

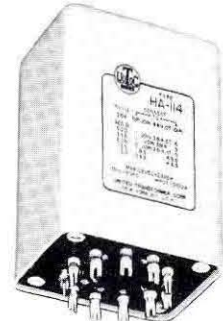


HIPERMALLOY TRANSFORMERS

The UTC Hipermalloy audio and power transformers are specifically designed for portable and compact service. While light in weight, neither dependability nor fidelity has been sacrificed. The frequency characteristic of the Hipermalloy audio units is uniform from 30 to 20,000 cycles. They incorporate a Hipermalloy nickel iron core and hum balanced coil structure. The rugged die cast case is of high conductivity alloy finished in grey, arranged for mounting with the terminals either up or down. DC in Primary shown is maximum unbalanced.

TYPE H-1 CASE

Length2 $\frac{3}{8}$ "
 Width1 $\frac{1}{8}$ "
 Height3 $\frac{1}{8}$ "
 Mounting1 $\frac{3}{8}$ x 1 $\frac{1}{8}$ "
 Screws6-32
 Cutout1 $\frac{1}{8}$ " dia.
 Unit Weight2 lbs.



LOW IMPEDANCE TO GRID AND MIXING TRANSFORMERS

Type No.	Application	Primary Imp. (ohms)	Secondary Impedance	± 1 db from	Max. Level dbm mw	Unbal. DC in Prim'y	Case No.
HA-100	Low impedance mike, pickup, or multiple line to grid	50, 125/150, 200/250, 333, 500/600	60,000 ohms overall, split	30-20,000	+18 63	.5 ma	H-1
HA-100X	Same as above but with multiple alloy shields to effect very low hum pickup				+16 40		H-1
HA-101	Low impedance mike, pickup, or multiple line to P.P. grids	50, 125/150, 200/250, 333, 500/600	120,000 ohms overall, split	30-20,000	+18 63	.5 ma	H-1
HA-101X	As above but with multiple alloy shield to effect very low hum pickup		80,000 ohms overall, split	30-20,000	+16 40	.5 ma	H-1
HA-103A	Low impedance mike, pickup, or parallel mixer to grid	2.5, 5.5, 10, 15, 22, 30, 38, 60	60,000 ohms overall, split	30-20,000	+18 63	.5 ma	H-1
HA-108*	Mixing, low impedance mike, pickup, or multiple line	50, 125/150, 200/250, 333, 500/600	50, 125/150, 200/250, 333, 500/600	20-50,000	+20 100	.5 ma	H-1
HA-108X*	Same as above but with multiple alloy shields to effect very low hum pickup				+18 63		H-1
HA-130X	Three isolated lines or pads to one or two grids with tri-alloy internal shields	30, 50, 200/250 each primary	60,000 ohms overall, split	30-20,000	+18 63	.5 ma	H-1

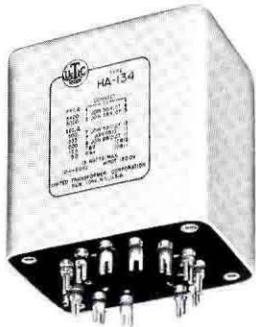
*High electrostatic shielding.

INTERSTAGE AUDIO TRANSFORMERS

Type No.	Application	Primary Imp.	Secondary Impedance	± 1 db from	Max. Level dbm mw	Unbal. DC in Prim'y	Case No.
HA-104	Single plate to P.P. grids like 2A3, 6L6 (split secondary)	15,000 ohms (split)	95,000 ohms 2.5:1	30-20,000	+20 100	0	H-1
HA-105	Single plate to single grid	15,000 ohms	60,000 ohms 2:1 turn ratio	30-20,000	+20 100	0	H-1
HA-106	Single plate to push pull grids (split secondary)	15,000 ohms (split)	135,000 ohms 3:1 ratio overall	30-20,000	+20 100	0	H-1
HA-107	Push pull plates to push pull grids (split primary and secondary)	30,000 ohms plate to plate	80,000 ohms 1.6:1 turn ratio overall	30-20,000	+28 600	.25 ma	H-2
HA-137	Push pull plates to push pull grids (split Pri. and Sec.)	30,000 ohms plate to plate	68,000 ohms 1.5:1 turn ratio	30-20,000	+20 100	0	H-1

AND SPECIAL CUSTOM BUILT HIPERMALLOY

Above stock units cover general purpose applications.



TYPE H-2 CASE

Length $3\frac{1}{8}$ "
 Width $2\frac{1}{8}$ "
 Height $3\frac{1}{2}$ "
 Mounting $2 \times 2\frac{3}{4}$ "
 Screws 6-32
 Cutout $2\frac{1}{8}$ " dia.
 Unit Weight 5 lbs.

POWER TRANSFORMERS

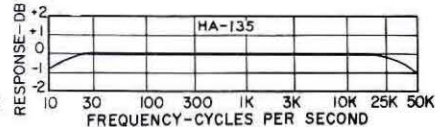
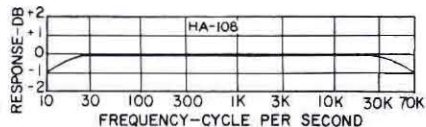
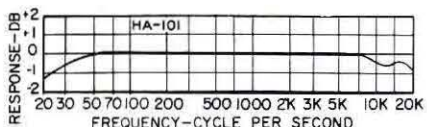
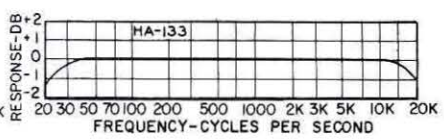
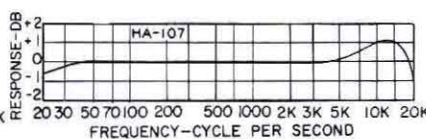
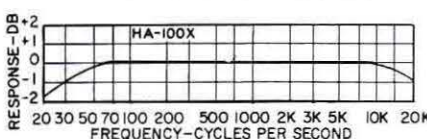
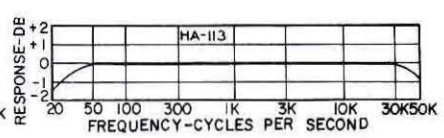
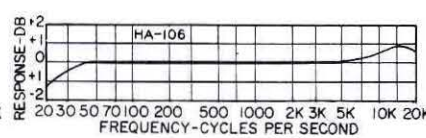
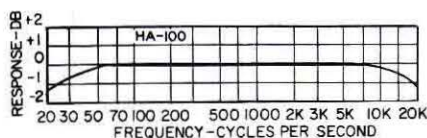
Type No.	Application	Primary Voltage 50/60 cycles	High Voltage	Filament Windings	Case No.
HP-122	pre-amp. power supply using 6X4, 6X5GT rectifier	115	220-0-220 15 ma	6.3 V.C.T.-.6A 6.3 V.C.T.-1.2A	H-1
HP-123	Pre amp. or tuner power supply using 6X4, 6X5GT rectifier	115	275-0-275 35 ma	6.3 V.C.T.-.6A 6.3 V.C.T.-2A	H-2

PLATE TO LINE TRANSFORMERS

Type No.	Application	Primary Imp.	Secondary Imp. Ohms	± 1 db from	Max. Level dbm	Unbal. DC in Prim'y	Case No.	
HA-113	Single plate to multiple line	15,000 ohms (split)	50, 125/150, 200/250, 333, 500/600	30-40,000	+21	125	0 ma	H-1
HA-114	Push pull low level plates to multiple line	30,000 ohms plate to plate	50, 125/150, 200/250, 333, 500/600	30-40,000	+23	200	1 ma	H-1
HA-133	Single plate to mutiple line (DC in Pri.)	15,000 ohms (split)	50, 125/150, 200/250, 333, 500/600	30-40,000	+22	160	8 ma	H-1

OUTPUT TRANSFORMERS

Type No.	Application	Primary Imp.	Secondary Imp. Ohms	± 1 db from	Max. Level	Case No.
HA-134	Push pull, 6L6, 6050, 7355, 7581 to line	5000/9400 ohms plate to plate	50, 125/150, 200/250, 333, 500/600	10-50,000	15 watts	H-2
HA-135	As above except to voice coil	3000/5000 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	10-50,000	18 watts	H-2
HA-136	5881's (KT-66's) in AB-feed back (see pg. 19 circuit)	6,600 ohms CT 43% screen taps	4, 8, 16	10-50,000	20 watts	H-2



TRANSFORMERS TO YOUR SPECIFICATIONS

For specific applications cost reductions may be effected.



LINEAR STANDARD AUDIO TRANSFORMERS

The ever increasing use of wide range equipment has reached the point where the major limiting factor is the frequency range of the transformers employed. UTC Linear Standard components represent the closest approach to the ideal transformer from the standpoint of uniform frequency response, low wave form distortion, high efficiency, thorough shielding, and dependability.

LOW IMPEDANCE TO GRID AND MIXING AND MATCHING TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	± 1 db from	Max. Level dbm	Relative* hum	Unbal. DC in primary	Case No.
LS-10	Low impedance mike, pickup, or multiple line to push pull grids	50, 125/150, 200/250, 333, 500/600 ohms	60,000 ohms in two sections	20-20,000	+19	-74 db	.5 ma	LS-1
LS-10X	As above	As above	50,000 ohms	20-20,000	+17	-92 db-Q	.5 ma	LS-1
LS-12	Low impedance mike, pickup or multiple line to push pull grids	50, 125/150, 200/250, 333, 500/600 ohms	120,000 ohms overall, in two sections	20-20,000	+19	-74 db	.5 ma	LS-1
LS-12X	As above	As above	80,000 ohms overall, split	20-20,000	+17	-92 db-Q	.5 ma	LS-1
LS-14X	Low impedance mike, pickup, or parallel mixer to grid	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	50,000 ohms	20-20,000	+17	-92 db-Q	.5 ma	LS-1
LS-26	Bridging line to single or push pull grids	5,000 ohms	60,000 ohms in two sections	15-20,000	+23	-74 db	0 ma	LS-1
LS-30†	Mixing, low impedance mike, pickup or multiple line to multiple line	50, 125/150, 200/250, 333, 500/600 ohms	50, 125/150, 200/250, 333, 500/600 ohms	7-50,000	+23	-74 db	.5 ma	LS-1
LS-30X†	As above	As above	As above	20-20,000	+20	-92 db-Q	.3 ma	LS-1
LS-31	Three isolated lines or pads to multiple line	30/50, 200/250 ohms each primary	50, 125/150, 200/250, 333, 500/600 ohms	20-20,000	+23	-74 db	.5 ma	LS-1
LS-32	Mixing, low impedance mike, pickup or parallel mixer to multiple line	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	50, 125/150, 200/250, 333, 500/600 ohms	20-20,000	+23	-74 db	.5 ma	LS-1
LS-68† New	Mixing, matching line or transistor to 2 simultaneously loaded lines or transistors	600/150 split	2 secondaries each 600/150 split	20-40,000	+15	-92 db-Q	0 ma	LS-1

† High electrostatic shielding.

INTERSTAGE AND DRIVER TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	± 1 db from	Max. Level	Relative* hum	Unbal. DC in primary	Case No.
LS-19	Plate to PP grids like 6L6, 5881 Split secondary	15,000 ohms	95,000 ohms 1.25:1 each side	20-20,000	100 mw	-50 db	0 ma	LS-1
LS-21	Plate to PP grids Split pri. and sec.	15,000 ohms	135,000 ohms; 3:1 overall	10-20,000	100 mw	-74 db	0 ma	LS-1
LS-40	Plate to PP grids Split secondary	15,000 ohms	135,000 ohms; 3:1 overall	30-18,000 (± 2 db)	100 mw	-74 db	8 ma	LS-1
LS-25	PP plates to PP grids Med. level split pri. and sec.	30,000 ohms plate to plate	50,000 ohms; turn ratio 1.3:1 overall	20-20,000	200 mw	-74 db	1 ma	LS-1
LS-47	Driver from push pull 2A3's, or sim. to class B828's, 805's, or 2B120's	5,000 ohms plate to plate	.1 pri. impedance turns ratio, Pri./ $\frac{1}{2}$ Sec. 3.2:1	20-20,000	20 Watts		5 ma	LS-2
LS-48	Driver trans. push pull 845's to 805 grids in class B	12,000 ohms plate to plate	.038 pri. impedance turns ratio, Pri./ $\frac{1}{2}$ Sec. 5.1:1	20-20,000	40 Watts		15 ma	LS-3

HYBRID AND REPEAT COILS

Type No.	Application	Pri and Sec. Impedances	± 1 db from	Max. Level dbm	Relative* hum	Max. Unbal. DC in primary	Case No.
LS-140	Line to line for isol. balanced and unbal. cir.; bal. for max. cross talk 70 db	500/600 ohms split 500/600 ohms split	30-20,000	+18	-92 db-Q	0 ma	LS-1
LS-141	Three sets of bal. wind. for hybrid service, centertapped	500/600 ohms 500/600 ohms	30-15,000	+18	-74 db	0 ma	LS-1

The values of unbalanced DC shown will effect approximately 1.5 db loss at 30 cycles.

* Comparison of hum balanced unit with shielding to normal uncased type. Q = Multiple alloy magnetic shields.

AND SPECIAL CUSTOM BUILT LINEAR STANDARD

Above stock units cover general purpose applications.



LINEAR STANDARD AUDIO TRANSFORMERS

PLATE, CRYSTAL, PHOTOCELL, AND BRIDGING TO LINE TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	± 1 db from	Max. Level	Relative* hum	Unbal. DC in primary	Case No.
LS-27	Single pl. to multiple line	15,000 ohms	50, 125/150, 200/250, 333, 500/600	30-15,000	200 mw	-74 db	8 ma	LS-1
LS-50	Single pl. to multiple line	15,000 ohms	50, 125/150, 200/250, 333, 500/600	10-40,000	200 mw	-74 db	0 ma	LS-1
LS-51	Push pull low level pl. to multiple line	30,000 ohms plate to plate	50, 125/150, 200/250, 333, 500/600	10-40,000	250 mw	-74 db	1 ma	LS-1
LS-150	Bridging from 50 to 500 ohm line to line	4,000 ohms, bridging	50, 125/150, 200/250, 333, 500/600	7-50,000	200 mw	-74 db	1 ma	LS-1
LS-151	Bridging from 50 to 500 ohm line to line	16,000 ohms, bridging	50, 125/150, 200/250, 333, 500/600	7-50,000	400 mw	-74 db	1 ma	LS-1

HIGH LEVEL MATCHING TRANSFORMERS

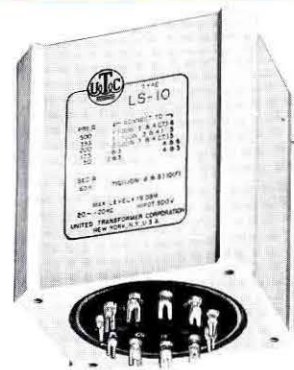
Type No.	Application	Primary Impedance	Secondary Impedance	± 1 db from	Max. Level	Case No.
LS-33	High level line matching	50, 125/150, 200/250, 333, 500/600 ohms	1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125/150, 200/250, 333, 500/600	10-40,000	20 watts	LS-2
LS-34	High level line matching	50, 125/150, 200, 250, 333, 500/600 ohms	1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125/150, 200/250, 333, 500/600	10-40,000	40 watts	LS-3

OUTPUT TRANSFORMERS TO LINE AND VOICE COIL

Type No.	Primary will match typical tubes	Primary Impedance	Secondary Impedance	± 1 db from	Max. Level	Case No.
LS-52	Push pull 6AQ5, 6V6, 6L6, 5881, 6BQ5, 7189A	8,000 ohms	500, 333, 250/200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	7-50,000	20 watts	LS-2
LS-54	Same as above	8,000 ohms	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	7-50,000	20 watts	LS-2
LS-55	Push pull 300B, 6L6's, 6AS7G, 6080, 7581, 7355	5,000 ohms plate to plate and 3,000 ohms plate to plate	500, 333, 250/200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	7-50,000	20 watts	LS-2
LS-57	Same as above	5,000 ohms plate to plate and 3,000 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	7-50,000	20 watts	LS-2
LS-58	Push pull parallel as above	2,500 ohms plate to plate and 1,500 ohms plate to plate	500, 333, 250/200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	10-50,000	40 watts	LS-3
LS-61	Push pull triode; 6AS7G, 6080, 6L6, 5881, KT-66, 807, 1614	10,000 ohms pl. to plate and 6,000 ohms plate to plate	500, 333, 250/200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	7-50,000	20 watts	LS-2
LS-63	Same as above	10,000 ohms pl. to plate and 6,000 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	7-50,000	20 watts	LS-2
LS-6L1	Self bias push pull 6L6's, 5881, KT-66, 6146 triode, 6159 triode	9,000 ohms plate to plate	500, 333, 250/200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	7-50,000	30 watts	LS-3
LS-6L4	Push pull 6146, 6159, 6L6's fixed bias or push pull parallel 6L6's self bias, 7581	4,500 ohms plate to plate and 3,800 ohms plate to plate	500, 333, 250/200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	12-50,000	55 watts	LS-3
LS-35	EL-34 in AB-feedback (see circuit pg. 19)	5,000 ohms CT 43% screen taps	4, 8, 16	7-50,000	35 watts	LS-3
LS-65	6550's in AB ₁ feedback (see circuit pg. 19)	3,300 ohms CT 40% screen taps	4, 8, 16	7-50,000	60 watts	LS-3
LS-666	Push pull transistors class B (2N277 or equiv.) (see circuit pg. 20)	8 ohms split	500 ohms split	7-50,000	50 watts	LS-3
LS-667	Push pull transistors class B (2N277 or equiv.) (see circuit pg. 20)	8 ohms split	4, 8, 16	7-50,000	50 watts	LS-3

MODULATION TRANSFORMERS

Type No.	Primary will match typical tubes	Primary Impedance	Secondary Impedance	± 1 db from	Max. Level	Case No.
LS-56	Push pull 6AS7G's, 300B's, 6AS7G, 6L6 6080, 7335, 7581	5,000 ohms plate to plate and 3,000 ohms plate to plate	6000, 5000, 4000, 1800, 1500, 1000, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	10-50,000	20 watts	LS-2
LS-691	Class B, 833A, 250TH	10,400 ohms plate to plate	4500, 4000, 3500, 2750, 2000	20-40,000	1000 watts	LS-6
LS-692	Class B push pull parallel 833A's	4,750 ohms plate to plate	2500, 2000, 1750, 1500, 1250	20-40,000	2500 watts	LS-6



LINEAR STANDARD HIGH SHIELDING DIE CAST CASES TOP & BOTTOM MTG.

LS-1 CASE

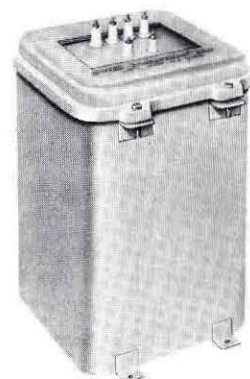
Length3 $\frac{1}{8}$ "
Width2 $\frac{5}{8}$ "
Height3 $\frac{1}{4}$ "
Mounting1 $\frac{1}{8}$ " x 2 $\frac{1}{8}$ "
Screws6-32
Cutout1 $\frac{1}{8}$ " dia.
Unit Weight3 lbs.

LS-2 CASE

Length4 $\frac{1}{8}$ "
Width3 $\frac{1}{2}$ "
Height4 $\frac{3}{8}$ "
Mounting2 $\frac{1}{8}$ " x 3 $\frac{1}{8}$ "
Screws8-32
Cutout2 $\frac{1}{4}$ " dia.
Unit Weight7.5 lbs.

LS-3 CASE

Length5 $\frac{1}{8}$ "
Width5"
Height4 $\frac{1}{2}$ "
Mounting4 $\frac{1}{8}$ " x 5 $\frac{1}{8}$ "
Screws10-24
Cutout3 $\frac{1}{4}$ " dia.
Unit Weight15 lbs.



LS-6 CASE

Length15 $\frac{3}{4}$ "
Width13"
Height—LS-69124"
Height—LS-69228"
Mounting Dimen.7 $\frac{3}{8}$ " x 14 $\frac{1}{8}$ "
Mounting Hole $\frac{3}{8}$ " dia.
Unit Weight350 lbs.
Unit Weight—LS-691370 lbs.
Unit Weight—LS-692520 lbs.

AUDIO TRANSFORMERS TO YOUR SPECIFICATIONS

For specific applications cost reductions may be effected.



COMMERCIAL GRADE COMPONENTS

The Commercial Grade series of transformers incorporate conservative design and rugged construction to assure dependability under continuous service operation in commercial grade equipment. These units are mounted in uniform drawn cases finished in light grey enamel, and intended for chassis mounting. All items are poured with special sealing compound in addition to vacuum impregnation of coil structures.

All audio components are linear $\pm 1\frac{1}{2}$ db from 40 to 10,000 cycles (no unbalanced DC), except CVL and CVM units . . . 40 to 6000 cycles. CG-134, 135 and 136 are of the hum-bucking type to assure low hum pick-up. Parallel feed low level interstage units with 50,000 ohms and .25 mfd.; 200 ohm windings on input transformers are balanced and may be used for 150 to 250 ohm circuits.

INPUT, INTERSTAGE, MIXING AND LOW LEVEL OUTPUT TRANSFORMERS

Type No.	Application	Primary Impedance Ohms	Max. Level dbm	Secondary Impedance Ohms	Case No.
CG-131	1 plate to 1 grid	15,000	+28	135,000 1:3 ratio	RC-50
CG-132	1 plate to 2 grids	15,000	+30	135,000 split 1:3 ratio overall	RC-62
CG-133	2 plate to 2 grids	30,000 P to P	+32	80,000 overall 1:1.6 ratio overall	RC-75
CG-134	Line to 1 grid hum-bucking	50, 200, 500	+30	80,000	RC-50
CG-135	Line to 2 grids hum-bucking	50, 200, 500	+30	120,000 overall	RC-50
CG-235	Line to 1 or 2 grids, hum-bucking; multiple alloy shielded for low hum pickup	50, 200, 500	+28	80,000 overall	RC-75
CG-136	Single plate and low impedance mike or line to 1 or 2 grids hum-bucking	15,000, 50, 200	+30	80,000 overall 1:1.9 ratio overall	RC-62
CG-137	Mixing	50, 200, 500	+28	50, 200, 500	RC-50
CG-140	Triode plate to line	15,000 8 ma DC	+30	50, 200, 500	RC-50
CG-141	PP triode plates to line	30,000 P to P	+32	50, 200, 500	RC-50
CG-233	PP 6C5, 12AU7, similar triodes to AB 45's, 2A3's, 6L6's, etc.	30,000 P to P	+35	25,000 overall 1:1.33 ratio overall	RC-87
CG-333	PP 6C5, 12AU7, similar triodes to fixed bias 6L6's	30,000 P to P	+35	3,300 overall 1:1.33 ratio overall	RC-87
CG-433	PP 45, 2A3, similar tubes to fixed bias 2 or 4 6L6's	5,000 P to P	10W.	800 overall 1:4 ratio overall	RC-100

OUTPUT TRANSFORMERS

Secondary Impedances: 500, 200, 16, 8, 5, 3, 1.5 ohms

Type No.	Imped. P. P. Ohms, Overall	Typical Tubes	Max. Watts	Case No.
CG-15	8,000	6V6, 6AQ5, 6BQ5, 7189A	20	RC-100
CG-16	3,000/5,000	6AS7G, 6L6, 6080, 7581	20	RC-100
CG-19	6,000/10,000	6L6, 5881, 6DZ7	20	RC-100
CG-710	14,000/20,000	7B5, 6AK6, 6K6GT	20	RC-100
CG-2L6	9,000	6L6's, AB1, 5881	30	RC-125

FEEDBACK OUTPUT TRANSFORMERS

(See page 19 for typical circuits)

Secondary Impedances: 4, 8, 16 ohms and 70 Volt line.

Type No.	Primary Impedance	Typical Tubes	Audio Watts	Case No.
CG-20	5,000 CT, 43% screen taps	EL-34 in AB	25	RC-125
CG-21	3,300 CT, 40% screen taps	6550's in AB	50	RC-150

CG VARIMATCH OUTPUTS FOR P. A.

Universal units designed to match any tubes within the rated output power, to line or voice coil. Output impedance 500, 200, 50, 16, 8, 5, 3, 1.5 ohms. Primary impedance 3000, 5000, 6000, 8,000, 10,000, 14,000 ohms, center tapped.

Type No.	Audio Watts	Typical Tubes	Case No.
CVP-1	12	6V6, 6AQ5, 6BQ5, 6DZ7, 7189	RC-100
CVP-2	30	6L6, 6V6, 807, 5881, 6DZ7, 7189, 7355, 7581	RC-125
CVP-3	60	300B's, 6L6's, 807, 1614, 5881, 1625	RC-150
CVP-4	125	807's, 4-6L6's, 845's, 4-1614's, 6146, 6159	RC-152
CVP-5	300	242A's, 838's, ZB-120's	RC-175



COMMERCIAL GRADE CASE

Case No.	Base Dim. (Sq.)	Mounting Dim. (Sq.)	Mounting Screw	Height $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$	Cutout Dia.	Unit Weight Lbs.
RC-37	1 $\frac{1}{2}$	1 $\frac{1}{2}$	4-40	1 $\frac{1}{2}$	1 $\frac{1}{4}$.35
RC-50	1 $\frac{1}{2}$	1 $\frac{1}{2}$	6-32	2 $\frac{1}{4}$	1 $\frac{1}{2}$	$\frac{1}{2}$
RC-62	1 $\frac{1}{2}$	1 $\frac{1}{2}$	6-32	2 $\frac{1}{2}$	1 $\frac{1}{2}$	1
RC-75	2 $\frac{1}{2}$	1 $\frac{1}{2}$	8-32	2 $\frac{1}{2}$	1 $\frac{1}{8}$	1 $\frac{1}{2}$
RC-87	2 $\frac{1}{2}$	2 $\frac{1}{2}$	8-32	3 $\frac{1}{4}$	2	2 $\frac{1}{2}$
RC-100	3	2 $\frac{1}{2}$	8-32	3 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$
RC-112	3 $\frac{1}{2}$	2 $\frac{1}{2}$	10-32	4 $\frac{1}{2}$	2 $\frac{1}{8}$	5
RC-125	3 $\frac{1}{2}$	3	10-32	4 $\frac{1}{2}$	3	6 $\frac{1}{2}$
RC-150	4 $\frac{1}{2}$	3 $\frac{1}{2}$	12-28	5 $\frac{1}{2}$	3 $\frac{1}{4}$	11
RC-152	5 $\frac{1}{2}$	4 $\frac{1}{2}$	12-28	5 $\frac{1}{2}$	4	15 $\frac{1}{2}$
RC-175	5 $\frac{1}{2}$	4 $\frac{1}{2}$	$\frac{1}{4}$ -20	7	4	22

CG VARIMATCH LINE TO VOICE COIL TRANSFORMERS

The UTC VARIMATCH line to voice coil transformers will match any voice coil or group of voice coils to a 500 ohm line. More than 50 voice coil combinations can be obtained, as follows:

.2, .4, .5, .62, 1, 1.25, 1.5, 2, 2.5, 3, 3.3, 3.8, 4, 4.5, 5, 5.5, 6, 6.25, 6.6, 7, 7.5, 8, 9, 10, 11, 12, 14, 15, 16, 18, 20, 25, 28, 30, 31, 40, 47, 50, 63, 69, 75 ohms.

Type No.	Audio Watts	Primary Impedance	Secondary Impedance	Case No.
CVL-1	15	500 ohms	.2 to 75 ohms	RC-87
CVL-2	40	500 ohms	.2 to 75 ohms	RC-125
CVL-3	75	500 ohms	.2 to 75 ohms	RC-150

CG VARIMATCH DRIVER TRANSFORMERS

Type No.	Primary	Typical Output Tubes	Max. Level Watts	Case No.
CG-51AX	All single tubes like: 6C5, 6C4, 12AU7, 2A3, 5814A Ratios 2.8:1, 3.1:1, Pri. to $\frac{1}{2}$ sec.	2A3, 6L6	5	RC-87
CG-53AX	P. P. tube like: 2A3, 6L6, Ratios 2:1, 3:1, Pri. to $\frac{1}{2}$ sec.	841, 801A, 800, 838, 805	20	RC-112
CG-59AX	50, 200, 500 ohm line Ratios 1:1, 1.4:1, Pri. to $\frac{1}{2}$ sec.	805, 838, ZB-120, 100TH, 800, 55T	20	RC-112

CG VARIMATCH MODULATION UNITS

Will match any modulator tubes to any RF load.

The UTC Varimatch transformer eliminates the power loss and high distortion caused by imprecise matching of RF load to a class B modulation through the use of a combination of tapped windings affording an extremely wide range in impedance matching. Designs provide that for any load impedance employed, full class C plate current can be carried by secondary winding.

Primary impedances from 500 to 20,000 ohms

Secondary impedances from 30,000 to 300 ohms

Type No.	Max. Audio Watts	Max. Class C Input	Typical Modulator Tubes	Case No.
CVM-0	12	25	6BQ5, 6DZ7, 6V6, 7189	RC-100
CVM-1	30	60	6V6, 6L6, 807, 5881, 7189, 7355, 7581	RC-125
CVM-2	60	125	6L6, 809, T-20, 1608, 6159	RC-150
CVM-3	125	250	807, 845, TZ-20, RK-30, 35-T	RC-152
CVM-4	300	600	805, 838, T-55, ZB-120, 4-65A, 100TH	RC-175
CVM-5	600	1200	805, HF-300, HK-354, 205TH, 810, 4-125A	7x12x9H 82 lbs.

AND SPECIAL CUSTOM BUILT AUDIO AND POWER

Above stock units cover general purpose applications.

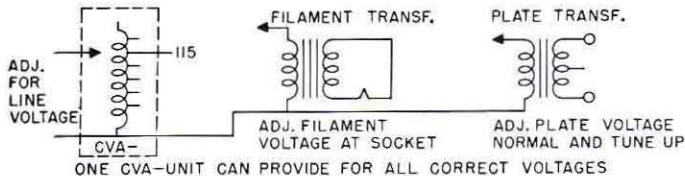


COMMERCIAL GRADE COMPONENTS

UTC CG power transformers, Varimatch units and inductors are designed to A.I.E.E. commercial standards. Ratings are conservative for continuous duty. Units are tested for breakdown at twice maximum working voltage plus 1000 volts and surge tested at 250% normal voltage. All items are vacuum impregnated and sealed with special insulating compound. The conservative design and manufacturing procedure of these units make them suitable for virtually all types of commercial equipment as well as ideally suited for quality amateur and public address service.

VARIPOWER AUTO-FORMERS

Boosting/Voltage Adjustment



Type No.	Watts Output	Case No.
CVA-1	150	RC-112
CVA-2	250	RC-125
CVA-3	500	RC-150
CVA-4	1000	RC-152
CVA-5	2000	RC-175

Designed for line voltage control, filament control and reduced power operation. Output voltage from 0 to 130 volts, 50/60 cycles. Varipower units permit control of filament voltage at the tube socket to within 2½% of desired value simultaneously with line voltage control and plate voltage control. Can be used to reduce or increase voltages on filament transformers. Taps at 25, 55, 75, 95, 100, 105, 110, 115, 120, 125 and 130 volts permit output voltages from 0 to 130 volts in 5 volt steps... from 115V, 50/60 cycles.

POWER AND BIAS TRANSFORMERS

Primary 115 volts 50/60 cycles

(DC ma is for choke input. Reduce to 70% for condenser input.)

Type No.	High Voltage	DC ma	Fil. 1	Fil. 2	Fil. 3	Fil. 4	Case No.
CG-422	435-365-0-365-435 125-0-125	125 25	5V-3A	5V-2A	6.3 VCT-3A	2.5 VCT-5A	RC-150
CG-428	500-0-500 80-0-80	250 100	5V-3A	5V-2A	6.3 VCT-4A	6.3 VCT-3A, tapped 2.5 VCT-3A	RC-152
CG-429	600-525-0-525-600	250	5V-3A	6.3VCT-3A	7.5 VCT-3A, tapped 6.3 VCT-4A		RC-152
CG-431	500-400-0-400-500 80-0-80	500 100	5V-6A	5V-2A	6.3 VCT-5A	6.3 VCT-3A	RC-175
CG-315	Tapped for any DC voltage from 15 to 100 volts within 6%—250 MA						RC-125
CG-316	Tapped for any DC voltage from 75 to 400 volts within 6%—250 MA						RC-152

TRANSISTOR/FILAMENT SUPPLY TRANSFORMERS

Primary 115 volts 50/60 cycles

See page 30 for typical applications.

Type No.	Sec. V RMS	Sec. A RMS	In Parallel			In Series			Case No.		
			Choke in DCV	C in DCA	DCV	Choke in DCV	C in DCA	DCV			
CG-30	17/21.5 17/21.5	1.5 1.5	14/17.5	3	18.5/25	2	28/35	1.5	43/56	1	RC-112
CG-31	34/43 34/43	4.5 4.5	28/35	9	43/56	6	56/70	4.5	85/110	3	RC-175
CG-32	6.3VCT	1.2									RC-62

FILAMENT/TRANSISTOR SUPPLY TRANSFORMERS

Primary 105, 115, 210, 220, 230 volts, 50/60 cycles, except CG-34... 105, 115, 220, 230. These transformers may be used on 25 to 43 cycles if 220 volt primary is used on 110 volts. Secondary voltage is simultaneously reduced to half.

Type No.	Sec. Volts C T	Sec. Amps	Working Voltage	Sec. Test Volts RMS	Case No.
CG-33	6.3	4	500	2000	RC-75
CG-34	2.5	10	2500	6000	RC-112
CG-120	2.5	10	5000	11000	RC-125
CG-121	5	25	5000	11000	RC-150
CG-122	7.5/6.3	10	1500	4000	RC-125
CG-124	10	10	1500	4000	RC-150
CG-125	14/12/11	10	1500	4000	RC-150
CG-126	14/11/10 14/11/10	10 10	1500	4000	RC-152



CG PLATE TRANSFORMERS

Primaries for 105, 115, 220, 230 volts, 50/60 cycles. For reduced power, secondary voltages can be reduced to half by using 220V. Pri. on 110 volts. These transformers may be used on 25 to 43 cycles if 220V. Pri. is used on 110 volts; secondary voltage is simultaneously halved. Units with a W suffix have been designed to be used both in full wave center tap and full wave bridge application. In these units, center-tap of secondary winding may be disconnected from ground. All ratings are for choke input filtering. Other electrical and mechanical parameters on "W" units are the same as the non-suffixed units.

Type No.	High Voltage	DC Voltage	DC ma	Case No.
CG-300	625-515-0-515-625	500/400	200	RC-150
CG-301	580-530-300-0-300-530-580	475/425/250	420	RC-152
CG-302	950-750-0-750-950	760/610	360	RC-175
CG-303	1500-1235-400-0-400-1235-1500	1250/1000 300	260* 175	RC-175

* 300MA, if used without load on low voltage winding.

END CASTING UNITS

Type No.	High Voltage	DC Voltage	DC ma	L	W	H	Mtg. Dim.	Wt. Lbs.
CG-304	1500-1235-0-1235-1500	1250/1000	800	14½"	8½"	10½"	7¼x13¾"	100
CG-304W		2500/2000	550		Same as above			
CG-305	2400-1750-0-1750-2400	2000/1500	300	10½"	4¾"	6½"	3¾x9¾"	50
CG-305W		4000/3000	210		Same as above			
CG-306	2400-1750-0-1750-2400	2000/1500	500	13¾"	8½"	10½"	7¼x12¾"	100
CG-306W		4000/3000	350		Same as above			
CG-307	3500-3000-2400-0-2400-3000-3500	3000/2500 2000	300	13¾"	8½"	10½"	7¼x12¾"	90
CG-308	3500-3000-2400-0-2400-3000-3500	3000/2500 2000	500	15½"	8½"	10½"	7¼x14¼"	125
CG-309	3500-3000-2400-0-2400-3000-3500	3000/2500 2000	1000	21"	10"	13¾"	8½x20"	253
CG-310	4600-4050-3500-0-3500-4050-4600	4000/3500 3000	600	17½"	10"	13¾"	8½x16½"	150
CG-311	1500-1235-0-1235-1500	1250/1000	500	10½"	4¾"	6½"	3¾x9¾"	50
CG-311W		2500/2000	350ma		Same as above			
CG-312	1800-1500-0-1500-1800	1500/1250	400	10½"	4¾"	6½"	3¾x9¾"	38

FILTER INDUCTORS

INDUCTANCE SHOWN IS AT RATED DC MA

Type No.	Inductance Henrys	DC ma	DC Res. Ohms	Test Volts RMS	Case No.
CG-40	10	200	110	1750	RC-112
CG-44	30	100	400	1750	RC-100
CG-45	250	15	5000	1750	RC-87
CG-48C	75	50	2200	1750	RC-87
CG-100	12	150	110	*2500	RC-125
CG-102	12	250	100	3000	RC-150
CG-104	10	350	90	5000	RC-152
CG-108	10	500	52	7000	RC-175
CG-1S	10	1000	40	9000	11½x4¼x 6½ H, 40 lb.

SWINGING INPUT INDUCTORS

INDUCTANCE SHOWN IS FROM 100% TO 10% OF RATED DC MA

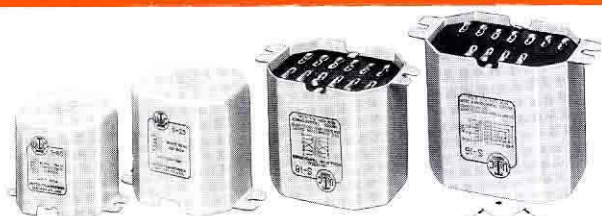
Type No.	Inductance Henrys	DC ma	DC Res. Ohms	Test Volts RMS	Case No.
CG-101	25/5	150	110	2500	RC-125
CG-103	25/5	250	100	3000	RC-150
CG-105	25/5	350	90	5000	RC-152
CG-109	25/5	500	52	7000	RC-175
CG-111† (2 Wdgs.)*	100/10 Mhy 25/2.5 Mhy	2.5A 5A	.6 .15	1500	RC-87
CG-1C	25/5	1000	40	9000	Same as CG-1S

† Split winding in series

* Split winding in parallel

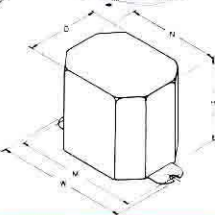


SPECIAL SERIES AUDIO TRANSFORMERS



CASE SIZES

Type No.	H	W	D	M	N	Wt. Lbs.
G-1	1 1/8	2 1/8	1 3/4	2 3/8	2	1
G-2	2 1/8	3 1/8	1 3/8	2 3/8	2 1/2	1 1/2
G-3	2 1/2	3 3/4	2 3/8	3 1/4	2 3/4	2
G-4	2 3/8	4 1/8	2 3/8	3 3/8	3 1/8	3



CLASS A INPUT TRANSFORMERS

Type No.	Application	Ratio	Case
S-1	1 plate* to 1 grid	1:3	G-2
S-2	1 plate* to 2 grids	1:4	G-2
S-3	1 plate* to 1 or 2 grids compact type	1:4	G-1
S-5	Single or double button mike or line to 1 grid hum-bucking type	1:16	G-2
S-6	Single or double button mike or line to 1 grid, compact type	1:16	G-1

*Will match tubes like 6J5, 6C4, 12AU7, etc. Can be used with high mu triodes with loss in low frequencies. Pri. DC to 8 ma

UNIVERSAL DRIVER TRANSFORMERS

(See modulator chart supplied with units for tube types, ratios are Pri. to 1/2 sec.)

Type No.	Application	Max. Watts	Case
S-8	Single driver plate to pushpull grids, 2.66:1, 5:1 ratios. Pri. DC to 45 ma.	5	G-3
S-9	Pushpull driver plates to grids of class B tubes up to 400 watts output, 2.66:1, 3.6:1, 5:1 ratios.	20	G-4
S-10	12AU7 or similar plates to 5881 or 6L6's, self or fixed bias, 2.25:1 ratio	5	G-3

MATCHING TRANSFORMERS

Type No.	Application	Pri. Ohms	Sec. Ohms	Case
S-11	Single 6J5, 6C4, 12AU7 or similar tube to line	15,000 10 ma DC	200/500	G-2
S-12	Line to speaker 15 watts	500, 2000, 4000	2, 4, 8, 15	G-2
S-13	Line to speaker 30 watts	500, 2000, 4000	2, 4, 8, 15	G-4

UNIVERSAL OUTPUT TRANSFORMERS TO LINE AND VOICE COIL

(Secondary Impedances: 500, 15, 8, 2 ohms)

Type No.	Primary Impedance	Typical Tubes	Case
SINGLE-ENDED TUBES			
S-14 10 W.	2500 ohms 4000 ohms 7000 ohms 10,000 ohms	35 ma DC 35L6GTG, 6V6, 12A6, 6AC5 2A3, 6B4, 6L6, 6Y6, 25L6GT 6F6, 7B5, 6K6GT, 1G5, 3C5 6A4, 6N7, 7189A, 7581, 7355	G-2
PUSH-PULL TUBES			
S-15 12 W.	4000 ohms 5000 ohms 10,000 ohms	6Y6, 25L6GT 2A3, 6AS7G 6080, 6BN8	G-2
S-16 30 W.	3000 ohms 6000 ohms 9000/10000 ohms	6AS7G, 6L6, 6DZ7 7189A, 7355, 7581 807-triode	G-4
S-17 55 W.	3800 ohms 4500/5000 ohms	6L6's 809, 6146, 7355, 7581	G-5

UTC Special Series audio units are specifically designed for amateur and popular-priced PA service. The Special Series units are finished in a rich, light gray enamel. A recessed terminal strip is provided permitting above chassis or breadboard wiring in addition to standard chassis type wiring. The universal windings provided on driver, matching and output transformers assure a maximum of flexibility. Large components are housed in formed cases with top or bottom mounting. All units are vacuum impregnated—compound filled.

UNIVERSAL MODULATION TRANSFORMERS

(Secondary carries class C current)
Any modulator tubes to any RF load.
(see chart supplied with units)

Maximum efficiency and lowest distortion in a modulator stage are made possible by properly matching of impedances. These units cover every modulator combination. Full class C current can be carried. Primary impedances from 500 to 20,000 ohms...secondary from 200 to 22,000 ohms.

Type No.	Audio Power	Case
S-18	12 watts	G-3
S-19	30 watts	G-4
S-20	55 watts	G-5
S-21	110 watts	G-7
S-22	250 watts	G-9

TYPICAL MODULATOR COMBINATIONS

S-18—12 WATTS MAX.

Typical driver tubes: 6C4, 12AU7, 6J5, 6SN7GT.

DRIVER	Sec. Term.	P. P. Tubes	Watts Output	P. P. Load	Plate Volts	Bias Volts
S-8	G'-G'	6AC5G	8	10,000	250	0
S-2	G-G	6V6, 6AQ5	12	6,000	250	15

S-19—30 WATTS MAX.

DRIVER							
Tube or Tubes	Transf.	Sec. Terms.	P. P. Tubes	Watts Output	P. P. Load	Plate Volts	Volts Bias
6C4	S-10	G-G	6L6 self bias	30	9,000	400	23

S-20—55 WATTS MAX.

DRIVER		Sec. Terms.	P. P. Tubes	Watts Output	P. P. Load	Plate Volts	Plate Tr'sf.	Bias Volts	Bias Tr'sf.
P. P. Tubes	Transf.								
12AU7	S-9	2-2	2E26	54	8000	500	S-41	15	S-51
12AU7	S-10	G-G	6L6, AB2	60	3800	400	S-39	25	S-51
12AU7	S-10	G-G	4-6L6	60	4500	400	S-40	23	S-51
2A3	S-9	3-3	809	60	5000	500	S-41	0	

S-21—115 WATTS MAX.

P. P.-2A3								
Driver								
S-9 Transf.	P. P. Tubes	Watts Output	P. P. Load	Plate Volts	Plate Transf.	Bias Volts	Bias Tr'sf.	
1-1	807	80	6600	600	S-45	30	S-51	
2-2	6146	95	6000	600	S-46	50	S-51	
3-3	809	100	8400	750	S-45	5	S-51	
2-2	TZ-40	100	6000	750	S-45	0		
2-2	T-756	100	7000	850	S-46	30	S-51	
1-1	4-6L6	110	2000	400	S-44	25	S-51	
2-2	35-T	115	11000	1000	S-47	30	S-51	

S-22—250 WATTS MAX.

P. P.-2A3							
Driver	P. P.	Watts	P. P.	Plate	Plate	Bias	Bias
S-9 Transf.	Tubes	Output	Load	Volts	Transf.	Volts	Transf.
Sec. Term.							
1-1	T-55	175	6900	1000	S-47	40	S-51
2-2	830 B	175	7600	1000	S-47	35	S-51
2-2	808	190	12700	1250	S-47	15	S-51
3-3	203 Z	200	6900	1000	S-47	0	
1-1	HK-354	220	15000	1500	S-49	100	S-51
*	HK-154	225	11400	1250	S-47	210	S-52
2-2	100 TH	250	7200	1250	S-47	0	
2-2	838	250	9000	1250	S-47	0	

* Reverse S-9, using 2-2 for plates and P-P for grids.

AND SPECIAL CUSTOM BUILT "S" LINE AUDIO AND POWER

Above stock units cover general purpose applications.