electronic Center
Mt. Carmel, IL 62863
Phone: 618-262-5121
TWX 510-525-2254



MEMBER



NEDA
ASSOCIATED MEMBER

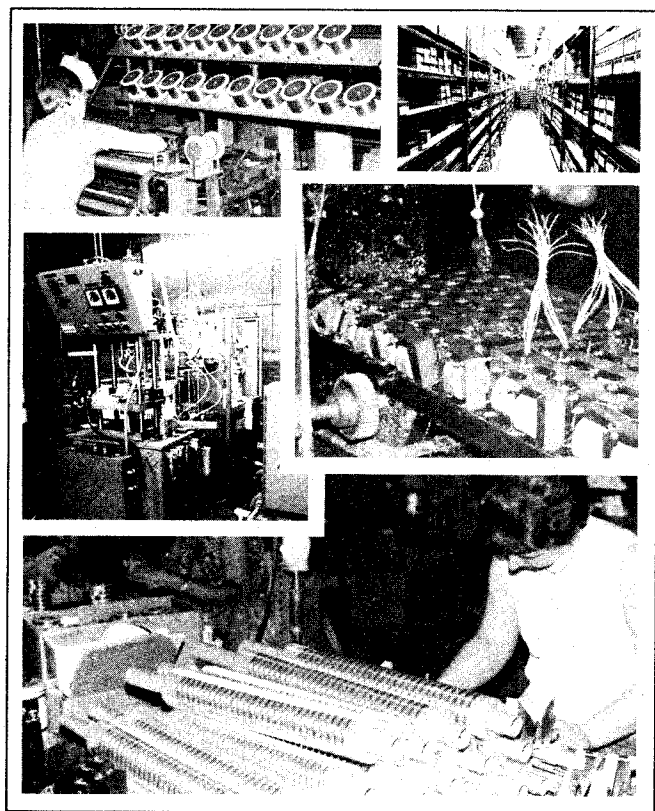


CAPABILITIES

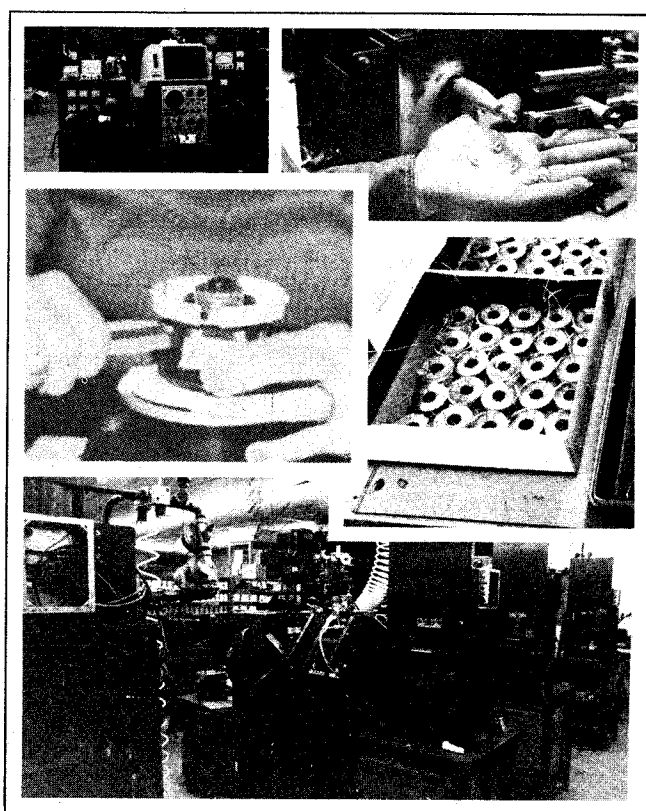
Welcome to the Thordarson spectrum of magnetics and thank you for the opportunity to provide you with today's technology and service.

Our vast experience and history have been building a reputation for high quality and detail attention to customer service for over 85 years. But we're not resting on that reputation — we're striving to use that knowledge combined with state of the art technology and techniques to earn **your** recognition today. As you examine our production and design facilities, we hope you'll find an area where our expertise can perform for you.

Our plants are located in Mt. Carmel and Robinson, IL with each plant having almost totally independent and equal capabilities to protect your source of supply. These plants cover over 120,000 square feet all devoted to meeting your delivery requirements.



**Mt. Carmel and Robinson, IL
Factory Operations**



**Mt. Carmel, IL
Engineering R&D and Prototype Facilities**

The Thordarson production equipment and facilities are modern but conservative in keeping with our approach to this highly competitive business, while utilizing a wide range of automatic and semiautomatic equipment to ensure low labor costs for you.

CAPABILITIES

We also strive to operate in an austere manner to hold down overhead costs. This philosophy is one prime reason why Thordarson can offer you a stable, consistent and protected source of supply of magnetic products.

PRODUCTS

We design, manufacture and test transformers, inductors, reactors and coils. In addition to custom designed components we maintain over 8000 pre-engineered items to meet the requirements of virtually every OEM/MRO requirement. The following represents a cross-section of our product line:

TRANSFORMERS

- Power—Both Rectified/Unrectified
- Inverter
- Single Frequency
- Audio Input
- Interstage
- Output
- Hybrid
- Pulse
- Saturable-Core
- Inverter, Toroidal
- Converter, Toroidal, DC to DC
- Plate, Oil/Liquid Filled
- 3 \emptyset Power, Delta, wye, Star
- Line Isolation, Multi-Shielded
- Voltage Regulator
- Voltage Distribution
- Magnetic Amplifier
- Bio-medical Isolation
- Power Transistor, Toroidal
- Geophysical
- Liquid-Filled, Internal Pressure Relief
- Variable Voltage
- Synchro Overload
- High Voltage, Corona-Free
- Filament, Low to High Power

TRANSFORMERS (continued)

- Machine Tool
- Constant Voltage
- Matching 25.0V Line
- and 70.7V Line

INDUCTORS

- Power—Single & Multiple
- Single Frequency Misc.
- Audio, Single and Multiple
- Charging
- Miniature Transistor
- High Q. Low Frequency
- Toroidal Precision Inductance
- Variable Inductance
- Liquid Filled
- Saturable-Core
- High Current

SWEEP AND DEFLECTION

- High Voltage Flyback
- Yoke, Saddle, Toroidal
- and Saddle/Saddle

VOLTAGE MULTIPLIERS



ACTION REQUEST FORM

Thordarson's expertise in design and manufacturing transformers, inductors, high voltage flyback transformers, deflection yokes and voltage multipliers also extends into TV replacement parts and related areas. Please check the following areas of interest for further information and a prompt reply.

- | | |
|---|---|
| <input type="checkbox"/> Price and Delivery
on the Transformer/Choke Below | <input type="checkbox"/> Abridged Catalog of Popular
Industrial Transformers
and Chokes |
| <input type="checkbox"/> Sales/Engineering Information
Concerning _____ | <input type="checkbox"/> TV Replacement Parts Guide |
| <input type="checkbox"/> Nearest Distributor/Representative | <input type="checkbox"/> Replacement Semiconductor/
Voltage Multiplier Guide |
| <input type="checkbox"/> Catalog of CRT Display
Flybacks and Yokes | <input type="checkbox"/> Complete Industrial
Catalog (TSC-1) |
| <input type="checkbox"/> Voltage Multiplier Information | <input type="checkbox"/> Additional Action Request Forms |
| <input type="checkbox"/> Thordarson Capabilities Brochures | |

TRANSFORMER/CHOKE DETAIL INFORMATION

UNIT TYPES

- | | |
|------------------------------------|-------------------------------------|
| <input type="checkbox"/> Power | <input type="checkbox"/> Audio |
| <input type="checkbox"/> Plate | <input type="checkbox"/> Output |
| <input type="checkbox"/> Filament | <input type="checkbox"/> Modulation |
| <input type="checkbox"/> Isolation | <input type="checkbox"/> Driver |
| <input type="checkbox"/> Inverter | <input type="checkbox"/> Interstage |
| <input type="checkbox"/> Choke | <input type="checkbox"/> Input |
| <input type="checkbox"/> Filter | <input type="checkbox"/> Microphone |
| <input type="checkbox"/> Swinging | |
| <input type="checkbox"/> Military | <input type="checkbox"/> Other |

Electrical Specifications (other than Audio)

Primary Power Source _____ Freq _____
Output to What _____

Windings	Volts	AC Amps	Terminations or Lead Color	Termination Size or Lead Length	Taps or C.T.
#1 (Pri)					
#2 (Sec)					
#3 (Sec)					
#4 (Sec)					

Shielding: ☐ Electrostatic ☐ Magnetic ☐ Other

Electrical Specifications (Choke)

Inductances _____ Currents _____ Amps D.C.
Volts A.C. or Watts _____ Frequency _____

Quantity Needed _____ Delivery When _____
Budgetary Price _____ New Requirement Yes No
Equipment to be used in _____
Replacement Yes* No
*If Yes, Is Sample Available for Analysis? Yes No

Electrical Specifications (Audio)

Primary Impedance _____ Frequencies _____ Tapped _____
Secondary Impedance _____ Tapped _____ Freq Response _____
D.C. MA in Primary _____ in Secondary _____
Balanced _____

MECHANICAL TYPE

Style and Mounting Type _____
From Transformer Catalog _____
Other _____

Schematic Diagram or Other Important Information

Additional Information Attached ☐

Company Name _____ Date _____
Address _____
City _____ State _____ Zip Code _____
Contact _____

POWER TRANSFORMERS

The following broad selection of power transformers are listed in order of increasing plate voltage. The dc ma ratings for part numbers 24R72 thru 26R152 inclusive are for capacitor input, full wave bridge circuits. Starting with 24R105, the ratings reflect full wave center-tapped capacitor input circuits. All listed transformers may be used in other circuits by applying factors shown in the chart on page 22.

PLATE AND FILAMENT: PRIMARY 117V 50/60 Hz. WITH LEADS

Section	TM Part No.	Plate Supply		Rectifier Fil.		Other Windings		Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts AC	MADC	Volts	Amps	Volts	Amps		H	W	D	MW	MD	
A	24R72	117	15	6.3	0.6	—	—	BAH	1 ⁵ / ₁₆	2 ¹³ / ₁₆	1 ⁵ / ₈	2 ³ / ₈	—	1.0
	26R162	115	290	—	—	2.7 6.3	0.45 8.0	AGF	4	2 ¹³ / ₁₆	3 ¹ / ₁₆	2 ⁷ / ₁₆	3	5.7
	26R105	117/110	900	6.3 C.T.	10.0	—	—	GGH	3 ³ / ₈	3 ³ / ₄	3 ³ / ₄	2 ¹ / ₂	2 ³ / ₈	4.0
	26R106	117/110	900	6.3	10.0	—	—	AGF	2 ⁵ / ₈	3 ³ / ₈	2 ¹³ / ₁₆	2 ¹³ / ₁₆	2 ¹ / ₄	5.13
	26R37	125	15	6.3	0.6	—	—	BAV	2	2 ⁵ / ₈	1 ⁵ / ₈	2	—	0.7
B	24R165	125	15	—	—	12.6	0.3	BAV	1 ⁵ / ₁₆	2 ⁵ / ₈	1 ⁵ / ₈	2	—	0.7
	26R38	125	50	6.3	2.0	—	—	BAH	2 ¹ / ₄	3 ¹¹ / ₁₆	2 ¹ / ₈	3 ¹ / ₈	—	1.5
	24R167	125	50	—	—	12.6	1.0	BAH	2 ¹ / ₄	3 ¹¹ / ₁₆	2 ¹ / ₈	3 ¹ / ₈	—	1.5
	24R71	135	50	6.3	1.5	—	—	BAH	2 ¹ / ₄	3 ³ / ₄	2 ¹ / ₈	3 ¹ / ₈	—	1.5
	26R155	140	1150	5.2	1.7	12.6 C.T.	11.0	GGV	4 ¹ / ₂	3 ³ / ₄	5	3	3 ¹ / ₂	8.5
C	26R60	150	25	6.3	.5	—	—	BGV	2	2 ⁵ / ₈	1 ¹³ / ₁₆	2	—	0.7
	24R168	150	25	—	—	12.6	0.3	GGV	1 ⁵ / ₁₆	2 ⁵ / ₈	1 ¹³ / ₁₆	2	—	0.8
	22R12	150	50	6.3	1.5	—	—	BAH	2 ¹ / ₄	3 ¹¹ / ₁₆	2 ¹ / ₈	3 ¹ / ₈	—	1.5
	26R150	155	450	6.3	2.0	6.3	13.5	GGV	4 ¹ / ₈	3 ¹ / ₂	4 ¹ / ₂	3 ¹ / ₁₆	3 ¹ / ₈	9.0
	26R148	160	500	6.3	1.4	6.3 12.6 C.T.	1.6 5.5	GGV	4 ¹ / ₈	3 ¹ / ₂	4 ³ / ₈	2 ¹ / ₄	3 ³ / ₁₆	6.5
D	26R159	315	550	6.3	1.8	6.3	12.0	GGV	4 ¹ / ₈	3 ¹ / ₂	4 ¹ / ₂	3 ¹ / ₈	3 ³ / ₈	7.25
	26R152	320	480	6.3	1.9	6.3	12.0	GGV	4 ¹ / ₈	3 ¹ / ₂	4 ¹ / ₄	3 ¹ / ₈	3 ³ / ₈	7.75
	24R105	30-0-30	2.5A	6.3	1.5	6.3	1.5	GGV	4 ³ / ₁₆	3 ³ / ₈	3 ¹³ / ₁₆	2 ¹ / ₄	2 ¹ / ₁₆	6.0
	24R108	120-0-120	250	5.0	3.0	—	—	GGV	4	3 ¹ / ₄	3 ¹ / ₈	2 ¹ / ₂	1 ¹⁵ / ₁₆	4.2
	22R39	125-0-125	25	6.3	1.0	—	—	BAV	2 ⁵ / ₈	2 ⁵ / ₈	1 ³ / ₄	2 ³ / ₈	—	1.0
E	24R166	125-0-125	25	—	—	12.6	0.6	BAV	2 ⁵ / ₁₆	2 ¹³ / ₁₆	1 ³ / ₄	2 ³ / ₈	—	1.0
	24R101	150-0-150	600	6.3	2.5	6.3	2.5	GGV	4 ¹ / ₁₆	3 ³ / ₈	4 ³ / ₁₆	2 ¹ / ₄	3 ¹ / ₁₆	7.1
	22R94	190-160-0-160/190	70	6.3	0.6	6.3 C.T.	3	GGV	3 ³ / ₃₂	2 ¹ / ₃₂	2 ⁵ / ₈	2	1 ³ / ₄	2.75
	26R164	200-0-200	110	—	—	6.3 6.3 C.T.	2.0 4.0	GGV	3 ¹ / ₈	2 ¹ / ₂	3 ¹ / ₄	2	2 ¹ / ₄	3.0
	24R10	220-0-220	50	6.3	0.6	25.2	-0.5	GGV	3 ³ / ₁₆	2 ⁵ / ₈	2 ⁵ / ₈	2	1 ⁹ / ₁₆	2.2
F	24R11	230-0-230	50	6.3	2.5	—	—	AGF	2 ⁵ / ₈	3	2 ¹ / ₂	2	1 ⁹ / ₁₆	2.2
	24R11U	230-0-230	50	6.3	2.5	—	—	GGV	3 ³ / ₁₆	2 ⁵ / ₈	2 ⁵ / ₈	2	2 ¹ / ₂	2.2
	24R00	240-0-240	40	5	2	6.3 C.T.	2	AGF	2 ⁵ / ₈	3	2 ¹ / ₂	2	2 ¹ / ₂	2
	24R00U	240-0-240	40	5	2	6.3 C.T.	2	GGV	3 ¹ / ₈	2 ⁵ / ₈	2 ⁵ / ₈	2	1 ⁹ / ₁₆	3.25
	24R19U	240-0-240	55	5	2	6.3 C.T.	2	GGV	3 ³ / ₈	2 ⁵ / ₈	2 ³ / ₄	2	1 ¹¹ / ₁₆	2.5
G	24R12	240-0-240	70	6.3	3	—	—	AGF	2 ⁷ / ₈	2 ¹ / ₂	3	2	2 ¹ / ₂	2.6
	24R12U	240-0-240	70	6.3	3	—	—	GGV	3 ¹ / ₈	2 ¹ / ₂	2 ⁷ / ₈	2	1 ¹³ / ₁₆	2.6
	22R00	250-0-250	40	5	2	6.3 C.T.	2	AGF	2 ¹ / ₂	3	2 ¹ / ₂	2	2 ¹ / ₂	2
	24R09	250-0-250	70	5	2	6.3 C.T.	2.5	AGF	3 ¹ / ₂	3	2 ¹ / ₂	2	2 ¹ / ₂	3.2
	24R09U	250-0-250	70	5	2	6.3 C.T.	2.5	GGV	3 ¹ / ₈	2 ⁵ / ₈	3 ¹ / ₈	2	2 ¹ / ₁₆	3.2
H	24R13	260-0-260	90	5	2	6.3 C.T.	3	AGF	3 ⁵ / ₈	2 ¹ / ₈	3 ³ / ₈	2 ¹ / ₄	2 ¹³ / ₁₆	4
	24R13U	260-0-260	90	5	2	6.3 C.T.	3	GGV	3 ¹ / ₂	2 ¹ / ₈	3 ³ / ₈	2 ¹ / ₄	2 ¹ / ₄	4
	26R31	260-0-260	90	—	—	6.3	4	AGF	3 ¹ / ₂	2 ⁵ / ₈	3 ³ / ₈	2 ¹ / ₄	2 ¹³ / ₁₆	3.5
	26R88	265-0-265	300	5	6	6.3 6.3 6.3	6.0 6.0 1.2	AGF	5	3 ³ / ₄	4 ¹ / ₂	3	3 ³ / ₄	11
	24R20	270-0-270	120	5.0	3.0	6.3 C.T.	3.5	AGF	3 ³ / ₄	3 ¹ / ₈	3 ³ / ₄	2 ¹ / ₂	3 ¹ / ₈	5.0
	24R20U	270-0-270	120	5.0	3.0	6.3 C.T.	3.5	GGV	3 ³ / ₈	3 ¹ / ₈	3 ¹ / ₂	2 ¹ / ₂	2 ³ / ₁₆	5.0
	26R160	270-0-270	260	5.0	3.0	6.3	8.8	GGV	3 ³ / ₈	3 ¹ / ₈	3 ¹ / ₂	2 ¹ / ₂	2 ¹ / ₄	5.5

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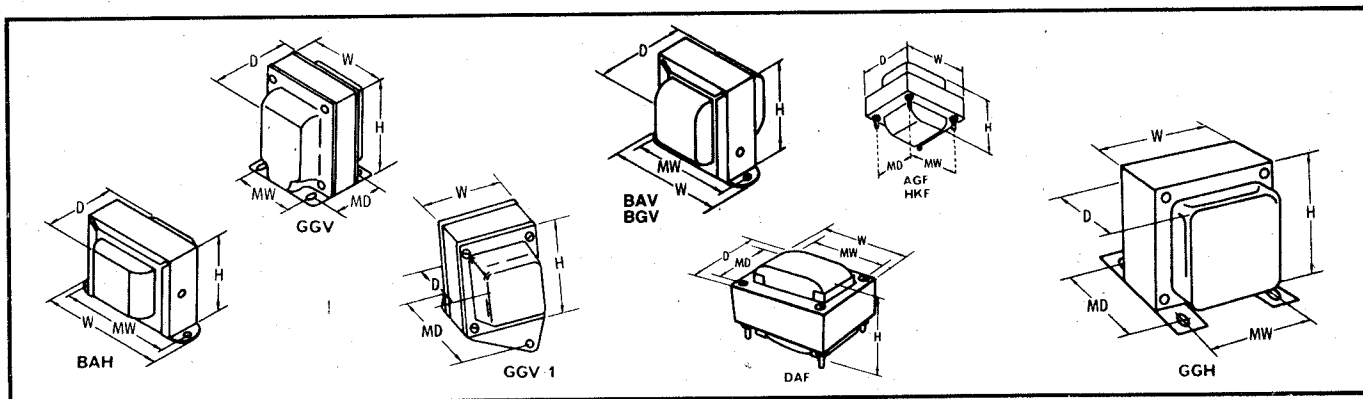
POWER TRANSFORMERS

PLATE AND FILAMENT: PRIMARY 117V 50/60 Hz. WITH LEADS (Cont'd)

Section	TM Part No.	Plate Supply		Rectifier Fil.		Other Windings		Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts AC	MADC	Volts	Amps	Volts	Amps		H	W	D	MW	MD	
A	26R115	270-0-270	280	5.0	3.8	6.3	9	GGV	3 ¹ / ₈	3 ¹ / ₁₆	4 ¹ / ₈	2 ¹ / ₂	2 ³ / ₁₆	5.5
	26R116	270-0-270	300	5.0	3.8	6.3	10	AGF	3 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₈	3 ³ / ₁₆	2 ¹ / ₁₆	5.5
	22R01	275-0-275	50	5.0	2.0	6.3 C.T.	2.5	AGF	2 ¹ / ₂	3	2 ¹ / ₂	2	2 ¹ / ₂	2.2
	22R30	275-0-275	50	5.0	2.0	6.3 C.T.	2.5	GGV	3 ¹ / ₈	2 ⁵ / ₈	3 ¹ / ₈	2	2 ¹ / ₄	2.2
	26R121	275-0-275	300	5.0	6.0	6.3	2.0	AGF (X)	4 ³ / ₈	3 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₈	2 ¹ / ₂	9.0
B	26R123	280-0-280	300	5.0	4.0	6.3	10.0	GGV	3 ³ / ₈	3 ¹ / ₈	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₈	
	26R122	280-0-280	280	5.0	3.0	6.3	9.5	AGF (X)	3 ¹ / ₁₆	3 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₈	2 ¹ / ₂	
								GGV (X)	3 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₁₆	2 ¹ / ₂	2 ⁵ / ₁₆	
								GGH (X)	3 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₁₆	2 ¹ / ₂	2 ⁵ / ₁₆	
	26R166	285-0-285	250	5.0	3.0	6.3	9.5	GGV	3 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₈	2 ¹ / ₄	2 ¹ / ₂	4.6
C	24R21U	300-0-300	70	5.0	3.0	6.3 C.T.	3.0	GGV	3 ¹ / ₈	3	3 ¹ / ₄	2 ¹ / ₄	2 ⁵ / ₈	4.0
	22R04	300-0-300	90	5.0	2.0	6.3 C.T.	3.5	AGF	3 ¹ / ₄	2 ¹ / ₁₆	3 ³ / ₈	2 ¹ / ₄	2 ⁵ / ₈	3.0
	22R05	300-0-300	120	5.0	3.0	6.3 C.T.	5.0	AGF	3 ³ / ₈	3 ¹ / ₈	3 ¹ / ₄	2 ¹ / ₂	3 ³ / ₈	4.2
	22R05U	300-0-300	120	5.0	3.0	6.3 C.T.	5.0	GGV	3 ¹ / ₈	3 ¹ / ₄	3 ³ / ₈	2 ¹ / ₂	2 ⁵ / ₁₆	4.2
	26R71	300-0-300	230	5.0	3.0	6.3	9.0	AGF	4 ¹ / ₄	3 ¹ / ₁₆	4 ¹ / ₈	2 ³ / ₄	3 ¹ / ₁₆	8.0
D	24R01	325-0-325	40	5.0	2.0	6.3 C.T.	2.0	AGF	2 ⁷ / ₈	2 ¹ / ₂	3	2	2 ¹ / ₂	2.5
	24R01U	325-0-325	40	5.0	2.0	6.3 C.T.	2.0	GGV	3 ¹ / ₈	2 ⁵ / ₈	2 ⁵ / ₈	2	1 ³ / ₄	2.5
	24R08	325-0-325	55	5.0	2.0	6.3 C.T.	2.0	AGF	3 ¹ / ₈	3	2 ¹ / ₂	2	2 ¹ / ₂	3.2
	24R08U	325-0-325	55	5.0	2.0	6.3 C.T.	2.0	GGV	3 ¹ / ₈	2 ¹ / ₂	3 ¹ / ₈	2	2 ¹ / ₁₆	3.2
	24R87	325-0-325	150	5.0	3.0	6.3 C.T.	5.0	GGV	4	3 ¹ / ₈	3 ¹ / ₄	2 ¹ / ₂	2 ⁵ / ₁₆	5.8
E	22R06	325-0-325	150	5.0	3.0	6.3 C.T.	5.0	AGF	3 ³ / ₈	3 ¹ / ₈	3 ¹ / ₄	2 ¹ / ₂	3 ¹ / ₈	5.5
	26R45	328-0-328	270	5.0	3.0	12.6	5.25	GGV-1	4 ⁵ / ₈	3 ¹ / ₈	4 ¹ / ₁₆	3	3 ¹ / ₁₆	8.0
	24R02	350-0-350	70	5.0	2.0	6.3 C.T.	2.5	AGF	3 ³ / ₈	3 ³ / ₈	2 ¹ / ₈	2 ¹ / ₄	2 ¹ / ₈	3.8
	24R02U	350-0-350	70	5.0	2.0	6.3 C.T.	2.5	GGV	3 ¹ / ₂	2 ¹ / ₈	3 ¹ / ₂	2 ¹ / ₄	2 ¹ / ₈	3.8
	24R164	350-0-350	70	5.0	3.0	6.3 C.T.	2.5	AGF	3 ⁷ / ₁₆	3	2 ⁵ / ₁₆	2	2 ¹ / ₂	4.0
F	24R40	350-0-350	90	5.0	2.0	6.3 C.T.	3.0	AGF	3 ³ / ₈	2 ¹ / ₁₆	3 ³ / ₈	2 ¹ / ₄	2 ¹ / ₁₆	4.5
	24R40U	350-0-350	90	5.0	2.0	6.3 C.T.	3.0	GGV	3 ³ / ₈	3	3 ³ / ₈	2 ¹ / ₄	2 ⁵ / ₈	4.5
	24R04	350-0-350	90	5.0	3.0	6.3 C.T.	3.5	AGF	4	2 ⁷ / ₈	3 ³ / ₈	2 ¹ / ₄	2 ¹ / ₈	4.5
	24R04U	350-0-350	90	5.0	3.0	6.3 C.T.	3.5	GGV	3 ¹ / ₂	2 ¹ / ₈	3 ¹ / ₈	2 ¹ / ₄	2 ⁵ / ₈	4.5
	22R32	350-0-350	110	5.0	2.0	6.3 C.T.	3.0	GGV	3 ¹ / ₈	3 ¹ / ₄	4	2 ¹ / ₂	2 ¹ / ₁₆	5.8
G	24R05	350-0-350	120	5.0	3.0	6.3 C.T.	4.7	AGF	4 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₄	2 ¹ / ₂	3 ¹ / ₈	5.7
	24R05U	350-0-350	120	5.0	3.0	6.3 C.T.	4.7	GGV	3 ¹ / ₈	3 ¹ / ₄	4 ³ / ₈	2 ¹ / ₂	2 ⁵ / ₁₆	5.7
	22R07	350-0-350	200	5.0	3.0	6.3 C.T.	6.0	AGF	3 ¹ / ₈	3 ¹ / ₈	4 ¹ / ₂	3	3 ¹ / ₄	7.0
	26R21	350-0-350	225	5.0	3.0	6.3	10	AGF	4 ¹ / ₄	3 ¹ / ₄	4 ¹ / ₂	3	3 ¹ / ₄	11.5
	24R22	360-0-360	120	5.0	3.0	6.3 C.T.	3.5	AGF	3 ³ / ₈	3 ¹ / ₈	3 ¹ / ₄	2 ¹ / ₂	3 ¹ / ₈	5.5

(X) Has Universal Mtg. Gkt.

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POWER TRANSFORMERS

PLATE AND FILAMENT: PRIMARY 117V 50/60 Hz. WITH LEADS (Cont'd)

Section	TM Part No.	Plate Supply		Rectifier Fil.		Other Windings		Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts AC	MA DC	Volts	Amps	Volts	Amps		H	W	D	MW	MD	
A	24R22U	360-0-360	120	5.0	3.0	6.3 C.T.	3.5	GGV	3 ⁷ / ₈	3 ¹ / ₄	3 ³ / ₄	2 ¹ / ₂	2 ⁷ / ₁₆	5.38
	24R24	370-0-370	275	5.0 C.T.	3.0	6.3 C.T.	7.0	AGF	4 ¹ / ₄	3 ³ / ₄	4 ¹ / ₂	3	3 ³ / ₄	9.5
	24R06	375-0-375	150	5.0	3.0	6.3 C.T.	4.7	AGF	3 ⁷ / ₈	3 ¹ / ₂	4 ¹ / ₈	2 ³ / ₄	3 ¹ / ₂	6.2
	24R06U	375-0-375	150	5.0	3.0	6.3 C.T.	4.7	GGV	4 ¹ / ₄	3 ¹ / ₂	4	2 ³ / ₄	2 ⁷ / ₈	6.2
	26R86	380-0-380	220	5.0	3.0	6.3 6.3 6.3	7.0 5.0 1.2	GGV	4 ³ / ₄	4	4 ³ / ₄	3	3 ³ / ₁₆	10.5
B	24R07	400-0-400	200	5.0	3.0	6.3 C.T.	5.0	AGF	4 ¹ / ₂	3 ³ / ₄	4 ¹ / ₂	3	3 ³ / ₄	9.2
	24R07U	400-0-400	200	5.0	3.0	6.3 C.T.	5.0	GGV	4 ⁵ / ₈	3 ³ / ₄	4 ¹ / ₂	3	3 ³ / ₈	9.2
	24R03	400-0-400	250	5.0	4.0	6.3 C.T.	5.0	GGV	4 ⁵ / ₈	3 ³ / ₈	4 ³ / ₈	3	3 ³ / ₁₆	8.0
	22R35	400-0-400	340	5.0	6.0	6.3 C.T.	7.0	GGV	4 ⁵ / ₈	3 ³ / ₈	5 ¹ / ₄	3	4	12.5
	24R25	440-0-440	130	5.0	3.0	6.3 C.T.	3.5	GGV	4 ¹ / ₄	3 ¹ / ₂	4 ¹ / ₈	2 ³ / ₄	2 ¹³ / ₁₆	7.0
C	24R27	600-0-600	200	5.0	3.0	6.3 6.3	3.0 3.0	GGV	4 ⁵ / ₈	3 ³ / ₈	4 ¹ / ₄	3	3 ¹ / ₁₆	8.5
	22R58	750-0-750	315	5.0	6.0	6.3 6.3	8.0 3.0	GGV	5 ³ / ₁₆	4 ¹ / ₂	7 ¹ / ₈	3 ¹ / ₂	6 ¹ / ₈	23.0

FOR SPECIAL APPLICATIONS: PRIMARY 117V 50/60 Hz WITH LEADS

Section	TM Part No.	Application	Plate Supply		Rectifier Fil.		Other Windings		Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Volts AC	MA DC	Volts	Amps	Volts	Amps		Pri.	Sec.	H	W	D	MW	MD	
D	24R77	C.R.T.	1600	3.0	2.5/5.0/6.3	1.0	2.5/5.0/6.3	3.0	HKF	Lugs	Lugs	2 ³ / ₈	3 ¹ / ₁₆	2 ⁷ / ₁₆	2 ¹ / ₂	2	3.5
	22R40	C.R.T.	1800	2.0	2.5	1.8	2.5 or 6.3	2.2 or 6.3	GGV	Leads	Leads	3 ⁷ / ₈	3 ³ / ₄	3 ³ / ₄	2 ¹ / ₂	1 ¹ / ₂	5.0
	24R30	C.R.T.	2400	5.0	2.5	2.0	2.5	2.0	GGV	Leads	Leads	4 ¹ / ₄	3 ³ / ₄	3 ³ / ₄	2 ¹ / ₂	2 ¹¹ / ₁₆	5.5
	24R109	CF-160 Condenser Tester	550 55	30 60	6.3	0.9	6.3	0.6	DAF	Leads	Leads	2 ¹ / ₄	2 ³ / ₈	2 ³ / ₁₆	1 ¹ / ₄	2 ³ / ₁₆	1.4

FOR SPECIAL APPLICATIONS: PHOTOFLASH

Section	TM Part No.	Application	Primary Volts	Secondary		Filament		Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts	Amps	Volts	Amps		H	W	D	MW	MD	
E	24R107	Photoflash	105/115/125	Charges Capacitor to 450VDC				BAV	2 ⁵ / ₁₆	2 ¹⁵ / ₁₆	2	2 ⁵ / ₈	—	1.4
	22R115	Replaces GE 86G41	Photoflash Trigger Coil for 450V Flash Tube. Use with 24R107.				—	—	3 ¹ / ₄ Long 9 ¹ / ₁₆ Dia.			—	—	—
	22R43	Photoflash	117					BAH	2 ¹ / ₁₆	3 ¹ / ₈	2	2 ¹³ / ₁₆	—	2.0
	22R44	Photoflash	Discharge from 200V Capacitor	15KV Peak	—	—	—	BAH Single Hole Mtg.	1 ¹ / ₂	1 ¹ / ₈	2 ¹ / ₄	—	—	0.2

THORDARSON has additional standard and stocked power transformers which are not listed in this catalog. Contact factory for additional information.

POWER TRANSFORMERS

PLUG-IN PRINTED CIRCUIT: 117V 50/60 Hz PRIMARY, DUAL SECONDARY

Section	TM Part No.	Output Watts	Secondary		Diagram	Outline Dimensions								MW	Wt. Oz.
			Series	Parallel		H	W	D	A	B	C	E	F		
A	23V282	1.5	8.0V C.T. @ .188A	4.0V @ .376A	B	1 ¹ / ₈		1 ³ / ₁₆	1 ¹³ / ₃₂	.312	1.0	3 ¹ / ₁₆	.041		3.5
	23V324	1.5	25.2V C.T. @ .060A	12.6V @ .120A	B	1 ¹ / ₈		1 ³ / ₁₆	1 ¹³ / ₃₂	.312	1.0	3 ¹ / ₁₆	.041		3.5
	23V274	1.5	30V C.T. @ .050A	15V C.T. @ .100A	B	1 ¹ / ₈		1 ³ / ₁₆	1 ¹³ / ₃₂	.312	1.0	3 ¹ / ₁₆	.041		3.5
	23V279	4.5	15V C.T. @ .300A	7.5V @ .600A	A	1 ⁷ / ₁₆	2 ³ / ₈	1 ¹ / ₄		.400	1.1	3 ¹ / ₁₆	.041	2	7.5
	23V277	4.5	30V C.T. @ .150A	15V @ .300A	A	1 ⁷ / ₁₆	2 ³ / ₈	1 ¹ / ₄		.400	1.1	3 ¹ / ₁₆	.041	2	7.5
B	23V278	4.5	54V C.T. @ .084A	27V @ .168A	A	1 ⁷ / ₁₆	2 ³ / ₈	1 ¹ / ₄		.400	1.1	3 ¹ / ₁₆	.041	2	7.5
	23V286	7.5	15V C.T. @ .500A	7.5V @ 1.00A	A	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ¹⁵ / ₃₂		.400	1.30	3 ¹ / ₁₆	.041	2 ³ / ₈	10.5
	23V285	7.5	30V C.T. @ .250A	15V @ .500A	A	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ¹⁵ / ₃₂		.400	1.30	3 ¹ / ₁₆	.041	2 ³ / ₈	10.5
	23V283	7.5	54V C.T. @ .140A	27V @ .280A	A	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ¹⁵ / ₃₂		.400	1.30	3 ¹ / ₁₆	.041	2 ³ / ₈	10.5

PLUG-IN PRINTED CIRCUIT: 115/230V 50/60 Hz PRIMARY, DUAL SECONDARY

Section	TM Part No.	Output Watts	Secondary		Diagram	Outline Dimensions								MW	Wt. Oz.
			Series	Parallel		H	W	D	A	B	C	E	F		
C	23V330	1.5	30V C.T. @ .050A	15V @ .100A	B	1 ¹ / ₈		1 ³ / ₁₆	1 ¹³ / ₃₂	.312	1.0	3 ¹ / ₁₆	.041		3.5
	23V306	4.5	12.6V C.T. @ .350A	6.3V @ .700A	A	1 ⁷ / ₁₆	2 ³ / ₈	1 ¹ / ₄		.400	1.1	3 ¹ / ₁₆	.041	2	7.5

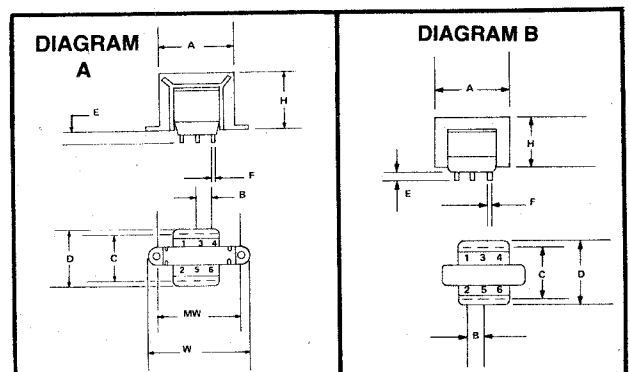
PLATE TRANSFORMERS

Section	TM Part No.	Notes	Secondary AC Volts	Secondary DC Volts	MADC*		Primary AC Volts 50/60 Hz.	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
					Reactive Input	Capacitive Input			Pri.	Sec.	H	W	D	MW	MD	
D	21P73	—	415-0-415	375	200	160	117	GGV	Leads	Leads	4	3 ¹ / ₄	3 ¹ / ₁₆	2 ¹ / ₂	2 ³ / ₁₆	5
	21P51	**	500/40-0-500	450	375	300	117	GGV	Leads	Leads	4 ³ / ₄	4	4 ¹ / ₂	3	3 ⁷ / ₁₆	9.8
	21P89	—	550-0-550	500	175	140	117	GGV	Leads	Leads	3 ⁷ / ₈	3 ¹ / ₄	4 ¹ / ₄	2 ¹ / ₂	3	6.5
	21P65	—	728-0-728	660	250	200	117	GGV	Leads	Leads	4 ⁵ / ₈	4	4	3	2 ⁷ / ₈	8.5
	21P53	**	770-510-40-0-510-770	700	375	300	117	GGV	Leads	Leads	4 ³ / ₄	4	6 ³ / ₈	3	5 ⁹ / ₁₆	18
E	21P87	—	835-0-835 or 656-0-656	760 600	220 220	175 175	117 —	GGV —	Leads —	Leads —	4 ⁵ / ₈ —	3 ⁷ / ₈ —	4 ¹ / ₂ —	3 —	3 ³ / ₈ —	10 —
	21P86	—	920-0-920	835	250	200	117	GGV	Leads	Leads	4 ³ / ₄	4	4 ⁷ / ₈	3	3 ¹³ / ₁₆	12
	21P88	—	1200-0-1200	1090	225	180	117	GGV-2†	Leads	Leads	4 ³ / ₄	4	5 ¹ / ₈	3	4 ¹ / ₁₆	13

* These are maximum continuous ratings in normal applications.

** These units may be operated with ungrounded center tap for full wave bridge applications. Secondary center tap must be grounded on others.

† GGV-2 is same as GGV except secondary leads exit at top of transformer shield.



POWER TRANSFORMERS

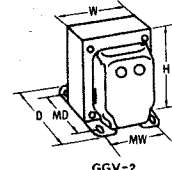
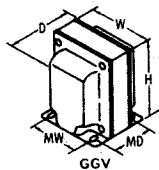
SILICON RECTIFIER POWER: 117V 50/60 Hz PRIMARY

These transformers have been designed to fill the gap between the electronic tube—high voltage, low current—type of transformer and the transistor—low voltage, high current—type unit. The two 6.3 volt windings may be connected in series or in parallel to provide either 6.3 volts or 12.6 volts CT. They may also be used with suitable rectifiers to supply a low voltage DC source.

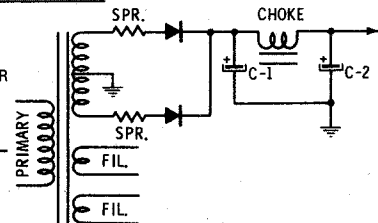
Section	TM Part No.	Secondary No. 1		Secondary No. 2		Secondary No. 3		Termination		Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	MADC	Volts	Amps RMS	Volts	Amps RMS	Primary	Secondary		H	W	D	MW	MD	
A	24R100	400 C.T.	400	6.3	3.0	6.3	3.0	Leads	Leads	GGV	4 1/4	3 7/16	4 1/4	2 3/4	3 7/16	7.1
	24R101	300 C.T.	600	6.3	2.5	6.3	2.5	Leads	Leads	GGV	4 1/4	3 7/16	4 1/4	2 3/4	3 7/16	7.1
	23V378	54 C.T.	500	6.3	0.5	—	—	Leads	Leads	GGV	2 5/8	2 1/4	2 9/16	1 3/4	1 5/8	1.7
	24R102	200 C.T.	800	6.3	2.0	6.3	2.0	Leads	Leads	GGV	4 1/4	3 7/16	4 1/4	2 3/4	2 15/16	6.9
	24R103	100 C.T.	1600	6.3	1.5	6.3	1.5	Leads	Leads	GGV	4 1/4	3 7/16	3 7/8	2 3/4	2 11/16	6.0
B	24R104	80 C.T.	2000	6.3	1.5	6.3	1.5	Leads	Leads	GGV	4 1/4	3 7/16	4	2 3/4	2 13/16	6.5
	24R105	60 C.T.	2500	6.3	1.5	6.3	1.5	Leads	Leads	GGV	4 1/4	3 7/16	4	2 3/4	2 13/16	6.5

TYPICAL OPERATION CHART

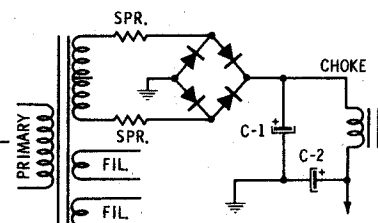
The following chart has been prepared to simplify the designing of complete low voltage power supplies for the silicon rectifier power transformer shown above. The DC Voltages are average and may vary slightly in individual units, due to variations in component values.



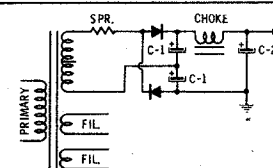
Part No.	DC Output		Filter Input	Choke Part No.	C-1 In MFD	C-2 In MFD	Typical Silicon Rectifiers (XX)
24R105	31	2,500	Capacitive	20C26	500	500	1N1124 R, 1N1621, 1N1342/A
24R105	23	4,000	Inductive	20C01	—	1,000	1N1342 A, 1N1621, 10J2(I.R.)
24R104	47	2,000	Capacitive	20C25	500	500	1N1086, 20LA, 1N1124/R, 1N1343/A, 1N1620R
24R104	33	3,000	Inductive	20C01	—	1,000	1N1124/R, 1N1342/A, 1N1621, 10J2(I.R.)
24R103	53	1,600	Capacitive	20C25	200	200	1N1086/20LA, 1N1124/R, 1N1344/A
24R103	41	2,600	Inductive	20C26	—	300	1N1124/R, 1N1344/A
24R102	105	800	Capacitive	20C25	40	150	1N611/A, 1N1087/30LA, 1N1117, 1N1565
24R102	86	1,400	Inductive	20C25	—	350	1N1117, 1N1087/30LA
24R101	148	600	Capacitive	26C81	8	20	1N1095, 1N1491, 1N1104, 1N2614, 1N4433
24R101	130	1,000	Inductive	20C25	—	125	*1N611/A, 1N1541, 1N1565A
24R100	192	400	Capacitive	26C81	10	10	*1N604, 1N1084, 1N540, 1N2483, 1N1103
24R100	173	570	Inductive	20C25	—	200	*1N256, 1N1696, 1N605/A, 1N540, 1N2483
24R105	70	1,060	Capacitive	20C25	200	200	1N610, 1N3189, 1N1540, 1N1564A
24R105	50	2,000	Inductive	20C25	—	500	1N1087, 1N1086, 1N1124/R
24R104	93	810	Capacitive	20C25	100	100	1N610, 1N3189, 1N1540, 1N1564A
24R104	71	1,500	Inductive	20C25	—	250	1N1087, 1N1086, 1N1124/R
24R103	100	880	Capacitive	20C25	40	80	1N610, 1N3189, 1N1540, 1N1564A
24R103	88	1,160	Inductive	20C25	—	300	1N1087, 1N1086, 1N1124/R
24R102	247	377	Capacitive	26C92	30	40	1N604, 1N1084, 1N256, 1N1696
24R102	172	625	Inductive	26C81	—	250	1N540, 1N1103, 1N1169, 1N2483, 1N2613
24R101	322	305	Capacitive	26C91	8	20	1N256, 1N1696, 1N605/A
24R101	285	425	Inductive	20C25	—	125	1N256, 1N1696, 1N605/A
24R100	502	150	Capacitive	20C68	8	10	*1N604, 1N1084, 1N256, 1N1696
24R100	330	302	Inductive	20C70	—	20	*1N604, 1N1084, 1N256, 1N1696
24R105	150	553	Capacitive	26C81	500	200	1N540, 1N1103, 1N1169, 1N2483, 1N2613
24R104	212	390	Capacitive	26C95	150	80	1N540, 1N1103, 1N1169, 1N2483, 1N2613
24R103	240	325	Capacitive	26C93	80	16	1N540, 1N1103, 1N1169, 1N2483, 1N2613
24R102	536	188	Capacitive	20C94	80	30	1N547, 1N1096, 1N2071, 1N2484
24R101	802	142	Capacitive	26C89	60	20	*1N547, 1N1096, 1N2071, 1N2484
24R100	1,040	75	Capacitive	20C71	8	2	*1N547, 1N1096, 1N2071, 1N2484



†SPR = Surge Protection Resistance required with a capacitive input filter.



†SPR = Surge Protection Resistance required with a capacitive input filter.



† SPR—SURGE PROTECTION RESISTORS are required with capacitive input filters. Allow 3.5 ohms per 70 volts RMS applied voltage, then subtract the secondary winding DC resistance from this value. The remainder will be the total resistance required for the SPR Resistance.

* To meet the higher peak inverse voltage required connect 2 rectifiers in series in each leg of the circuit.

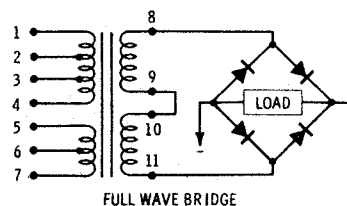
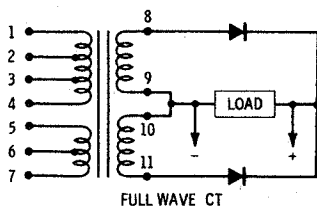
XX Selection of the silicon rectifiers recommended in this chart was based on a 50°C maximum rectifier temperature, for higher temperature operation refer to manufacturer's specifications.

POWER TRANSFORMERS

UNIVERSAL RECTIFIER: 117 V 50/60 Hz PRIMARY-LUG TERMINATIONS-STYLE LHV.

Each Selenium Rectifier Transformer listed in this section has terminal numbering and winding arrangement as shown in schematics. Primary connections are made to terminals 1, 2, 3, 4, 5, 6 and 7. The winding connected to terminals 5, 6 and 7 is a separate isolated primary winding, designed for the purpose of extending the voltage range of the transformer. This is accomplished by connecting the winding in series aiding or in series bucking with terminals 2, 3 or 4. Two identical secondary windings are connected to terminals 8 and 9 and to 10 and 11. Complete connection data supplied with each unit.

Section	TM Part No.	Fullwave Rectifier Circuits	Secondary AC Volts	Res. or Ind. Load		Capacitive Load		Recommended Capacitor	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
				DC Volts	DC Amps	DC Volts	DC Amps		H	W	D	MW	MD	
A	23V60	C.T. Bridge	11.7 to 29.4 11.1 to 28.5	3.3 to 11.2 7.4 to 23.0	2.0 1.25	3.5 to 12.8 8.7 to 30.0	2.0 1.25	1000 mfd 500 mfd	3 1/8	2 1/8	2 1/8	2	2 1/8	2.5
	23V61	C.T. Bridge	12.2 to 29.7 12.2 to 29.7	3.7 to 11.1 8.9 to 24.3	4.0 2.0	4.0 to 14.7 10.8 to 33.0	4.0 2.0	2000 mfd 1000 mfd	3 7/16	2 13/16	3 1/8	2 1/4	2 3/8	3.75
	23V62	C.T. Bridge	11.7 to 29.2 11.8 to 29.2	4.3 to 12.0 8.8 to 24.0	8.0 4.0	4.5 to 14.5 11.4 to 32.4	8.0 4.0	4000 mfd 2000 mfd	3 13/16	3 3/16	4 1/8	2 1/2	3 3/8	7.75
	23V63	C.T. Bridge	12.0 to 29.8 12.0 to 29.6	3.4 to 11.5 8.4 to 24.0	12.0 6.0	3.9 to 14.4 10.0 to 32.0	12.0 6.0	6000 mfd 3000 mfd	4 1/4	3 9/16	4 1/4	2 3/4	3 1/4	8.0
	23V64	C.T. Bridge	12.2 to 29.7 12.1 to 29.2	3.9 to 11.4 8.7 to 23.7	15.0 8.0	4.4 to 14.5 10.4 to 32.5	15.0 8.0	7500 mfd 4000 mfd	4 1/2	3 3/8	5 1/8	3	4 3/8	13.50
B	23V66	C.T.	12.2 to 29.1	3.9 to 11.4	22.5	4.0 to 14.3	22.5	11250 mfd	5 3/8	4 1/16	4 1/2	4 1/2	3 3/4	14.0
	23V431	C.T. Bridge	12.2 to 29.2 12.1 to 29.2	3.9 to 11.4 8.7 to 23.7	15.5 8.0	4.4 to 14.8 10.4 to 32.5	15.5 8.0	4000 mfd	4 9/16	3 3/4	5	2 15/16	3 3/4	12.6
	23V434	C.T. Bridge	12.2 to 29.1 12.2 to 29.0	3.9 to 11.4 8.6 to 23.5	22.5 12.0	4.0 to 14.3 10.8 to 33.0	22.5 12.0	11250 mfd 6000 mfd	5 1/8	4 3/8	5 1/8	3 1/2	4 1/4	20.5
	23V406	C.T. Bridge	23.5 to 60.0 23.5 to 60.0	9.0 to 25.0 20.5 to 53.0	1.0 0.5	11.0 to 34.0 27.0 to 74.0	1.0 0.5	1500 mfd 600 mfd	3 1/8	2 1/2	3 3/8	2	2 1/4	2.7
	23V407	C.T. Bridge	24.0 to 59.0 24.0 to 59.0	9.0 to 25.0 20.5 to 52.5	2.0 1.0	11.5 to 34.0 28.5 to 73.5	2.0 1.0	2500 mfd 1500 mfd	3 7/16	2 13/16	3 11/16	2 1/4	2 1/2	4.1
	23V408	C.T. Bridge	23.0 to 58.0 23.0 to 58.0	9.0 to 25.0 20.0 to 51.5	4.0 2.0	11.0 to 33.5 27.0 to 72.5	4.0 2.0	3000 mfd 1500 mfd	3 13/16	3 1/8	4 1/2	2 1/2	3 1/16	6.9
	23V65	C.T. Bridge	25.0 to 53.0	8.0 to 44.0	8.0 4.375	25.0 to 63.0	8.0	4000 mfd	5 1/4	4 1/16	6	3 1/2	5 1/8	25.0
	23V67	C.T. Bridge	25.0 to 53.0	18.0 to 43.5	12.0 5.625	24.0 to 60.0	12.0	6000 mfd	6 5/8	5 3/8	5 1/4	4 1/4	4 1/2	23.5



117V 50/60 Hz PRIMARY—TAPPED SECONDARY—WITH LEADS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
C	23V360	12.0 C.T.	10.0	1500	LAV	3 3/4	3 1/8	3 1/2	2 1/2	2 1/8	6.2
	23V267	*12.6	1.0	1500	DAF	1 1/8	2 1/4	1 1/8	1 21/32	—	0.9
	23V100	17.0/18.0	3.0	1500	LAV	3 1/8	2 9/16	2 13/16	2	2 3/8	3.2
	23V101	17.0/18.0	6.0	1500	LAV	3 13/16	3 5/16	3 3/16	2 1/2	2 11/16	5.5
	23V210	18.4 C.T.	0.9	1500	BAH	2	3 1/16	1 1/4	2 13/16	—	0.8
D	23V383	20.0 C.T.	1.0	1500	BAH	2	3 1/4	2 1/8	2 13/16	—	1.4
	23V435	28 C.T./56 C.T.	4/2*	1500	LHV	3 13/16	3 3/16	3 1/4	2 1/2	2 5/8	5.7
	23V89	72.0 C.T.	0.075	1500	BAH	1 1/8	2 13/16	1 1/8	2 3/8	—	0.6
	23V122	80.0 C.T.	1.2	1500	GGV	3 1/2	2 7/8	3 1/2	2 1/2	2 3/8	4.5

*Primary Taped at 99 Volts

POWER TRANSFORMERS

115/230V 50/60 Hz PRIMARY—TAPPED SECONDARY—WITH LEADS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
A	23V433	7/8/9	7.0	1500	LAV	3 ⁷ / ₁₆	2 ⁷ / ₈	2 ⁵ / ₈	2 ¹ / ₄	2 ¹ / ₈	2.9
	23V357	17.0/18.0	3.0	1500	CAV	3 ¹ / ₈	2 ⁹ / ₁₆	2 ¹³ / ₁₆	1 ⁵ / ₈	2 ³ / ₈	3.2
	23V356	24.0 C.T.	0.2	1500	BAH	1 ³ / ₈	2 ³ / ₈	1 ¹ / ₂	2	—	0.45
	23V477	24.0 C.T.	0.4	1500	BAH	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ¹ / ₂	2 ³ / ₈	—	0.75
	23V358	6.5/13.0/19.5/26.0	3.0	1500	LAV	3 ¹ / ₂	2 ⁷ / ₈	2 ¹¹ / ₁₆	2 ¹ / ₄	2 ³ / ₁₆	3.5
	23V359	27.0/30.0/33.0/36.0	3.0	1500	LAV	3 ¹³ / ₁₆	3 ⁵ / ₈	3 ³ / ₈	2 ¹ / ₂	2 ¹¹ / ₁₆	5.6

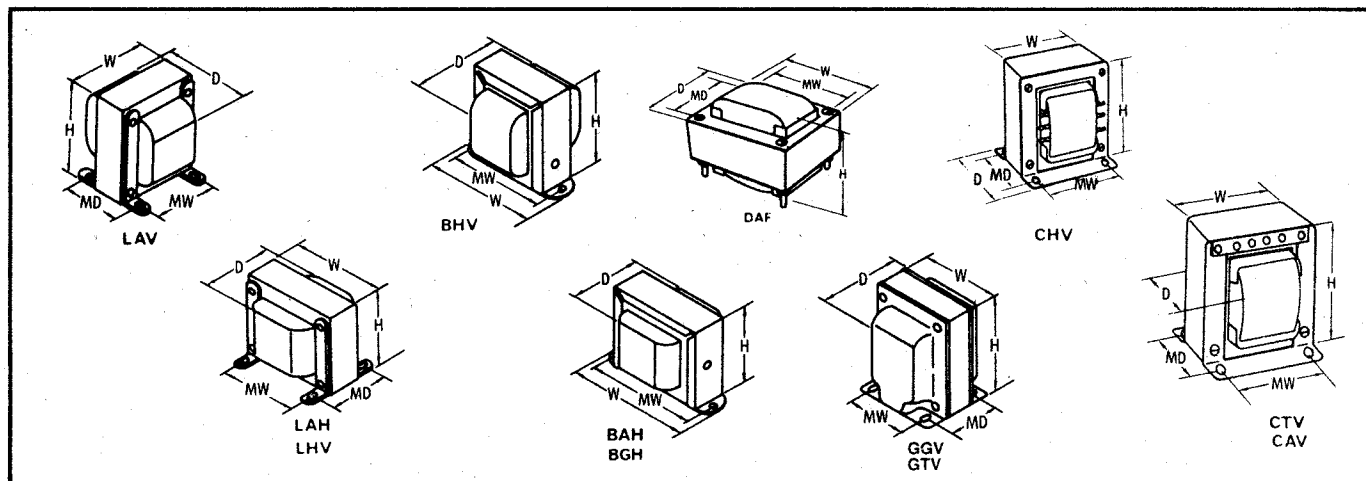
SIGNALING—115V 60 Hz PRIMARY—TAPPED SECONDARY—WITH LEADS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
B	23V03	4/8/12/16/20/24	2.0 to 2.8	1500	BAH	2 ¹ / ₄	3 ¹¹ / ₁₆	2 ¹ / ₂	3 ¹ / ₈	—	1.7
	23V04	4/8/12/16/20/24	4.0 to 5.6	1500	LAV	3 ¹ / ₂	2 ⁷ / ₈	2 ⁹ / ₁₆	2 ¹ / ₄	2 ¹ / ₁₆	3.1
	23V42	4/8/12/16/24	9.0 to 10.5	1500	GTV	4 ⁵ / ₈	4	5	3	3 ¹ / ₂	10.0

DUAL SECONDARIES—115/230V 50/60 Hz PRIMARY

These transformers all have 115V/230V, 50/60 Hz. primaries, two separate secondaries and solder terminals. The secondaries may be connected in series or parallel and used to control all types of low-voltage devices such as bells, lamps, relays, solenoids, etc. The secondary voltages may be reduced to half rated by applying 115V to 230V primary.

Section	TM Part No.	Secondary Outputs						VA Capacity	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Each Winding		Sec. in Series		Sec. in Parallel				H	W	D	MW	MD	
		Volts	Amps	Volts	Amps	Volts	Amps								
C	23V50	6.0	1.0	12	1.0	6.0	2.0	12	BHV	2 ³ / ₈	2 ⁷ / ₈	1 ⁷ / ₈	2 ³ / ₈	—	1.0
	23V51	6.0	2.0	12	2.0	6.0	4.0	24	BHV	2 ³ / ₄	3 ¹ / ₈	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	23V52	12	2.0	24	2.0	12	4.0	48	BHV	3 ¹ / ₈	3 ⁹ / ₁₆	2 ³ / ₈	3 ¹ / ₈	—	2.5
	23V53	12	4.0	24	4.0	12	8.0	96	CHV	3 ⁷ / ₁₆	2 ⁷ / ₈	3 ¹ / ₈	2 ¹ / ₄	2 ³ / ₈	4.3
	23V54	12	8.0	24	8.0	12	16	192	CHV	4 ³ / ₁₆	3 ¹ / ₂	3 ¹ / ₂	2 ³ / ₄	2 ¹ / ₈	8.0
D	23V388	24	0.25	48	0.25	24	0.5	12	BHV	2 ³ / ₈	2 ⁷ / ₈	1 ⁷ / ₈	2 ³ / ₈	—	1.0
	23V389	24	0.50	48	0.50	24	1.0	24	BHV	2 ³ / ₄	3 ¹ / ₈	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	23V390	24	1.0	48	1.0	24	2.0	48	BHV	3 ¹ / ₈	3 ⁹ / ₁₆	2 ³ / ₈	3 ¹ / ₈	—	2.5
	23V391	24	2.0	48	2.0	24	4.0	96	CHV	3 ⁷ / ₁₆	2 ⁷ / ₈	3 ¹ / ₈	2 ¹ / ₄	2 ³ / ₈	4.3
	23V392	24	4.0	48	4.0	24	8.0	192	CHV	4 ³ / ₁₆	3 ¹ / ₂	3 ¹ / ₂	2 ³ / ₄	2 ¹ / ₈	8.0



POWER TRANSFORMERS

117V 50/60 Hz PRIMARY—MULTI—TAPPED SECONDARY—WITH LEADS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
A	23V103	6.3/13/19.5/26	3.0	1500	LAV	3 1/2	2 7/8	2 11/16	2 1/4	2 3/16	3.5
	23V107	7/8/9	7.0	1500	LAV	3 1/2	2 7/8	2 11/16	2 1/4	2 3/16	3.5
	23V104	24/27/30/33/36	3.0	1500	LAV	3 13/16	3 9/16	3 3/16	2 1/2	2 11/16	5.6
	23V105	24/27/30/32/36	8.0	1500	LAV	4 5/8	3 13/16	3 13/16	3	3 1/2	10.75
	23V394	24/26/28/30	15.0	1500	LAH▲	3 13/16	4 1/2	5 1/2	3 3/4	4 3/8	17.0

▲Secondary Leads Have Terminals attached.

117V 50/60 Hz PRIMARY—DUAL SECONDARIES—WITH LEADS

Section	TM Part No.	Primary Volts	Secondary 1		Secondary 2		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Volts	Amps	Volts	Amps			H	W	D	MW	MD	
B	23V121*	117	*13/18*	.900	13/18*	.900	1500	GGV	3 1/8	3	2 1/2	2	2	2.7
	23V436	117	16 C.T.	.500	6.3	.500	1500	BGH	1 5/8	2 13/16	1 15/16	2 3/8		.5
	23V437	117	16 C.T.	1.0	6.3	.500	1500	BGH	1 31/32	3 3/16	1 15/16	2 13/16		1.0
	23V438	117	18 C.T.	.500	6.3	.500	1500	BGH	1 5/8	2 13/16	1 23/32	2 3/8		.6
C	23V439	117	18 C.T.	1.0	6.3	.500	1500	BGH	1 31/32	3 3/16	2 3/32	2 13/16		1.2
	23V440	117	20 C.T.	.200	6.3	.200	1500	BGH	1 3/8	2 3/8	1 1/2	2		.4
	23V441	117	20 C.T.	.500	6.3	.500	1500	BGH	1 3/8	2 13/16	1 23/32	2 3/8		.6
	23V442	117	20 C.T.	1.00	6.3	.500	1500	BGH	1 31/32	3 3/16	2 3/32	2 13/16		1.2
	23V443	117	24 C.T.	.400	6.3	.300	1500	BGH	1 5/8	2 13/16	1 23/32	2 3/8		.6
D	23V444	117	24 C.T.	1.00	6.3	.500	1500	BGH	2 5/32	3 3/4	2 1/8	3 1/8		1.4
	23V445	117	26 C.T.	.200	6.3	.200	1500	BGH	1 5/8	2 13/16	1 15/32	2 3/8		.5
	23V446	117	26 C.T.	.500	6.3	.500	1500	BGH	1 31/32	3 3/16	1 15/16	2 13/16		1.0
	23V447	117	26 C.T.	1.00	6.3	.500	1500	BGH	2 5/32	3 3/4	2 1/8	3 1/8		1.4
	23V448	117	30 C.T.	.400	6.3	.300	1500	BGH	1 5/8	2 13/16	1 23/32	2 3/8		.6
E	23V449	117	30 C.T.	.500	6.3	.500	1500	BGH	1 31/32	3 3/16	1 15/16	2 13/16		1.0
	23V450	117	36 C.T.	.500	6.3	.500	1500	BGH	1 31/32	3 3/16	2 3/32	2 13/16		1.2
	23V451	117	36 C.T.	1.00	6.3	.500	1500	BGH	2 5/32	3 3/4	2 3/8	3 1/8		1.8
	23V102	117	36	3.0	36	3.0	1500	LAV	4 5/8	3 3/4	3 3/4	3	3 1/16	9.7
	23V452	117	40 C.T.	.800	6.3	.500	1500	BGH	2 5/32	3 3/4	2 1/4	3 1/8		1.6
	23V453	117	44 C.T.	.400	6.3	.500	1500	BGH	1 31/32	3 3/16	2 3/32	2 13/16		1.2
F	23V454	117	50 C.T.	.500	6.3	.500	1500	BGH	2 5/32	3 3/4	2 1/8	3 1/8		1.4
	23V455	117	50 C.T.	.800	6.3	1.00	1500	BGH	2 19/32	4	2 11/32	3 9/16		2.3
	23V456	117	60 C.T.	.600	6.3	1.00	1500	BGH	2 19/32	4	2 11/32	3 9/16		2.3
	23V457	117	60 C.T.	1.00	6.3	1.00	1500	BGH	2 19/32	4	2 11/32	3 9/16		2.3

*Secondary Voltage Varied By Means Of Primary Taps.

TRIPLE SECONDARIES—117V 50/60 Hz PRIMARY—WITH LEADS

These transformers all have **three** separate 12-volt secondaries, one center-tapped. Various combinations of voltage and current are possible by series or parallel hook-up.

Section	TM Part No.	Each Secondary		Secondaries in Series		Secondaries in Parallel		Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps	Volts	Amps	Volts	Amps		H	W	D	MW	MD	
G	23V236	12	0.10	36	0.10	12	0.30	BAV	1 1/4	2	1 1/2	1 3/4	—	0.36
	23V237	12	0.15	36	0.15	12	0.45	BAV	2	2 3/8	1 3/4	2	—	0.60
	23V238	12	0.25	36	0.25	12	0.75	BAV	2 5/8	2 7/8	2	2 3/8	—	0.85
	23V239	12	0.50	36	0.50	12	1.50	BAV	2 5/8	2 7/8	2 1/4	2 3/8	—	1.25

POWER TRANSFORMERS

MULTIPLE PRIMARY AND SECONDARY TAPS—WITH LEADS

Section	TM Part No.	Primary Volts (Blk/Blk/Yel)	Secondary				Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
			Volts*	Amps				H	W	D	MW	MD	
A	23V115	117	7-40*	0.035	—	—	BAH	1 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{8}$	2	—	.5
	23V116	117	7-40*	0.100	—	—	BAH	1 $\frac{1}{8}$	2 $\frac{3}{16}$	1 $\frac{1}{4}$	2 $\frac{3}{8}$	—	.7
	23V117	117	7-40*	0.300	—	—	BAH	2 $\frac{1}{4}$	3 $\frac{11}{16}$	2	3 $\frac{1}{8}$	—	1.5
	23V118	117	7-40*	0.750	—	—	BAH	2 $\frac{3}{8}$	4	2 $\frac{1}{4}$	3 $\frac{9}{16}$	—	2.4
	23V119	117	7-40*	1.0	—	—	GGV	3 $\frac{1}{4}$	2 $\frac{11}{16}$	3	2	2 $\frac{1}{8}$	3.2
B	23V411	117	6.7-42**	1.0	—	—	GGV	3 $\frac{1}{8}$	2 $\frac{1}{2}$	3 $\frac{1}{8}$	2	2 $\frac{1}{8}$	3.2
	23V410	117	6.7-42**	0.750	—	—	BAH	2 $\frac{3}{8}$	4	2 $\frac{3}{8}$	3 $\frac{9}{16}$	—	2.3
	23V409	117	6.7-42**	0.035	—	—	BAH	1 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{16}$	2	—	.45

*The Following Secondary Voltages are Available by Selective Connection of Taps — 7, 7.5, 8, 8.5, 9.5, 10, 14, 15, 16, 17, 19, 20, 21, 22.5, 24, 25.5, 28, 28.5, 30, 32, 34, 38, 40 — Refer to Schematic Packed with Unit.

**The Following Secondary Voltages are Available by Selective Connection of Taps — 6.7, 7.3, 8, 9, 9.5, 10.5, 13.5, 14.5, 16, 18, 19, 20, 21, 22, 24, 26.5, 27, 28, 29, 31.5, 32, 35.5, 37, 42 — Refer to Schematic Packed with Unit.

117V 50/60 Hz PRIMARY—SINGLE SECONDARY—WITH LEADS

12 VOLTS

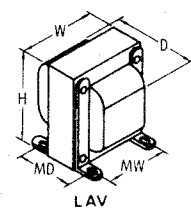
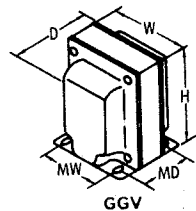
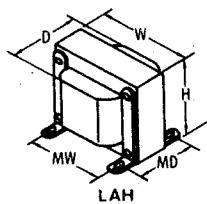
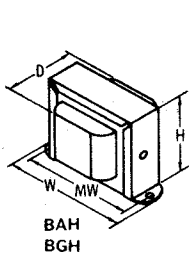
Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
C	23V252	12	0.150	1500	BAH	1 $\frac{1}{2}$	2 $\frac{1}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	—	0.25
	23V253	12	0.300	1500	BAH	1 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{2}$	2	—	0.35
	23V254	12	0.700	1500	BAH	1 $\frac{1}{8}$	2 $\frac{1}{8}$	1 $\frac{1}{2}$	2 $\frac{3}{8}$	—	0.6
	23V255	12	1.2	1500	BAH	2	3 $\frac{1}{2}$	1 $\frac{1}{8}$	2 $\frac{3}{16}$	—	0.85
	23V415	12	2.0	1500	BAH	2.0	3 $\frac{1}{2}$	2 $\frac{1}{8}$	2 $\frac{3}{16}$	—	1.3
D	23V416	12	4.0	1500	BAH	2 $\frac{1}{8}$	4.0	2 $\frac{1}{2}$	3 $\frac{1}{16}$	—	2.3
	23V417	12	6.0	1500	LAV	3 $\frac{1}{16}$	2 $\frac{11}{16}$	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{8}$	3.4
	23V418	12	8.0	1500	LAV	3 $\frac{1}{16}$	3 $\frac{1}{8}$	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{8}$	4.3

14 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
E	23V470	14 C.T.	1.0	1500	BAH	1 $\frac{1}{2}$	3 $\frac{1}{4}$	1 $\frac{1}{4}$	2 $\frac{3}{16}$	—	1.2
	23V471	14 C.T.	2.0	1500	BAH	2 $\frac{1}{4}$	3 $\frac{11}{16}$	1 $\frac{1}{8}$	3 $\frac{1}{8}$	—	1.5
	23V472	14 C.T.	6.0	1500	LAV	3 $\frac{1}{2}$	2 $\frac{1}{8}$	2 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{1}{8}$	4

20 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
F	23V473	20 C.T.	1.0	1500	BAH	2 $\frac{1}{4}$	3 $\frac{11}{16}$	1 $\frac{5}{16}$	3 $\frac{1}{8}$	—	1.5
	23V474	20 C.T.	2.0	1500	BAH	2 $\frac{3}{16}$	4	2 $\frac{1}{4}$	3 $\frac{9}{16}$	—	2.5
	23V475	20 C.T.	6.0	1500	LAV	3 $\frac{1}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{8}$	5.7
	23V476	20 C.T.	10.0	1500	LAV	4 $\frac{1}{4}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	7.4



POWER TRANSFORMERS

117V 50/60 Hz PRIMARY—SINGLE SECONDARY—WITH LEADS (cont'd)

24 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
A	23V153	24	0.04	500	MAH	$\frac{7}{8}$	$1\frac{1}{16}$	1	—	—	0.1
	23V256	24 C.T.	0.085	1500	BAH	$1\frac{3}{4}$	$2\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{4}$	—	0.25
	23V257	24 C.T.	0.200	1500	BAH	$1\frac{3}{8}$	$2\frac{3}{8}$	$1\frac{3}{4}$	2	—	0.35
	23V258	24 C.T.	0.400	1500	BAH	$1\frac{5}{8}$	$2\frac{3}{8}$	$1\frac{3}{8}$	2	—	0.6
	23V259	24 C.T.	0.700	1500	BAH	2	$3\frac{1}{4}$	$1\frac{3}{4}$	$2\frac{13}{16}$	—	0.85
B	23V478	24 C.T.	2.0	1500	BAH	$2\frac{9}{16}$	4	$2\frac{1}{4}$	$3\frac{9}{16}$	—	2.3
	23V419	24 C.T.	4.0	1500	LAV	$3\frac{13}{16}$	$3\frac{1}{8}$	$2\frac{13}{16}$	$2\frac{1}{2}$	$2\frac{1}{8}$	4.0
	23V420	24 C.T.	6.0	1500	LAV	$4\frac{3}{16}$	$3\frac{7}{16}$	3.0	$2\frac{3}{4}$	$2\frac{1}{4}$	5.7
	23V421	24 C.T.	8.0	1500	LAV	$4\frac{3}{16}$	$3\frac{7}{16}$	$3\frac{3}{8}$	$2\frac{3}{4}$	$2\frac{1}{4}$	7.3
	23V422	24 C.T.	12.0	1500	LAV	$4\frac{9}{16}$	$3\frac{3}{4}$	$4\frac{1}{8}$	3.0	$3\frac{1}{4}$	11.5

28 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
C	23V379	28 C.T.	0.085	1500	BAH	$1\frac{1}{4}$	$2\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{4}$	—	0.25
	23V380	28 C.T.	0.175	1500	BAH	$1\frac{3}{8}$	$2\frac{3}{8}$	$1\frac{3}{8}$	2	—	0.35
	23V381	28 C.T.	0.300	1500	BAH	$1\frac{5}{8}$	$2\frac{7}{8}$	$1\frac{1}{2}$	$2\frac{3}{8}$	—	0.6
	23V382	28 C.T.	0.800	1500	BAH	2	$3\frac{1}{4}$	2	$2\frac{13}{16}$	—	1.0
	23V423	28 C.T.	1.0	1500	BAH	2.0	$3\frac{1}{4}$	$2\frac{1}{8}$	$2\frac{13}{16}$	—	1.4
D	23V424	28 C.T.	2.0	1500	LAV	$3\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{1}{2}$	2.0	$2\frac{1}{16}$	2.9
	23V425	28 C.T.	4.0	1500	LAV	$3\frac{13}{16}$	$3\frac{1}{8}$	$3\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{1}{2}$	5.3
	23V426	28 C.T.	6.0	1500	LAV	$4\frac{3}{16}$	$3\frac{7}{16}$	$3\frac{1}{2}$	$2\frac{3}{4}$	$2\frac{1}{8}$	7.0

30 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
E	23V479	30 C.T.	1.0	1500	BAH	$2\frac{1}{4}$	$3\frac{11}{16}$	2	$3\frac{1}{8}$	—	1.5
	23V480	30 C.T.	2.0	1500	LAV	$3\frac{1}{8}$	$2\frac{9}{16}$	$2\frac{1}{8}$	2	$2\frac{1}{8}$	3.2
	21F190	30	3.0	1500	GGV	$3\frac{1}{2}$	$2\frac{13}{16}$	$3\frac{3}{8}$	$2\frac{1}{4}$	$2\frac{7}{16}$	4.2
	23V481	30 C.T.	6.0	1500	LAV	$4\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$2\frac{3}{4}$	$2\frac{1}{4}$	7.4

35 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
F	23V461	35 C.T.	0.1	1500	BAH	$1\frac{5}{8}$	$2\frac{13}{16}$	$1\frac{7}{16}$	$2\frac{3}{8}$	—	.35
	23V462	35 C.T.	0.5	1500	BAH	$2\frac{1}{4}$	$3\frac{11}{16}$	$1\frac{1}{8}$	$3\frac{3}{8}$	—	1.0
	23V463	35 C.T.	2.0	1500	LAV	$3\frac{1}{2}$	$2\frac{7}{8}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{8}$	3.5

36 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
G	23V384	36 C.T.	0.065	1500	BAH	$1\frac{1}{4}$	$2\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{4}$	—	0.25
	23V385	36 C.T.	0.135	1500	BAH	$1\frac{3}{8}$	$2\frac{3}{8}$	$1\frac{3}{8}$	2	—	0.35
	23V386	36 C.T.	0.300	1500	BAH	$1\frac{5}{8}$	$2\frac{7}{8}$	$1\frac{1}{2}$	$2\frac{3}{8}$	—	0.6
	23V387	36 C.T.	0.550	1500	BAH	2	$3\frac{1}{4}$	$1\frac{5}{8}$	$2\frac{13}{16}$	—	1.0
	23V427	36 C.T.	1.0	1500	BAH	$2\frac{1}{8}$	$3\frac{3}{4}$	$2\frac{1}{4}$	$3\frac{1}{8}$	—	2.0
H	23V428	36 C.T.	2.0	1500	LAV	$3\frac{7}{16}$	$2\frac{13}{16}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{8}$	3.5
	23V429	36 C.T.	4.0	1500	LAV	$4\frac{3}{16}$	$3\frac{7}{16}$	$2\frac{1}{8}$	$2\frac{3}{4}$	$2\frac{1}{8}$	6.0
	23V430	36 C.T.	6.0	1500	LAV	$4\frac{9}{16}$	$3\frac{3}{4}$	$3\frac{1}{2}$	3	$2\frac{1}{8}$	8.3

POWER TRANSFORMERS

117V 50/60 Hz PRIMARY—SINGLE SECONDARY—WITH LEADS (cont'd)

40 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
A	23V458	40 C.T.	1.0	1500	BAH	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.6
	23V459	40 C.T.	2.0	1500	LAV	3 ¹ / ₂	2 ⁷ / ₈	2 ³ / ₄	2 ¹ / ₄	2 ³ / ₈	4.0
	23V460	40 C.T.	6.0	1500	LAV	4 ⁵ / ₈	3 ¹³ / ₁₆	3 ³ / ₄	3	3	10.0

48 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
B	21F187	48 C.T.†	1.0	2500	BAH	2 ⁵ / ₈	4	2 ³ / ₈	3 ⁹ / ₁₆	—	2.3

†Primary tapped to provide secondary voltage of 45 C.T. or 48 C.T. or 51 C.T. or 54 C.T.

50 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
C	23V466	50 C.T.	1.0	1500	BAH	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.4
	23V377	50 C.T.	1.0	1500	GGV	3 ¹ / ₈	2 ¹ / ₂	2 ³ / ₄	2	1 ¹ / ₄	2.3
	23V467	50 C.T.	2.0	1500	LAV	3 ⁷ / ₈	3 ⁹ / ₁₆	2 ⁷ / ₈	2 ¹ / ₂	2 ³ / ₈	4.7

60 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
D	23V464	60 C.T.	1.0	1500	LAV	3 ¹ / ₈	2 ⁹ / ₁₆	2 ⁵ / ₈	2	2 ³ / ₈	3.4
	23V465	60 C.T.	2.0	1500	LAV	3 ⁷ / ₈	3 ⁹ / ₁₆	3 ¹ / ₈	2 ¹ / ₂	2 ³ / ₈	5.6

64 VOLTS

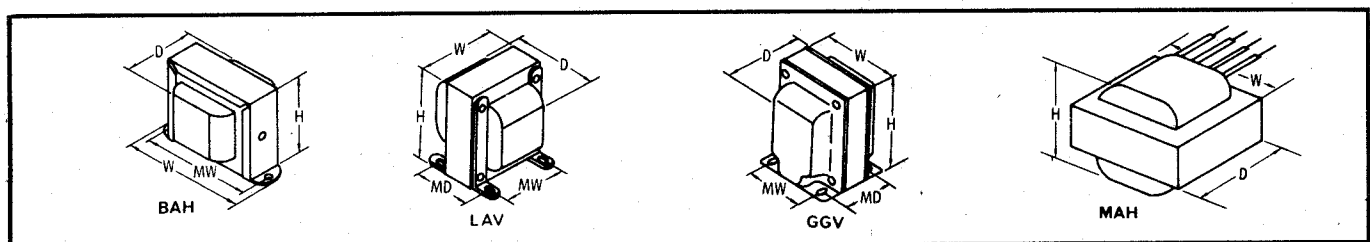
Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
E	23V215	64 C.T.	0.9	1500	BAH	2 ⁹ / ₁₆	4	2 ¹ / ₂	3 ⁹ / ₁₆	—	1.75

70 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
F	23V468	70 C.T.	1.0	1500	LAV	3 ¹ / ₂	2 ⁷ / ₈	2 ⁵ / ₈	2 ¹ / ₄	2 ¹ / ₄	4.0
	23V469	70 C.T.	2.0	1500	LAV	3 ⁷ / ₈	3 ⁹ / ₁₆	3 ¹ / ₈	2 ¹ / ₂	2 ³ / ₈	6.0

72 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
G	23V89	72 C.T.	0.075	1500	BAH	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ⁵ / ₈	2 ³ / ₈	—	0.6



POWER TRANSFORMERS

230V 50/60 Hz PRIMARY—SINGLE SECONDARY

24 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
A	23V401	24 C.T.	0.085	1500	BAH	1 1/4	2 1/8	1 1/4	1 1/4	—	0.25
	23V402	24 C.T.	0.200	1500	BAH	1 3/8	2 3/8	1 3/8	2	—	0.35
	23V403	24 C.T.	0.400	1500	BAH	1 5/8	2 7/8	1 5/8	2 3/8	—	0.60
	23V404	24 C.T.	0.700	1500	BAH	2	3 1/4	1 3/4	2 13/16	—	0.85

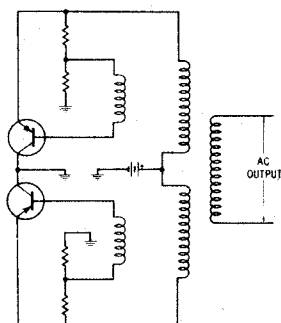
36 VOLTS

Section	TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps			H	W	D	MW	MD	
B	23V405	36 C.T.	0.065	1500	BAH	1 1/4	2 1/8	1 1/4	1 1/4	—	0.25

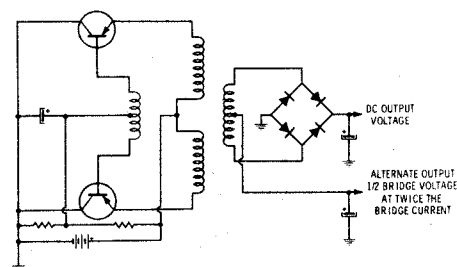
INVERTER/CONVERTER—TRANSISTOR POWER SUPPLY

Section	TM Part No.	Application	Style	DC Input Volts	Output Volts	Output MADC	Output PWR	Mounting Dimensions		Outline Dimensions			Termination	Wt. Lbs.
								MW	MD	H	W	D		
C	TR272	Converter	TMI	12.6	375/187.5	200/400	75	1 1/64	—	1	—	2	Lug	.5
	TR273	Converter	TMI	12.6	450/225	150/300	68	1 1/64	—	1	—	2	Lug	.5
	TR287	Inverter	TYL	28	110/115/125V	400 Hz	60	1 7/8	1 3/8	1 7/8	2 1/4	2	Leads	.6
	TR355	Inverter	GGV	12	110/115/125V	60 Hz	115	2 1/2	2 3/8	3 7/8	3 3/32	3 1/4	Leads	4.0
	TR354	Inverter	GGV	12	110/115/125V	60 Hz	60	2	1 7/8	3 1/8	2 3/8	2 3/8	Leads	3.0
D	TR95	Converter	DAH	12	600/300	200/400	120	3 3/4	—	2	4 1/8	3	Self	1.1
	TR462	Converter	BAH	3	1000 (1/2 wave)	—	25 μ a	1 3/8	—	3/4	1 3/8	1 3/16	Leads	.13
	TR464	Converter	MAH	4	425/500	—	50 μ a	—	—	7/16	7/16	1/2	Leads	.0625

TYPICAL DC to AC INVERTER



TYPICAL DC to DC CONVERTER



POWER TRANSFORMERS

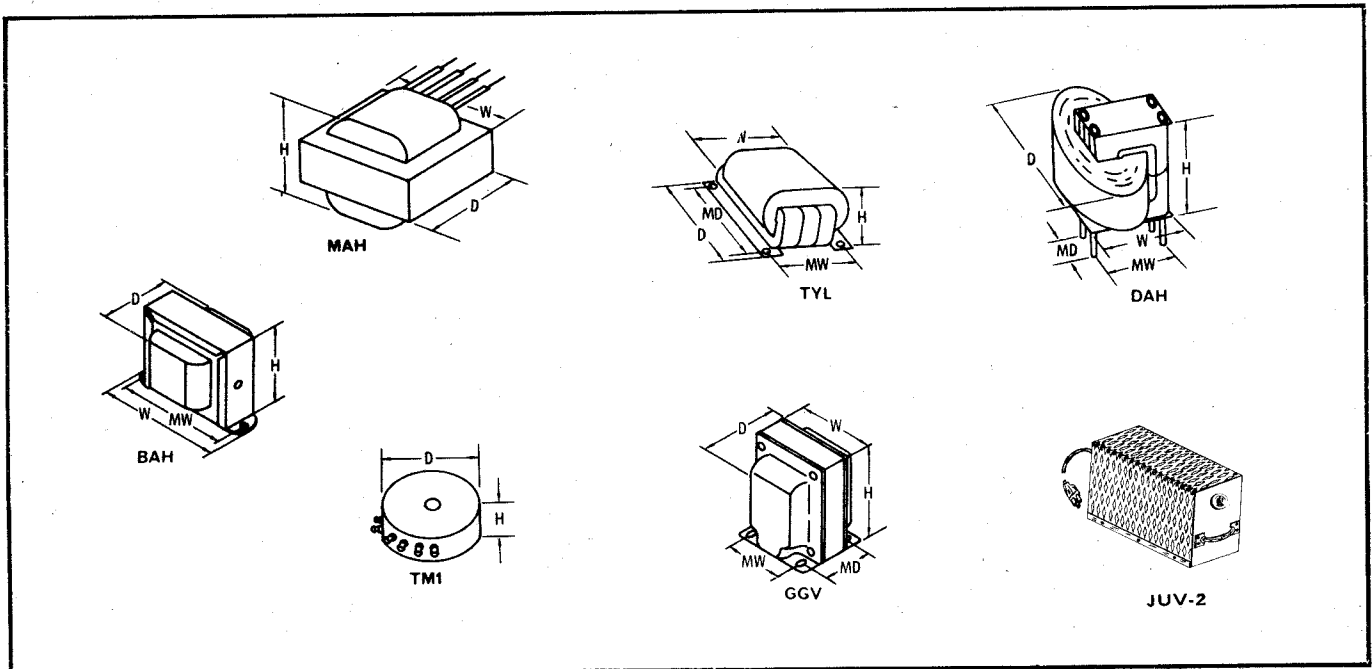
FERRORESONANT CONSTANT VOLTAGE

PRIMARY 95-130V 60 Hz Secondary 118V \pm 2%

3 CONDUCTOR LINE CORD

CORD & FRAME GROUNDED TO 3RD CONDUCTOR OF NEMA STANDARD CORD

Part No.	VA Rating	Primary	Secondary*	RMS	Style	H	W	D
FR5	30	95-130V	118	1500	JUV-2	6	4 $\frac{5}{8}$	6 $\frac{5}{8}$
FR10	60	95-130V	118	1500	JUV-2	6	4 $\frac{5}{8}$	6 $\frac{5}{8}$
FR15	120	95-130V	118	1500	JUV-2	6	4 $\frac{5}{8}$	6 $\frac{5}{8}$
FR20	250	95-130V	118	1500	JUV-2	7 $\frac{3}{8}$	6 $\frac{3}{4}$	10
FR25	500	95-130V	118	1500	JUV-2	7 $\frac{3}{8}$	6 $\frac{3}{4}$	10
FR30	750	95-130V	118	1500	JUV-2	7 $\frac{3}{8}$	6 $\frac{3}{4}$	10
FR35	1000	95-130V	118	1500	JUV-2	9 $\frac{1}{2}$	7	12
FR40	1500	95-130V	118	1500	JUV-2	9 $\frac{1}{2}$	7	12
FR45	2000	95-130V	118	1500	JUV-2	9 $\frac{1}{2}$	7	12



REPLACEMENT PARTS

THORDARSON maintains the most complete line of replacement transformers in the industry. Television flybacks, yokes, vertical output and power transformers are stocked in-depth plus thousands of other hard-to-get transformers and chokes for consumer, commercial, industrial, medical, and military applications. Your THORDARSON distributor has up-to-date TV replacement information.

FILAMENT TRANSFORMERS

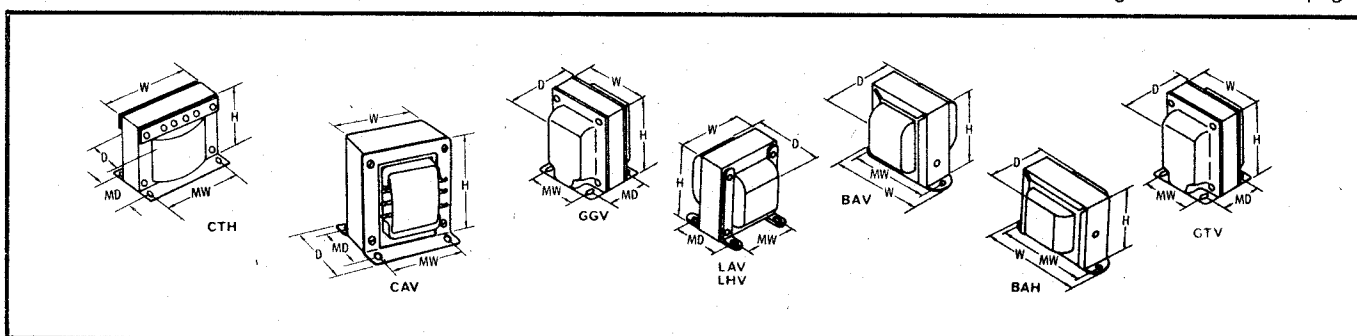
The following filament transformers are listed in order of increasing secondary voltage. Units may be used for applications where a low voltage transformer is required. The rated load current is specified as AC RMS THORDARSON has additional transformers for low voltage and related applications listed in the LOW VOLTAGE TRANSFORMER INDEX starting on page 18.

FILAMENT TRANSFORMERS—SINGLE SECONDARY

Section	TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
A	21F191	2.5 C.T.	0.3	117	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 1/16	1 1/4	—	0.3
	21F192	2.5	1.0	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.4
	21F34	2.5	1.5	117	1500	BAH	Leads	Leads	1 5/8	2 1/8	1 1/2	2 3/8	—	0.7
	21F120	2.5 C.T.	3.0	117	1500	BAH	Leads	Leads	1 5/8	2 1/8	1 3/4	2 3/8	—	0.6
	21F31	2.5 C.T.	5.0	117	7500	BAV	Leads	Leads	2 11/16	3 9/16	2 1/4	2 13/16	—	1.5
B	21F92	2.5 C.T.	6.0	117	1500	BAH	Leads	Leads	2	3 1/16	1 7/8	2 13/16	—	1.0
	21F93	2.5 C.T.	10.0	117	1500	BAH	Leads	Leads	2 9/16	3 3/4	2 1/8	3 1/8	—	1.5
	21F01	2.5 C.T.	10.0	117	2500	BAV	Leads	Leads	2 11/16	3 9/16	2	2 13/16	—	1.5
	21F103	2.5 C.T.	10.0	107/117	7500	BAV	Leads	Leads	3 1/8	3 3/8	2 1/2	3 1/8	—	2.5
	21F02	2.5 C.T.	10.0	117	10000	CAV	Leads	Leads	3 1/8	2 1/2	2 1/4	2	1 3/4	2.75
C	21F58	2.5 C.T.	10.0	117	10000	LHV	Lugs	Lugs	3 1/2	2 1/8	2 1/2	2 1/4	1 7/8	2.5
	21F122	2.5	60	117	1500	CTH	Leads	Leads	4 1/8	4 15/16	3	4 1/16	2 1/8	7.5
	21F36	5.0 C.T.	3.0	117	5000	GGV	Leads	Leads	3 1/8	2 5/8	2 1/2	2	1 1/2	2.5
	21F94	5.0 C.T.	3.0	117	1500	BAH	Leads	Leads	2	3 9/16	2	2 13/16	—	1.3
	21F03	5.0 C.T.	3.0	117	2500	BAV	Leads	Leads	2 3/8	2 1/8	1 3/4	2 3/8	—	1.0
D	21F37	5.0 C.T.	6.0	117	2500	LHV	Lugs	Lugs	3 1/8	2 1/2	2 1/2	2	2	2.25
	21F183	5.0 C.T.	6.0	107/117	2500	GGV	Leads	Leads	3 1/8	2 1/2	2 1/8	2	1 13/16	2.25
	21F04	5.0 C.T.	8.0	117	2500	CAV	Leads	Leads	3 1/8	2 1/2	2 1/4	2	1 3/4	2.5
	21F13	5.0 C.T.	10.0	117	2500	CAV	Leads	Leads	3 1/8	2 1/8	2 1/2	2	2 3/8	3.0
	26F66	5.0 C.T.	15.0	117	2500	CAV	Leads	Leads	3	2 1/2	2 1/8	2	2 1/8	3.5
E	21F20	5.0 C.T.	15.0	117	10000	CAV	Leads	Leads	4 5/8	3 3/4	3 1/4	3	2 1/2	6.75
	21F07	5.0 C.T.	21.0	117	2500	CAV	Leads	Leads	3 1/8	3 1/16	3	2 1/4	2 1/2	5.0
	21F07A	5.0 C.T.	29	117	2500	CAV	Leads	Leads	3 1/8	3 1/16	3 1/4	2 1/2	2 1/2	5.5
	21F155	5.0 C.T.	30.0	117	2500	GGV	Leads	Leads	4 5/8	3 3/4	4	3	2 1/8	7.5
	21F33	5.0 C.T.	30.0	110/115/120	2500	GTV	Terms.	Terms.	3 1/8	3 1/16	4 7/8	2 1/2	2 11/16	6.2
F	21F67	5.2 C.T.	24	117	1500	LAV	Leads	Leads	3 13/16	3 1/16	3 1/16	2 1/2	3	6.75
	21F69	6.3/5.0 Tap†	2.0	117	5000	BAH	Leads	Leads	2	3 1/16	2	2 13/16	—	1.25
	21F14	6.3/5/2.5	2.5	117	1600	BAH	Leads	Leads	2	3 1/4	1 3/4	2 13/16	—	1.5
	26F73	6.3 C.T.	0.3	117	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 5/8	1 3/4	—	0.3
	21F21	6.3	0.6	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	0.75
G	21F162	6.3 C.T.	0.6	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.4
	21F156	6.3 C.T.	0.6	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 5/8	2	—	0.4
	21F167	6.3	0.6	115/230	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 3/8	2	—	0.6
	21F200	6.3 C.T.	0.6	230	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	0.4
	21F143	6.3 C.T.	1.0	117	1500	BAH	Leads	Leads	1 3/8	2 1/8	1 1/2	2 3/8	—	0.6

†Has Faraday Shield.

Listing continued on next page



FILAMENT TRANSFORMERS

FILAMENT TRANSFORMERS—SINGLE SECONDARY (cont'd)

Section	TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
A	21F08	6.3 C.T.	1.2	117	2500	BAV	Leads	Leads	2	2 ³ / ₈	1 ¹ / ₂	2	—	0.7
	21F09	6.3 C.T.	1.2	117	2500	BAH	Leads	Leads	1 ⁵ / ₈	2 ¹ / ₈	1 ¹ / ₂	2 ¹ / ₈	—	0.7
	21F212	6.3	1.2	117	2500	BAH	*Leads	Leads	1 ⁵ / ₈	2 ¹ / ₈	1 ¹ / ₂	2 ¹ / ₈	—	0.7
	26F60	6.3	1.2	117	7000	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.25
	21F168	6.3 C.T.	1.2	115/230	2500	BAH	Leads	Leads	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ⁵ / ₈	2 ¹ / ₈	—	0.5
	26F65	6.3	1.2	6.3	5000	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.25
B	21F184†	6.3 C.T.	3.0	117	2500	LHV	Lugs	Lugs	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₂	2	1 ¹ / ₄	2.0
	21F10	6.3 C.T.	3.0	117	2500	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.25
	21F108	6.3	3.0	107/117	7000	BAV	Leads	Leads	3 ¹ / ₈	3 ⁹ / ₁₆	2 ¹ / ₈	3 ¹ / ₈	—	2.0
	21F169	6.3 C.T.	3.0	115/230	2500	BAH	Leads	Leads	1 ¹⁵ / ₁₆	3 ¹ / ₁₆	2	2 ¹³ / ₁₆	—	1.3
	21F71	6.3	4.0	117	1500	BAH	Leads	Leads	2	3 ⁹ / ₁₆	2	2 ¹³ / ₁₆	—	1.25
C	21F70	6.3	4.0	117	5000	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.1
	21F41	6.3 C.T.	4.0	107/117	2500	GGV	Leads	Leads	3 ¹ / ₈	2 ⁵ / ₈	2 ⁵ / ₈	2	1 ¹¹ / ₁₆	2.75
	21F204	6.3 C.T.	5.0	117	1500	BAH	Leads	Leads	2 ⁵ / ₈	3 ¹ / ₄	2 ¹ / ₈	3 ¹ / ₈	—	1.8
	21F148	6.3 C.T.	6.0	117	2000	BAV	Leads	Leads	3 ¹ / ₈	3 ⁹ / ₁₆	2 ¹ / ₂	3 ¹ / ₈	—	2.0
	21F59	6.3 C.T.	6.0	117	2500	LHV	Lugs	Lugs	3 ¹ / ₈	2 ¹ / ₈	2 ¹ / ₂	2	2	2.75
D	21F11	6.3 C.T.	6.0	117	1500	CAV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₂	2	1 ¹ / ₂	2.5
	21F42	6.3 C.T.	6.0	107/117	2500	GGV	Leads	Leads	3 ⁵ / ₈	3	3 ⁵ / ₈	2	2 ¹ / ₄	3.5
	21F72	6.3 C.T.	6.0	107/117	2000	BAH	Leads	Leads	2 ¹ / ₄	3 ⁵ / ₈	2 ¹ / ₂	3 ¹ / ₈	—	2.0
	21F170	6.3 C.T.	6.0	115/230	1500	BAH	Leads	Leads	2 ¹⁹ / ₃₂	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.3
	21F96	6.3 C.T.	8.0	117	1500	BAH	Leads	Leads	2 ⁵ / ₈	4	2 ¹ / ₂	3 ⁹ / ₁₆	—	2.5
E	21F74	6.3 C.T.	10.0	117	1500	GGV	Leads	Leads	3 ¹ / ₂	3	3 ¹ / ₈	2 ¹ / ₄	2	3.8
	21F12	6.3 C.T.	10.0	117	2500	CAV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₂	2	2	3.25
	21F43	6.3 C.T.	10.0	107/117	2500	LAV	Leads	Leads	3 ¹ / ₂	2 ¹ / ₈	2 ¹ / ₄	2 ¹ / ₄	2 ³ / ₁₆	3.5
	21F77	6.3 C.T.	20.0	117	2500	GGV	Leads	Leads	3 ¹ / ₈	3 ⁹ / ₃₂	4 ¹ / ₄	2 ¹ / ₂	2 ¹⁵ / ₁₆	7.0
F	21F25	6.3 C.T.	20.0	107/117	2500	LAV	Leads	Leads	4 ⁹ / ₈	3 ¹³ / ₁₆	3 ¹ / ₄	3	2 ⁵ / ₈	6.7
	21F79	*6.3 C.T./7.5 C.T.	25.0	117	3000	LHV	Leads	Lugs	4 ⁹ / ₈	3 ¹³ / ₁₆	3 ¹ / ₁₆	3	3 ¹ / ₁₆	7.5
	21F109	*6.0 C.T./6.5 C.T./7.0 C.T.	13	117	2000	LHV	Lugs	Cu. Tabs	3 ¹ / ₈	2 ¹³ / ₁₆	3 ¹ / ₈	2 ¹ / ₄	2 ¹ / ₁₆	4.5
	21F15	7.5 C.T.	4.0	117	2500	BAV	Leads	Leads	2 ³ / ₄	3 ¹ / ₈	2 ¹ / ₈	2 ¹³ / ₁₆	—	2.0
	21F45	7.5 C.T.	4.0	117	2500	LHV	Lugs	Lugs	3 ¹ / ₈	2 ⁵ / ₈	2 ¹ / ₄	2	2 ¹ / ₈	2.7
	21F110	7.5 C.T.	5.0	107/117	2500	GGV	Leads	Leads	3 ⁵ / ₈	3	3	2 ¹ / ₄	1 ¹ / ₈	3.4
G	21F62	7.5 C.T.	8.0	117	2500	LAV	Leads	Leads	3 ¹ / ₈	3 ¹ / ₈	2 ¹ / ₈	2 ¹ / ₂	2 ⁵ / ₈	4.7
	21F16	7.5 C.T.	8.0	117	2500	CAV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₄	2 ¹ / ₂	2	2	3.25
	21F111	7.5 C.T.	21.0	107/117	2500	GGV	Leads	Leads	4 ¹ / ₂	3 ¹ / ₄	4	2 ³ / ₄	3	8.0
	21F205	10.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	1 ⁵ / ₈	2 ¹³ / ₁₆	—	0.9
	21F206	10.0 C.T.	2.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.3
H	26F71	10.0 C.T.	3.0	117	1500	BAH	Leads	Leads	2 ¹ / ₈	3 ¹ / ₄	2 ¹ / ₄	3 ¹ / ₈	—	1.6
	21F171	10.0 C.T.	3.0	117	2000	BAH	Leads	Leads	2 ⁹ / ₃₂	3 ¹ / ₄	2 ¹ / ₈	3 ¹ / ₈	—	1.7
	21F61	10.0 C.T.	4.0	117	2500	LHV	Lugs	Lugs	3 ⁷ / ₁₆	2 ¹ / ₈	2 ⁵ / ₈	2 ¹ / ₄	2 ¹ / ₈	3.25
	21F172	10.0 C.T.	5.0	117	2000	LAV	Leads	Leads	3	2 ¹ / ₂	2 ⁵ / ₈	2 ¹ / ₁₆	2	2.5
	21F18	10.0 C.T.	5.0	117	2500	CAV	Leads	Leads	3 ¹ / ₈	2 ⁹ / ₁₆	2 ¹ / ₂	2	1 ¹ / ₂	2.25
I	21F47	10.0 C.T.	5.0	107/117	2500	GGV	Leads	Leads	3 ¹ / ₈	3 ¹ / ₄	3 ¹ / ₈	2 ¹ / ₂	1 ¹⁵ / ₁₆	4.0
	21F208	10.0 C.T.	6.0	117	1500	LAV	Leads	Leads	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₄	2	2 ³ / ₁₆	3.1
	21F28	10.0 C.T.	8.0	117	2500	CAV	Leads	Leads	3 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₈	2 ¹ / ₂	2 ⁵ / ₈	4.9
	21F173	10.0 C.T.	10.0	117	2000	LAV	Leads	Leads	4 ¹ / ₈	3 ¹ / ₂	3 ¹ / ₄	2 ¹ / ₄	2 ¹ / ₁₆	7.5
	21F112	10.0 C.T.	10.0	117	2000	GGV	Leads	Leads	3 ¹ / ₈	3 ¹ / ₄	3 ⁵ / ₈	2 ¹ / ₂	2 ¹ / ₁₆	5.2
J	21F68	*10.0 C.T./11.0 C.T./12.0 C.T.	11.0	115	3000	LAV	Leads	Leads	4 ⁹ / ₈	3 ¹ / ₂	3 ¹ / ₁₆	2 ¹ / ₄	2 ³ / ₁₆	6.5
	21F19	*10.0 C.T. or 11.0 C.T.	12.0 10.0	117	2500	CAV	Leads	Leads	3 ¹ / ₈	3 ¹ / ₁₆	2 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₄	6.0
	21F174	12.6 C.T.	1.0	117	1500	BAH	Leads	Leads	1 ¹⁵ / ₁₆	3 ⁵ / ₁₆	1 ³ / ₄	2 ¹³ / ₁₆	—	0.9
	26F72	12.6 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	1 ³ / ₄	1 ¹³ / ₁₆	—	1.0
	21F149	12.6 C.T.	1.5	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.0

*Secondary Voltage varied by means of Primary Taps.

†Has Faraday Shield.

Listing continued on next page



FILAMENT TRANSFORMERS

FILAMENT TRANSFORMERS—SINGLE SECONDARY (cont'd)

Section	TM Part No.	Secondary		Primary Volts	RMS Test Volts	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps				Primary	Secondary	H	W	D	MW	MD	
A	21F175	12.6 C.T.	1.5	115/230	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.0
	26F67	12.6 C.T.	2.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.1
	21F176	12.6 C.T.	2.0	115/230	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.1
	21F201	12.6 C.T.	2.0	230	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.75
	21F177	12.6 C.T.	2.5	115/230	1500	BAH	Leads	Leads	2 ⁵ / ₁₆	3 ¹¹ / ₁₆	2	3 ¹ / ₈	—	1.5
B	21F81	12.6 C.T.	2.5	117	1500	BAH	Leads	Leads	2 ¹ / ₂	3 ⁷ / ₈	2 ¹ / ₈	3 ¹ / ₈	—	1.6
	21F150	12.6 C.T.	3.0	117	1500	BAH	Leads	Leads	2 ⁷ / ₁₆	3 ¹¹ / ₁₆	2 ¹ / ₄	3 ¹ / ₈	—	1.75
	21F50	12.6 C.T.	3.0	117	2000	LAV	Leads	Leads	3 ⁷ / ₁₆	2 ⁹ / ₁₆	2 ¹ / ₈	2	2	3.5
	21F193	12.6 C.T.	4.0	117	1500	BAH	Leads	Leads	2 ⁵ / ₈	4	2 ¹ / ₈	3 ⁹ / ₁₆	—	2.5
	21F194	12.6 C.T.	6.0	117	1500	GGV	Leads	Leads	3 ¹ / ₂	2 ¹³ / ₁₆	3 ¹ / ₈	2 ¹ / ₈	2 ¹ / ₄	3.5
C	21F195	12.6 C.T.	8.0	117	1500	GGV	Leads	Leads	3 ⁷ / ₈	3 ¹ / ₈	3 ³ / ₈	2 ¹ / ₁₆	2 ¹ / ₂	4.5
	21F196	12.6 C.T.	10.0	117	1500	GGV	Leads	Leads	4 ¹ / ₂	3 ⁷ / ₁₆	3 ³ / ₈	2 ¹¹ / ₁₆	2 ¹ / ₄	5.5
	21F84	24.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.5
	26F68	24.0	1.0	117	2500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.5
	21F181	24.0 C.T.	1.0	115/230	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.5
D	21F153	24.0 C.T.	10.0	117	1500	CAV	Leads	Leads	4 ⁹ / ₁₆	3 ¹ / ₂	3 ¹ / ₄	3	2 ³ / ₄	7.5
	21F100	*24.5 to 29.0 C.T.	0.04	117	1500	BAH	Leads	Leads	1 ¹ / ₄	2 ¹ / ₈	1 ³ / ₈	1 ¹ / ₂	—	0.25
	21F101	*24.5 to 29.0 C.T.	0.25	117	1500	BAH	Leads	Leads	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ⁵ / ₈	—	—	0.6
	21F189	*24.5 to 29.0 C.T.	0.25	117	2500	BAH	Leads	Leads	1 ⁵ / ₈	2 ¹³ / ₁₆	1 ⁵ / ₈	2 ¹ / ₈	—	0.6
	21F51	25.2	1.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
E	21F159	25.2	1.0	230	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	21F142	25.2 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	21F186	25.2 C.T.	1.0	†117	1500	BGH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.5
	21F83	25.2 C.T.	2.0	117	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
	21F180	25.2 C.T.	2.0	115/230	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
F	21F114	25.2 C.T.	3.0	117	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
	21F197	25.2 C.T.	5.0	117	1500	GGV	Leads	Leads	4 ¹ / ₂	3 ⁷ / ₁₆	3 ³ / ₈	2 ¹ / ₂	2 ¹ / ₁₆	5.5
	21F198	25.2 C.T.	7.5	117	1500	GGV	Leads	Leads	4 ¹ / ₂	3 ⁷ / ₁₆	4 ¹ / ₄	2 ¹ / ₄	3 ¹ / ₁₆	7.5
	21F199	25.2 C.T.	10.0	117	1500	GGV	Leads	Leads	4 ⁹ / ₁₆	3 ³ / ₄	5	3	3 ¹³ / ₁₆	10.0
	21F27	26.5 C.T.	0.6	117	3000	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.6
G	21F82	26.8 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2	2 ¹³ / ₁₆	—	1.6
	21F178	26.8 C.T.	1.0	115/230	1500	BAH	Leads	Leads	2	3 ¹ / ₄	2 ¹ / ₈	2 ¹³ / ₁₆	—	1.7
	21F179	26.8 C.T.	1.7	115/230	1500	BAH	Leads	Leads	2 ⁹ / ₁₆	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.5
	23V270	26.8 C.T.	1.7	115	1500	BAH	Leads	Leads	2 ⁵ / ₈	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	3.5
	21F190	30.0	3.0	117	1500	GGV	Leads	Leads	3 ¹ / ₂	2 ¹³ / ₁₆	3 ³ / ₈	2 ¹ / ₄	2 ¹ / ₁₆	4.2
H	21F182	35.0	1.5	115/230	1500	BAH	Leads	Leads	2 ⁵ / ₈	4	2 ¹ / ₄	3 ⁹ / ₁₆	—	2.2
	21F211	50.0 C.T.	5.0	117	1500	GGV	Leads	Leads	4 ⁵ / ₈	3 ¹³ / ₁₆	4 ⁵ / ₈	3	3 ⁷ / ₁₆	10.0
	21F187	*45 to 54 C.T.	1.0	117	2500	BAH	Leads	Leads	2 ⁵ / ₈	4	2 ¹ / ₈	3 ⁹ / ₁₆	—	2.3
	21F210	60.0 C.T.	0.4	117	1500	BAH	Leads	Leads	2	3 ⁹ / ₁₆	2	2 ¹³ / ₁₆	—	1.2

*Secondary Voltage Varied by Means of Primary Taps.

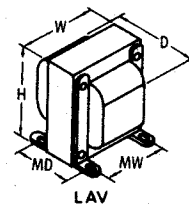
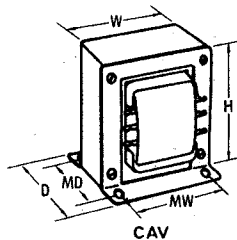
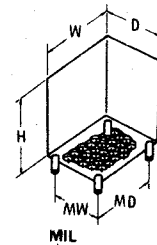
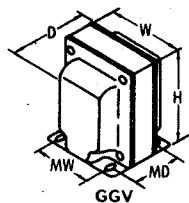
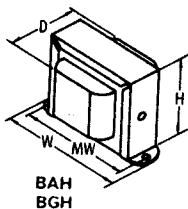
†Fused Primary.

THORDARSON has additional standard and stocked **FILAMENT TRANSFORMERS** which are not listed in this catalog. Contact factory for additional information.

FILAMENT TRANSFORMERS

FILAMENT TRANSFORMERS: WITH MULTIPLE SECONDARIES

Section	TM Part No.	Secondary		RMS Test Volts	Primary Volts 50/60 Hz.	Style	Termination		Outline Dimensions			Mounting Dimensions		Wt. Lbs.
		Volts	Amps				Pri.	Sec.	H	W	D	MW	MD	
A	21F56	5.0 C.T. 6.3 C.T.	6.0 6.0	1765 1765	107/117	GGV	Leads	Leads	3 ⁷ / ₈	3 ¹ / ₄	3 ³ / ₈	2 ¹ / ₂	2 ³ / ₈	4.8
	27F97	5 6.3 6.3 C.T. or 12.6 C.T.	3 3 3	2500 2500 2500	105/115/125	MIL-T-27 JB	Terminals	Terminals	3 ⁷ / ₈	3 ⁹ / ₁₆	3	2 ⁵ / ₈	2 ¹ / ₈	4.75
	21F87	6.3 C.T. 6.3 C.T.	3.0 3.0	1500 1500	117	GGV	Leads	Leads	3 ³ / ₃₂	2 ²¹ / ₃₂	2 ⁵ / ₈	2	1 ¹ / ₈	2.5
	21F24	6.3 6.3 6.3 6.3	3.0 3.0 3.0 3.0	2500 2500 2500 2500	117	GGV	Leads	Leads	3 ⁷ / ₈	3 ¹ / ₄	3 ³ / ₈	2 ¹ / ₂	2 ¹ / ₄	5.0
	21F98	24.0 C.T. or 12.0	1.0 2.0	1500	117	BAH	Leads	Leads	2 ⁵ / ₁₆	3 ³ / ₄	2 ¹ / ₈	3 ³ / ₈	—	1.5
	21F97	24.0 C.T. or 12.0	2.0 4.0	1500	117	BAH	Leads	Leads	2 ¹¹ / ₁₆	4	2 ⁵ / ₈	3 ³ / ₈	—	2.5
B	21F90	12.6 12.6 C.T.	2.5 2.5	1500 1500	115	GGV	Leads	Leads	3 ¹ / ₂	3	3 ¹ / ₈	2 ¹ / ₄	2	3.7
	21F52	12.6 12.6	3.5 3.5	2500	117	GGV	Leads	Leads	3 ¹ / ₂	2 ⁵ / ₈	3 ³ / ₈	2 ¹ / ₄	2 ⁵ / ₈	5.0
	21F99	18.0 18.0	1.3 1.3	1500 1500	117	BAH	Leads	Leads	2 ¹¹ / ₁₆	4	2 ⁵ / ₈	3 ³ / ₈	—	2.5



SPECIAL APPLICATION FLYBACKS AND YOKES

THORDARSON has over 500 stock TV flybacks and over 200 stock yokes which could solve your high voltage transformer or deflection yoke requirements off-the-shelf. There are many advantages using a stock item in special circuit applications including low prototype cost and fast delivery. Also, future availability, even in small quantities, can be assured. Your THORDARSON distributor has a complete list of available items.

LINE ADJUSTING TRANSFORMERS

THORDARSON presents a complete selection of line voltage adjusting transformers in both autoformer and isolation types with broad ranges of electrical and mechanical configurations. The units are listed in order of increasing VA ratings.

STEP-DOWN AND STEP-UP AUTOFORMERS—INPUT 50/60 Hz WITH 2 CONDUCTOR LINE CORD AND PLUG. OUTPUT 2 CONDUCTOR FEMALE RECEPTACLE.

These Autoformers provide a smaller and more economical method of changing from 115 to 220 or 220 to 115 Volts. They provide correct line voltages for machine tool control units such as sequence timers, solenoids and lighting systems.

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
A	23V125	20	230	115	1500	BAH	2	3 ¹ / ₄	2	2 ¹ / ₁₆	—	.75
	23V191	40	230	115	1500	GMV	3 ¹ / ₂	2 ¹ / ₁₆	2 ¹ / ₁₆	2	1 ¹ / ₁₆	2.2
	23V79	50	230	115	1500	BAH	2 ¹ / ₄	3 ¹ / ₁₆	2	3 ¹ / ₈	—	1.5
	23V393	50	230	115	1500	BAH	2 ⁵ / ₁₆	3 ¹ / ₁₆	1 ¹ / ₈	3 ¹ / ₈	—	1.5
	23V81	85	230	115	1500	GMV	3 ¹ / ₈	2 ⁵ / ₈	2 ¹ / ₈	2	2 ¹ / ₁₆	4.0
B	23V338	85	230	115	1500	GMV	3 ¹ / ₂	2 ⁵ / ₈	2 ¹ / ₄	2	1 ³ / ₄	2.5
	23V397	85	115	230	1500	GMV	3	2 ¹ / ₂	2 ³ / ₄	2	1 ³ / ₄	2.5
	23V21	100	230	115	1500	GMV	3 ¹ / ₈	3 ¹ / ₄	3 ¹ / ₈	2 ¹ / ₂	1 ³ / ₄	3.0
	23V344	125	230	115	1500	GMV	3	2 ⁵ / ₈	3	2	2	3.0
	23V398	125	115	230	1500	GMV	3	2 ¹ / ₂	3	2	2	3.0
C	23V22	150	230	115	1500	GMV	3 ¹ / ₈	3 ¹ / ₄	3 ¹ / ₈	2 ¹ / ₂	2 ¹ / ₁₆	3.0
	23V339	200	230	115	1500	GMV	3 ¹ / ₈	3 ³ / ₁₆	3 ³ / ₁₆	2 ¹ / ₂	2	5.0
	23V23	250	230	115	1500	GMV	4 ¹ / ₈	3 ¹ / ₈	3 ¹ / ₂	3	2 ³ / ₈	6.2
	23V343	300	230	115	1500	GMV	3 ¹ / ₈	3 ³ / ₁₆	3 ¹ / ₁₆	2 ¹ / ₂	2 ³ / ₈	5.2
	23V399	300	115	230	1500	GMV	3 ¹ / ₈	3 ³ / ₁₆	3 ¹ / ₁₆	2 ¹ / ₂	2 ³ / ₈	5.2
D	23V340	400	230	115	1500	GMV	3 ¹ / ₈	3 ³ / ₁₆	4 ¹ / ₈	2 ¹ / ₂	3 ¹ / ₁₆	7.0
	23V24	500	230	115	1500	GMV	4 ¹ / ₈	3 ¹ / ₈	4 ¹ / ₂	3	3 ¹ / ₈	10.2
	23V342	500	230	115	1500	GMV	4 ¹ / ₈	3 ¹ / ₁₆	4 ¹ / ₈	3	3 ¹ / ₁₆	10.3
	23V400	500	115	230	1500	GMV	4 ¹ / ₈	3 ¹ / ₁₆	4 ¹ / ₈	3	3 ¹ / ₁₆	10.3
	23V78	600	230	115	1500	GMV	4 ¹ / ₈	4	5	3	3 ¹ / ₈	12
E	23V341	1000	230	115	1500	GMV	4 ¹ / ₁₆	3 ¹ / ₁₆	6 ¹ / ₈	3	4 ¹ / ₁₆	17.0
	23V84	1200	230	115	1500	GMV	4 ¹ / ₈	3 ¹ / ₈	6 ¹ / ₈	3	5 ¹ / ₂	18.0
	23V120	2000	230	115	1500	GMV	5 ¹ / ₁₆	4 ¹ / ₂	7 ¹ / ₈	3 ¹ / ₂	6 ¹ / ₈	33.0
	23V46	3000	230/208	208/230	1750	GMH	4	4 ¹ / ₂	6	3 ³ / ₄	2 ¹ / ₂	10.0

STEP-DOWN AUTOFORMERS—INPUT 230 VOLTS 50/60 Hz WITH LINE CORD AND 3 CONDUCTOR PLUG. OUTPUT 115 VOLTS WITH 3 CONDUCTOR RECEPTACLE. CORE AND FRAME GROUNDED TO THIRD CONDUCTOR OF NEMA STANDARD CORD.

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
F	23V412	65	230	115	1500	BMH*	2 ¹ / ₄	3 ¹ / ₁₆	2 ¹ / ₄	3 ¹ / ₈	1 ¹ / ₂	1.6
	23V290	75	230	115	1500	GMV	3 ¹ / ₈	3 ¹ / ₁₆	2 ³ / ₄	2 ¹ / ₂	1 ¹ / ₂	3.25
	23V413	100	230	115	1500	BMH*	2 ¹ / ₄	3 ¹ / ₁₆	2 ³ / ₈	3 ¹ / ₈	1 ¹ / ₂	1.75
	23V288	100	230	115	1500	GMV	3 ¹ / ₈	3 ³ / ₁₆	3	2 ¹ / ₂	1 ³ / ₄	3.7
	23V414	150	230	115	1500	BMH*	2 ⁵ / ₈	4	2 ¹ / ₂	3 ³ / ₁₆	1 ³ / ₄	2.8
G	23V291	150	230	115	1500	GMV	3 ¹ / ₈	3 ³ / ₁₆	3 ¹ / ₄	2 ¹ / ₂	2	4.4
	23V292	250	230	115	1500	GMV	4 ¹ / ₈	3 ¹ / ₁₆	3 ³ / ₄	3	2 ³ / ₈	7.6
	23V293	350	230	115	1500	GMV	4 ¹ / ₈	3 ³ / ₁₆	3 ³ / ₄	3	2 ³ / ₈	7.4
	23V289	500	230	115	1500	GMV	4 ¹ / ₈	3 ¹ / ₁₆	4 ¹ / ₁₆	3	3 ¹ / ₁₆	9.6
	23V295	750	230	115	1500	GMV	5 ¹ / ₂	4 ¹ / ₈	4 ¹ / ₂	3 ¹ / ₂	2 ¹ / ₈	12.1
H	23V294	1000	230	115	1500	GMV	5 ¹ / ₂	4 ¹ / ₈	5 ¹ / ₈	3 ¹ / ₂	3 ¹ / ₄	16.5
	23V296	1500	230	115	1500	GMV	5 ¹ / ₂	4 ¹ / ₈	5 ¹ / ₈	3 ¹ / ₂	4 ¹ / ₄	20.1

*These units have 2 conductor line cords, plug and receptacle

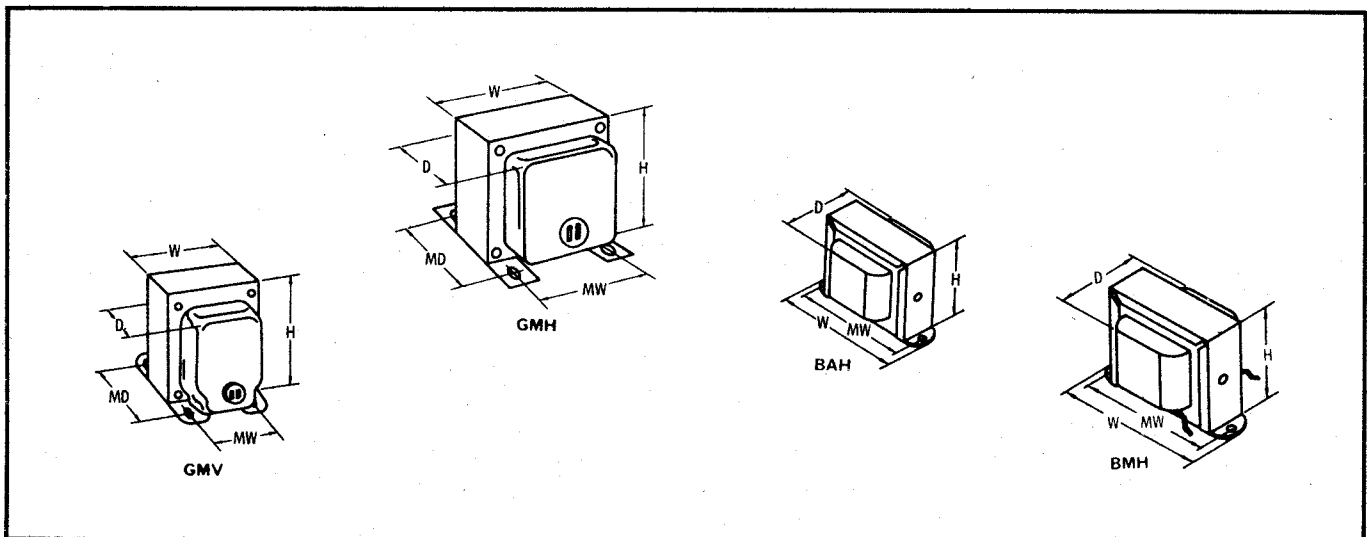
LINE ADJUSTING TRANSFORMERS

TAPPED INPUT AUTOFORMERS—VARIED INPUT 50/60 Hz WITH 2 CONDUCTOR LINE CORD AND TAPPED SWITCH. OUTPUT 115 VOLTS WITH 2 CONDUCTOR FEMALE RECEPTACLE.

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
A	23V91	85	105/115/125/135 150/210/230/250	115	1500	GMV	3½	3	4⅝	2½	3⅞	4.5
	23V92	150	105/115/125/135 150/210/230/250	115	1500	GMV	4	3¼	4¾	2½	3⅞	5.5
	23V93	350	85/90/95/100/105 110/115/120/125	115	1500	GMV	4	3¼	5	2½	3⅞	5.0

TAPPED INPUT AUTOFORMERS WITH VOLTMETER—VARIED INPUT 50/60 Hz WITH 2 CONDUCTOR LINE CORD AND TAPPED SWITCH. OUTPUT 115 VOLTS WITH 2 CONDUCTOR FEMALE RECEPTACLE.

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
B	23V14	750	65/75/90/100 115/130/145	115	750	GMV	6⅞	4½	8⅞	3½	6⅞	19.0



TV EXACT REPLACEMENTS

THORDARSON has the most complete line of TV exact replacement transformers in the industry. Color television flybacks, yokes, vertical output and power transformers are designed and manufactured as exact replacements for virtually all popular makes and models and many older black and white types are available too. Contact your THORDARSON distributor for FREE up-to-date TV replacement information.



LINE ADJUSTING TRANSFORMERS

ISOLATION—PRIMARY 50/60 Hz WITH 2 CONDUCTOR LINE CORD. SECONDARY—2 CONDUCTOR RECEPTACLE AND ELECTROSTATIC SHIELD GROUNDED TO CORE.

Isolation control transformers provide 115 Volts power or lighting within machine tools or other automated equipment from various line voltages from 115 Volts to 600 Volts. They also permit direct grounded lighting systems or control circuits independent of power distribution grounds for greater operation safety.

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
A	23V86	40	110-120	110-120	1500	GMV	3 ¹ / ₈	2 ⁵ / ₈	3 ¹ / ₈	2	1 ¹ / ₈	4.0
	23V45	50	115	115	1500	GMV	3 ¹ / ₈	3 ¹ / ₄	3 ¹ / ₄	2 ¹ / ₂	1 ¹⁵ / ₁₆	4.25
	23V87	100	110-120	110-120	1500	GMV	3 ¹ / ₈	3 ¹ / ₄	3 ¹ / ₄	2 ¹ / ₂	2 ³ / ₈	6.0
	23V213	100	115	115	1500	GGV	4 ³ / ₈	3 ³ / ₈	4	2 ³ / ₄	3 ³ / ₈	6.5
	23V48	100	115	115	1500	GMV	4 ³ / ₄	3 ³ / ₈	3 ¹ / ₂	3	2 ⁷ / ₁₆	6.5
B	23V25	100	105/115/125 ×	115	1500	GMV	4 ¹ / ₄	3 ¹ / ₂	3 ³ / ₈	2 ³ / ₄	3 ¹ / ₁₆	6.2
	23V128	100	210/230/250*	115	1500	GMV	4 ³ / ₄	4	3 ³ / ₄	3	3 ³ / ₁₆	7.3
	23V49	150	115	115	1500	GMV	4 ³ / ₄	3 ³ / ₈	3 ³ / ₄	3	2 ⁹ / ₁₆	7.0
	23V55	150	95/100/105/110* 115/120/125/130	115	1500	GMV**	4 ⁵ / ₈	3 ¹⁵ / ₁₆	5 ³ / ₈	3	4 ¹ / ₄	7.0
	23V74	150	115-230	115	1500	GGV	3 ³ / ₈	3 ⁹ / ₃₂	3 ³ / ₈	2 ¹ / ₂	3	7.0
C	23V58	250	115	115	1500	GMV	4 ³ / ₄	3 ³ / ₈	5 ³ / ₄	3	3 ⁹ / ₁₆	12.5
	23V126	250	105/115/125*	115	1500	GMV	4 ³ / ₄	4	5 ³ / ₈	3	4 ¹ / ₁₆	14.2
	23V90	250	220	120	1500	GMV	4 ⁵ / ₈	3 ³ / ₈	4 ⁷ / ₈	3	3 ¹ / ₂	12.0
	23V129	250	210/230/250*	115	1500	GMV	4 ³ / ₄	4	5 ³ / ₈	3	4 ¹ / ₁₆	14.2
	23V19	350	115	105/115/125	1500	GMV	5 ³ / ₈	4 ¹ / ₂	5 ³ / ₄	3 ¹ / ₂	3 ³ / ₈	13.0
D	23V28	500	105/115/125	115	750	JMV	6 ³ / ₈	5 ³ / ₈	7 ³ / ₈	3	4 ¹ / ₄	22
	23V130	500	210/230/250*	115	1500	GMV	7 ³ / ₄	5 ³ / ₈	7 ¹ / ₂	4 ⁵ / ₈	4 ¹ / ₄	29.5
	23V44	600	115	115	1500	GMV	4 ⁵ / ₈	3 ³ / ₈	7 ³ / ₁₆	3	6	16.0
	23V88	1200	110-120	110-120	1500	GMV	5 ⁷ / ₈	4 ¹ / ₂	8 ¹ / ₂	3 ³ / ₈	6 ³ / ₈	30.00

× Has receptacle for voltage adjustment

* Complete with tap switch for voltage adjustment

** With voltmeter.

ISOLATION—PRIMARY 50/60 Hz WITH 3 CONDUCTOR LINE CORD. SECONDARY—3 CONDUCTOR RECEPTACLE. CORE AND FRAME GROUNDED TO THIRD CONDUCTOR OF NEMA STANDARD CORD.

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
E	23V364	100	115	115	1500	GMV	3 ¹ / ₂	2 ¹³ / ₁₆	3 ⁹ / ₁₆	2 ¹ / ₄	2 ⁷ / ₁₆	4.5
	23V369	100	230	115	1500	GMV	3 ¹ / ₂	2 ¹³ / ₁₆	3 ⁹ / ₁₆	2 ¹ / ₄	2 ⁷ / ₁₆	4.5
	23V365	150	115	115	1500	GMV	3 ¹ / ₈	3 ³ / ₁₆	4 ³ / ₁₆	2 ¹ / ₂	2 ¹⁵ / ₁₆	7.0
	23V366	250	115	115	1500	GMV	4 ¹¹ / ₁₆	3 ³ / ₄	4 ³ / ₈	3	3 ³ / ₁₆	9.3
	23V367	500	115	115	1500	GMV	4 ¹¹ / ₁₆	3 ³ / ₄	6	3	4 ¹³ / ₁₆	16.5
F	23V372	500	230	115	1500	GMV	4 ¹¹ / ₁₆	3 ³ / ₄	6	3	4 ¹³ / ₁₆	16.0
	23V368	1000	115	115	1500	GMV	5 ¹ / ₂	4 ⁹ / ₁₆	8 ¹ / ₈	3 ¹ / ₂	6 ¹ / ₂	31.5

MERCURY SWITCHES, TIME CYCLE CONTROLLERS, AND FINE WIRE TENSIONING DEVICES

In addition to magnetic components, THORDARSON manufactures and sells mercury switches, custom time cycle controllers operating with either mercury, snap-action, or pneumatic switches, and wire tensioning devices. Contact factory for complete information.

THORDARSON has additional standard and stocked **LINE ADJUSTING TRANSFORMERS** which are not listed in this catalog. Contact factory for additional information.

LINE ADJUSTING TRANSFORMERS

ISOLATION—UNIVERSAL VOLTAGE CONTROL 50/60 Hz WITH 4-115 VOLT WINDINGS AND PRIMARY/SECONDARY LUGS ISOLATION CONNECTIONS 115 TO 115 VOLT, 115 TO 230 VOLT, 230 TO 115 VOLT. AUTOFORMER CONNECTIONS 115 TO 230 VOLT, 115 TO 460 VOLTS, 230 TO 460 VOLTS.

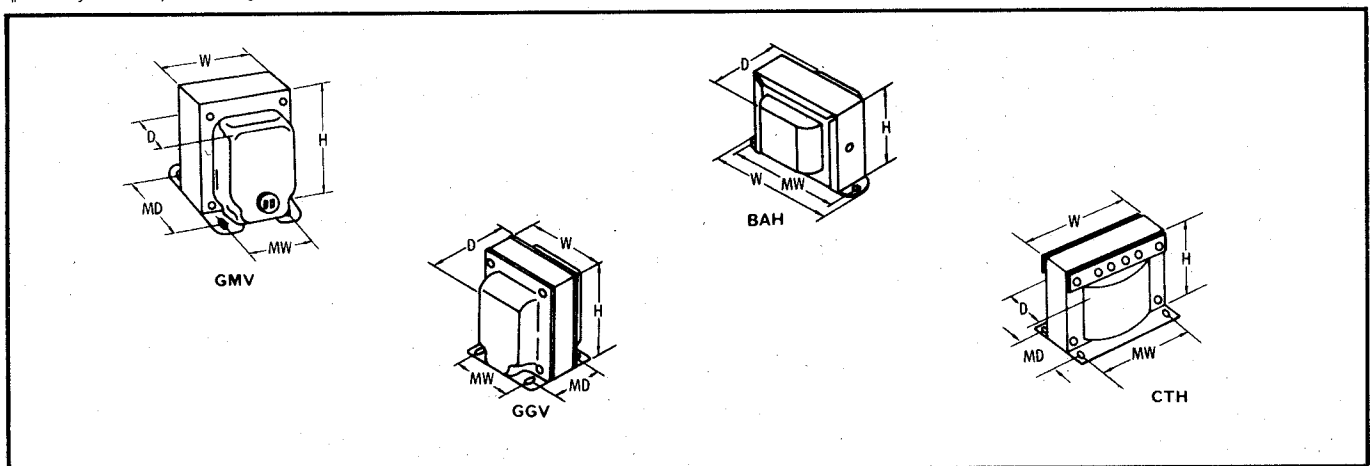
This series has four isolated windings with seven possible combinations: for step-up, step-down, and isolation applications in industrial, home or laboratory use. They are particularly adapted to 220-Volt line step-down to provide 115-Volt power source to operate machine tools and other automated equipment.

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
A	23V34	50	115/230	115/230	1500	CTH	2 ⁵ / ₈	3	3 ⁵ / ₈	2 ¹ / ₂	2 ¹ / ₈	2.75
	23V35	100	115/230	115/230	1500	CTH	3 ¹ / ₄	3 ³ / ₄	2 ⁵ / ₈	3 ¹ / ₈	2 ¹ / ₈	5.0
	23V36	200	115/230	115/230	1500	CTH	2 ⁵ / ₈	4 ¹ / ₂	3 ⁵ / ₈	3 ³ / ₄	2 ³ / ₄	9.0
	23V37	300	115/230	115/230	1500	CTH	4 ¹ / ₈	4 ⁷ / ₈	3 ³ / ₄	4 ¹ / ₈	2 ⁷ / ₈	11.0
	23V38	500	115/230	115/230	1500	CTH	4 ¹ / ₈	4 ⁷ / ₈	5	4 ¹ / ₈	4 ¹ / ₈	17.0
B	23V39	1000	115/230	115/230	1500	CTH	5 ⁵ / ₈	6 ⁵ / ₈	5 ¹ / ₂	5 ⁵ / ₈	4 ¹ / ₂	23.0
	23V197	2500	115/230	115/230	1500	CTH	7 ⁵ / ₈	9	5 ¹ / ₂	8	4 ¹ / ₂	40.0

ISOLATION—50/60 Hz WIRE—IN TYPE WITH LEAD WIRES FOR PERMANENT INSTALLATION. (SHIELDED)

Section	TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.
							H	W	D	MW	MD	
C	23V376	0.6	115	115	1500	BAH	1 ¹ / ₂	2 ¹ / ₈	1 ¹ / ₂	1 ³ / ₄	—	0.25
	23V374	15	115	115	1500	BAH	2	3 ¹ / ₄	1 ⁷ / ₈	2 ¹³ / ₁₆	—	1.0
	23V17	35	115	115	1500	BAH	2 ¹ / ₂	3 ¹³ / ₁₆	2 ¹ / ₂	3 ¹ / ₈	—	1.75
	23V80	35	115/230	115	1500	BAH	2 ¹ / ₂	3 ¹³ / ₁₆	2 ¹ / ₂	3 ¹ / ₈	—	1.75
	23V18	80	115	115	1500	GGV	3 ¹ / ₈	3 ¹ / ₁₆	3 ¹ / ₂	2 ¹ / ₂	2 ¹ / ₁₆	5.0
D	23V395	150	115	115/230†	1500	GMV	3 ⁷ / ₈	3 ⁹ / ₁₆	4	2 ¹ / ₂	2 ³ / ₄	6.2
	23V94	250	115/230	115	1500	GGV	4 ⁵ / ₈	3 ¹⁵ / ₁₆	4 ¹ / ₄	3	3 ⁵ / ₈	11.0
	23V133	300	220/440	115	1500	GGV	4 ⁵ / ₈	3 ¹⁵ / ₁₆	4 ¹ / ₂	3	3 ⁵ / ₈	10.2

†Secondary has two separate windings.



REPLACEMENT PARTS

THORDARSON maintains the most complete line of replacement transformers in the industry. Television flybacks, yokes, vertical output and power transformers are stocked in-depth plus thousands of other hard-to-get transformers and chokes for consumer, commercial, industrial, medical, and military applications. Your THORDARSON distributor has up-to-date TV replacement information.

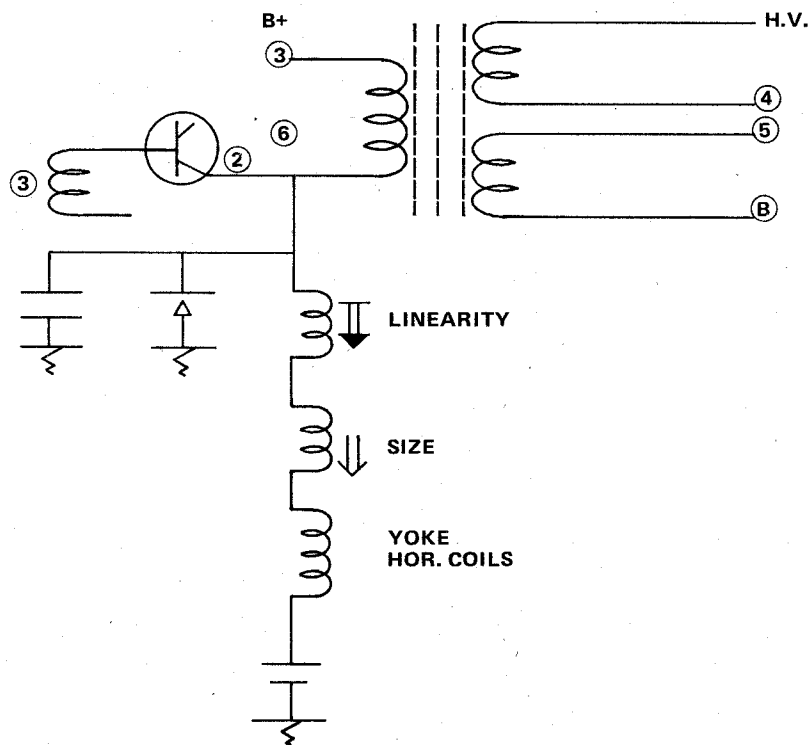
CRT DISPLAY COMPONENTS

- DATA DISPLAY TERMINALS
- VIDEO MONITORS
- INSTRUMENTS WITH CRT DISPLAYS
- HIGH VOLTAGE SUPPLIES
- SPECIAL APPLICATIONS

Thordarson CRT Display Products utilize advance design and construction techniques which meet or exceed all applicable standards. Development and production capabilities located in Mt. Carmel and Robinson, Illinois, are devoted primarily to producing customer requirements and standard flybacks and yokes for CRT Display and related applications.

As a leader in the development of sweep and deflection components and related parts, Thordarson can offer the user/circuit designer readily available standard flybacks and yokes at reasonable pricing. While Thordarson maintains an active design development program for high volume and specialized applications, the use of pre-engineered Thordarson matched components avoids time-consuming and costly development projects and offers excellent performance quality and economy.

We invite you to select a high voltage transformer (flyback) and/or a deflection yoke from the units listed herein. Prototype and small quantities are available off-the-shelf and production lead times are normally minimal. If modifications of these units are required, please contact factory for detailed information. Wherein possible, using these EXACT DESIGNS WILL PROVIDE IN-DEPTH AVAILABILITY AND ECONOMY.



TYPICAL CIRCUIT SCHEMATIC

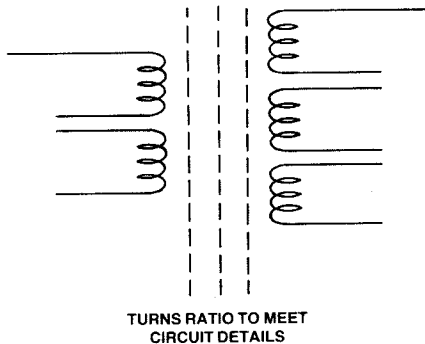
CRT DISPLAY COMPONENTS

HIGH VOLTAGE TRANSFORMERS (FLYBACKS)

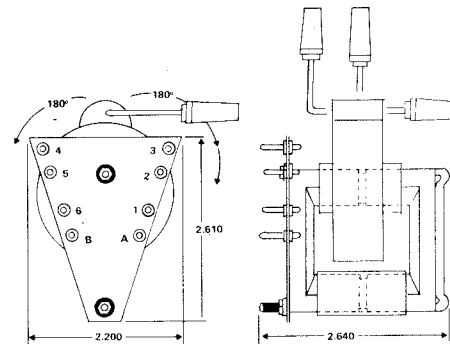
Sweep, Horizontal Output, Special Applications

TYPICAL OPERATION*											
Part No.	D.C. Supply v.	Primary Pulse vP.	Sweep Rate Khz	Ringings %	High Voltage Kv.	Retrace Time μ s.	Yoke Current A. P-P	Yoke Induct. μ h.	C.R.T. Heater	Additional Sec. Volt. Supply	Use With Yokes
F6010	11-15	190	15.5-18.5	5-16	11-13.5	7.2	5.6	95-105	No	450 vP	
F6020	45-55	650	15.5-18.5	5-16	15-17	7	4	550-575	Yes		
F6030	50-80	850	16.36	5-16	16.5-17.5	7.5	4.2	710-780	No	80 vP	

TYPICAL FLYBACK SCHEMATIC



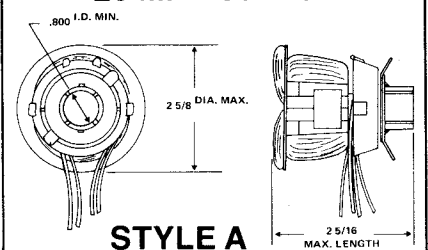
FLYBACK OUTLINE DRAWING



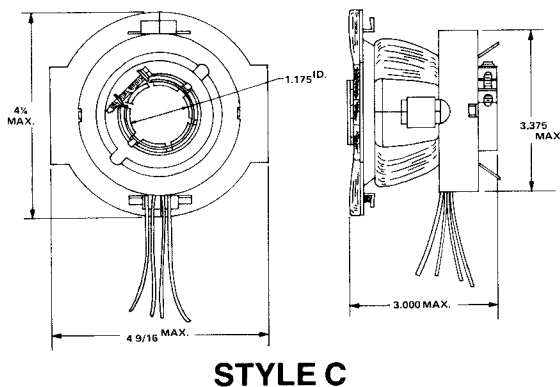
DEFLECTION YOKES

Part No.	Deflection Angle	CRT Neck Size	CRT Face Diagonal	Horiz. Ind.	Horiz. Res.	Vert. Ind.	Vert. Res.	Use With Flyback	Style
Y6110	90°	20mm	12" (305mm)	100uh	25 Ω	13.5 mh	6.5 Ω	F6010	A
Y6120	110°	20mm	12" (305mm)	550uh	1.2 Ω	15 mh	7.0 Ω	F6020	B
Y6130	114°	29mm**	15" (381mm)	750uh	1.2 Ω	25 mh	10 Ω	F6030	C
Y6131	114°	29mm	12" (305mm)	550uh	1.1 Ω	15 mh	7.5 Ω	F6020	C

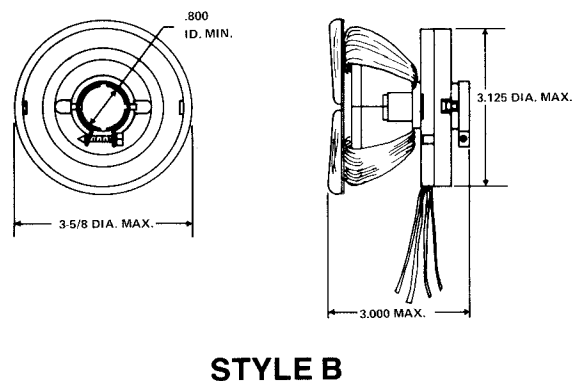
20 M.M. 90° YOKE



29 M.M. (1 1/8") 114° YOKE



20 M.M. 110° YOKE



* The specifications and typical schematic are provided for information only. Specific design values are subject to application and user discretion, within limitations.

** 29mm. yokes available in adjustable pincushion correction magnet configuration. Contact factory for details.