

JULY, 1965



OPM1A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM1A

Ferguson type OPM1A output transformer is a medium fidelity type designed to couple a single ended output stage to a wide range of speaker voice coil impedances.

RATINGS

Nominal power ratings	5 watts
Frequency response.....	40 c/s - 30,000 c/s $\pm$ 2db
Primary Impedance	7,000 ohms S.E.
	5,000 ohms S.E.
Secondary Impedance	15 ohms
	8 ohms
	3.7 ohms
	2 ohms
Primary Inductance (@ 20V 50 c/s) ..	7,000 ohms 18.0 H.
	5,000 ohms 15.5 H.
Leakage Inductance (@ 1,000 c/s) ...	7,000 Ω -15 Ω = 29mH.
	5,000 Ω -15 Ω = 21mH.
Primary D.C. Resistance.....	7,000 ohms 460 ohms
	5,000 ohms 380 ohms
Max. Primary D.C. (for Specific Response)	35 mA (7,000 Ω tap)
	45 mA (5,000 Ω tap)

CONSTRUCTION

Transformer is mounted in cadmium plated wrapover bracket with core locking tabs firmly crimped to the core.

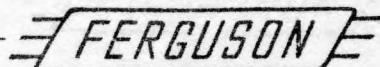
Slotted mounting feet are provided.

DIMENSIONS

Height	2-5/16 inches
Width	2-1/4 inches
Length	2-3/4 inches
Overall length (including mounting feet)	3-3/4 inches
Mounting centres	3-1/8 inches
Approx. weight.....	1-3/4 lbs.

COLOUR CODE

Primary	Red - B+
	Violet - 5,000 Ω
	Blue - 7,000 Ω
Secondary	Green - 15 ohms
	White - 8 ohms
	Yellow - 3.7 ohms
	Orange - 2 ohms
	Black - Common



OUTPUT TRANSFORMER

OPM1A

MEDIUM FIDELITY 40-12000 cps

FEBRUARY 1962

TYPE OPM1A

Ferguson Type OPM1A Output Transformer is a medium fidelity type designed to couple a single-ended output stage to a wide range of speaker voice coil impedances.

RATING

NOMINAL POWER RATING5 Watts

FREQUENCY RESPONSE.....40-30000 cps $\pm$ 2db

PRIMARY IMPEDANCES7000, 5000 ohms S.E.

SECONDARY IMPEDANCES:-

Nominal ... 15 8 3.7 2 ohms

NOTE: Use secondary tap nearest speaker voice coil impedance.

PRIMARY D.C. RESISTANCE513 ohms (7000 ohm tap)

420 ohms (5000 ohm tap)

MAX. PRIM. D.C.50 mA

MAX. PRIM. D.C. (For specified response)35 mA (7000 ohm tap)

45 mA (5000 ohm tap)

MOUNTING

Wrap-over bracket, cadmium plated, firmly crimped to the core with heavy core-locking tabs and slotted mounting feet.

Primary and Secondary leads 10/.010 PVC insulated.

DIMENSIONS

HEIGHT	2-5/16 inches
WIDTH (Over Coils)	2-1/2 inches
LENGTH	2-3/4 inches
OVERALL LENGTH (Inc. Mtg. Feet)	3-3/4 inches
MOUNTING CENTRES (NOMINAL)	3-1/8 inches
MOUNTING SLOTS	3/16 inch wide
APPROXIMATE WEIGHT	1-3/4 lbs.

COLOUR CODE

PRIMARY7000 ohms - Yellow, 5000 ohms - Orange, H.T.

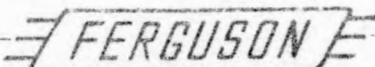
- Red.

SECONDARY15 ohms - Yellow, 8 Ohms - Orange, 3.7 ohms -

Red

2 ohms - Brown, Common - Black

JULY, 1965.



OPM2A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM2A

Ferguson type OPM2A output transformer is a medium fidelity type designed to couple a push pull output stage to a range of speaker voice coil impedances.

RATINGS

Nominal power rating	7 watts
Frequency response.....	40 c/s - 30,000 c/s $\pm$ 2db
Primary Impedance	10,000 ohms P.P.
Primary Inductance (@ 20V 50 c/s) ...	75 H.
Leakage Inductance	Prim. - 15 Ω = 42 mH.
Primary D.C. Resistance	500 ohms
Primary fundamental Resonance	89 Kc/s
Insertion Loss	0.54 db.
Secondary Impedance	15 ohms
	8 ohms
	3.7 ohms
	2 ohms

CONSTRUCTION

Transformer is mounted in cadmium plated wrapover bracket with core locking tabs firmly crimped to the core.

Slotted mounting feet are provided.

DIMENSIONS

Height	2-5/16 inches
Width	2-1/4 inches
Length	2-3/4 inches
Overall length (incl. mounting feet)	3-3/4 inches
Mounting centres	3-1/8 inches
Approx. weight	1-3/4 lbs.

COLOUR CODE

Primary	Brown	Start.
	Red	C.T.
	Blue	Finish
Secondary	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Black	Common

FERGUSON

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM3A

RATINGS

CONSTRUCTION

DIMENSIONS

COLOUR CODE

<u>Secondary.</u>	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Black	Common

FERGUSON

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM4A

RATINGS

CONSTRUCTION

DIMENSIONS

COLOUR CODE

<u>Secondary.</u>	Green	500 ohms
	White + trace	250 ohms
	Yellow + trace	166 ohms
	Orange	100 ohms
	Black	Common

MAY, 1965

FERGUSON

OPM5A

OUTPUT TRANSFORMER

Medium Fidelity

TYPE OPM5A

Ferguson type OPM5A output transformer is a medium fidelity type designed to couple a push pull output stage to a range of speaker voice coil impedances.

RATINGS

Nominal power rating	15 watts
Frequency response	40 c/s - 30,000 c/s $\pm$ 2db
Primary Impedance	5,000, 3,000 ohms P.P.
Secondary Impedance	15, 8, 3.7, 2 ohms
Primary Inductance (@ 20V 50 c/s).....	5,000 Ω = 50H 3,000 Ω = 35H
Leakage Inductance (@ 1,000 c/s).....	5,000 Ω - 15 Ω = 28mH 3,000 Ω - 15 Ω = 12.5mH
Primary D.C. Resistance	5,000 Ω = 250 Ω 3,000 Ω = 180 Ω
Primary Fundamental Resonance	116 Kc/s
Insertion Loss	0.52 db

CONSTRUCTION

Vertically mounted, fitted with side covers with integral mounting feet.

Leads 10/.010 PVC Insulated Approx. 7" long

DIMENSIONS

Height	3-1/4 inches
Width	2-3/4 inches
Length (over covers)	2-7/8 inches
Mounting centres	(L) 2-1/4 inches (W) 2-1/4 inches
Approx. weight	3-1/4 lbs

COLOUR CODE.

<u>Primary:</u>	Brown - Blue	5,000 ohms
	Pink - Violet	3,000 ohms
	Red	CT

<u>Secondary:</u>	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Black	Common

May 1965

FERGUSON

OPM6A

OUTPUT TRANSFORMER

Medium fidelity.

TYPE OPM6A

Ferguson type OPM6A output transformer is a medium fidelity type designed to couple a push pull output stage to a range of line impedances.

RATINGS

Nominal power rating 15 watt
Frequency response 40 c/s - 30 Kc/s $\pm$ 2db
Primary Impedance 3,000 ohm, 5,000 ohm P.P.
Secondary Impedance... 100 ohm, 166 ohm, 250 ohm, 500 ohm.
Primary Inductance (@ 20V 50 c/s) 3000 Ω = 35H
5000 Ω = 49H
Leakage Inductance @ 1000 c/s - 3000 Ω - 500 Ω = 18mH
5000 Ω - 500 Ω = 25mH
Primary D.C. Resistance - 3000 Ω - 180 Ω , 5000 Ω - 250 Ω
Primary Fundamental Resonance 108 Kc/s
Insertion Loss 0.42db

CONSTRUCTION

Transformer is vertically mounted, fitted with side covers, integral mounting feet.

Leads P.V.C. 10/010 approx. 7 inches long.

DIMENSIONS

Height 3-1/4 inches.
Width 2-3/4 inches.
Length 2-7/8 inches.
Mounting centres (W) 2 1/4" x (1) 2 1/4"
Approx. weight 3 1/4 lbs.

COLOUR CODE

Primary: Brown; Blue..... 5000 ohms
Pink, Violet 3000 ohms
Red..... C.T.

Secondary: Black..... Common
Orange 100 ohms
Yellow + trace..... 166 ohms
White + trace 250 ohms
Green 500 ohms

AUGUST 1965



OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM7A

OPM7A

Ferguson type OPM7A output transformer is a medium fidelity type designed to couple a push pull valve output stage to a range of speaker voice coil impedances.

The primary of the transformer may be connected for ultra-linear use by interconnection of the primary taps.

RATINGS

Nominal power rating 15 watts
Frequency response 40 c/s - 30,000 c/s $\pm$ 2db
Primary Impedance 10,000, 8,000, 7,000 ohm P.P.
Alternatively, 10,000 ohm P.P. with primary screen tapplings at approx. 20% turns.
Secondary Impedance 15, 8, 3.7, 2 ohms
Primary Inductance (@ 20V 50 c/s) 41 H.
Leakage Inductance primary to full secondary 27 mH.
Primary D.C. Resistance 230 ohms
Primary fundamental Resonance 70 Kc/s
Insertion Loss 0.22 db

CONSTRUCTION

Transformer is vertically mounted, fitted with side covers, integral mounting feet.

Leads 10/010 P.V.C. insulated. 7" long approx.

DIMENSIONS

Height 3-5/16 inches
Width 2-5/8 inches
Length 3-1/8 inches
Mounting Centres (W) 2-3/16 inches (L) 2-3/8 inches
Approx. weight 3 lbs 2 oz.

COLOUR CODE

<u>Primary</u>		<u>Secondary</u>	
Red & Red	10,000 ohms	Green	15 ohms
Violet & Pink	8,000 ohms	White	8 ohms
Yellow & White	7,000 ohms	Yellow	7 ohms
Blue & Brown	Junction C.T.	Orange	2 ohms
		Black	Common

For Ultra-Linea Connections. 10,000 ohm P.P. + 20% Screen Taps

Plate 1	Blue	Screen 1	Yellow
Plate 2	Brown	Screen 2	White

Connect both reds together for C.T.

JULY 1965

FERGUSON

OPM8A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM8A

Ferguson type OPM8A output transformer is a medium fidelity type designed to couple a push pull valve output stage to a range of line impedances.

The primary of the transformer may be connected for ultra-linear use by interconnection of the primary taps.

RATINGS

Nominal power rating	15 watts
Frequency response	40 c/s - 30,000 c/s $\pm$ 2db
Primary Impedance	10,000, 8,000, 7,000 ohm P.P.
Alternatively, 10,000 ohm P.P. with primary screen tapings at approx. 20 turns.	
Secondary Impedance	500, 250, 166, 100 ohm
Primary Inductance (@ 20V 50 c/s)	41 H.
Leakage Inductance primary to full secondary.	29 mH.
Primary D.C. Resistance.	232 ohms
Primary fundamental Resonance	70 Kc/s
Insertion Loss	0.24 db

CONSTRUCTION

Transformer is vertically mounted, fitted with side covers, integral mounting feet.

Leads 10/010 P.V.C. insulated. 7" long approx.

DIMENSIONS

Height	3-5/16 inches
Width	2-5/8 inches
Length	3-1/8 inches
Mounting Centres	(W) 2-3/16 inches (L) 2-3/8 inches
Approx. weight.....	3 lbs 2 oz.

COLOUR CODE

<u>Primary</u>		<u>Secondary</u>	
10,000 ohms	Red	500 ohm	Green
8,000 ohms	Violet	250 ohm	White + trace.
7,000 ohms	Yellow	166 ohm	Yellow + trace.
C.T.	Blue	100 ohm	Orange.
		Common.	Black.

For Ultra-Linea Connections. 10,000 ohm P.P. + 20% Screen Taps.

Plate 1	Blue	Screen 1	Yellow
Plate 2	Brown	Screen 2	White C.T. Reds.

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JULY, 1965

FERGUSON

OPM9A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM9A

Ferguson type OPM9A is a medium fidelity type designed to couple a push pull output stage to a range of line impedances.

RATINGS

Nominal power rating	25 watts
Frequency Response	40-30,000 c/s $\pm$ 2db
Primary Impedance	8,000 ohms P.P.
	6,000 ohms P.P.
Secondary Impedance	500 ohms
	250 ohms
	166 ohms
	100 ohms
Primary Inductance (@ 20V 50 c/s)	8,000 ohms = 57H.
	6,600 ohms = 50H.
Leakage Inductance (@ 1,000 c/s)..	8,000 ohms - 500 ohms = 31mH.
	6,600 ohms - 500 ohms = 26mH.
Primary D.C. Resistance	225 ohms
Primary fundamental Resonance	82 Kc/s
Insertion loss	0.29 db.

CONSTRUCTION

Transformer is vertically mounted, fitted with side covers, integral mounting feet.

Leads 10/010 P.V.C. insulated. 7" long approx.

DIMENSIONS

Height	3-1/4 inches
Width	2-5/8 inches
Length	3-1/2 inches
Mounting Centres	(W) 2-3/16 inches (L) 2-5/8 inches
Approx. weight	4 lbs

COLOUR CODE

Primary	8,000 ohms	Pink	Violet
	6,600 ohms	Brown	Blue
	C.T.	Red	
Secondary	500 ohms	Green	
	250 ohms	White + trace	
	166 ohms	Yellow + trace	
	100 ohms	Orange	
	Common	Black	

JULY, 1965



OPM10A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM10A

Ferguson type OPM10A is a medium fidelity type designed to couple a push pull output stage to a range of speaker voice coil impedances.

RATINGS

Nominal power rating	25 watts
Frequency Response	40-30,000 c/s ± 2 db.
Primary Impedance	8,000 ohms P.F.
	6,000 ohms P.F.
Secondary Impedance	15 ohms
	8 ohms
	3.7 ohms
	2 ohms
Primary Inductance (@ 20V 50 c/s)	8,000 ohms = 59H.
	6,600 ohms = 53H.
Leakage Inductance (@ 1,000 c/s)...	8,000 ohms - 15 ohms = 31mH.
	6,600 ohms - 15 ohms = 27mH.
Primary D.C. Resistance	230 ohms
Primary fundamental Resonance	82 Kc/s
Insertion loss	0.76 db.

CONSTRUCTION

Transformer is vertically mounted, fitted with side covers, integral mounting feet.

Leads 10/010 P.V.C. insulated. 7" long approx.

DIMENSIONS

Height	3-1/4 inches
Width	2-5/8 inches
Length	3-1/2 inches
Mounting Centres	(W) 2-3/16 inches (L) 2-5/8 inches
Approx. weight	4 lbs

COLOUR CODE.

Primary	8,000 ohms	Pink	Violet
	6,600 ohms	Brown	Blue
	C.T.	Red	
Secondary	15 ohms	Green	
	8 ohms	White	
	2.7 ohms	Yellow	
	2 ohms	Orange	
	Common	Black	

FERGUSON

OUTPUT TRANSFORMER

TYPE OPM11A

RATINGS

CONSTRUCTION

Leads P.V.C. insulation 10/010 7 inches long Approx.

DIMENSIONS

COLOUR CODE

<u>Secondary.</u>	500 ohms		Green
	250 ohms		White + Trace
	166 ohms		Yellow + Trace
	100 ohms		Orange
	Common		Black

May 1965

FERGUSON

OPM12A

OUTPUT TRANSFORMER

Medium Fidelity

TYPE OPM12A

Ferguson type OPM12A output transformer is a medium fidelity type designed to couple a push pull output stage to a range of line impedances.

RATINGS

Nominal power rating	55 watts.
Frequency response	40 c/s to 30,000 c/s $\pm$
Primary Impedance	3,500 ohms P.P.
Secondary Impedance	100 Ω , 166 Ω , 250 Ω , 500 Ω
Primary Inductance	(@ 20V 50 c/s) = 27H
Leakage Inductance	3.5K - 500 Ω = 20mH
Primary D.C. Resistance	82 Ω
Primary Fundamental Resonance	85 Kc/s
Insertion Loss	0.23 db

CONSTRUCTION

Transformer is vertically mounted; fitted with side covers, integral mounting feet.

Leads P.V.C. 10/010. Approx. 7 inches long.

DIMENSIONS

Height	4-7/8 inches.
Width	3-7/8 inches.
Length (Over covers)	3-7/8 inches.
Mounting centres	(L) 2-3/8 inches (W) 3-3/8 inches.
Approx. weight	8 lbs.

COLOUR CODE

Primary:	Brown	Start
	Red	CT
	Blue	Finish.
Secondary:	Black	Common
	Orange	100 ohms
	Yellow + trace	166 ohms
	White + trace	250 ohms
	Green	500 ohms

JULY 1965



OPM13A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM13A

Ferguson type OPM13A output transformer is a medium fidelity type designed to couple a push pull output stage to a range of speaker voice coil impedances.

RATINGS

Power ratings	55 watts
Frequency Response	40 c/s - 30,000 c/s $\pm$ 2db
Primary Impedance	3,500 ohms P.P.
Secondary Impedances	15 ohms 8 ohms 3.7 ohms 2 ohms
Primary Inductance.....	(@20V 50c/s) ... 21H.
Leakage Inductance..	3,500 ohm - 15 ohm .. (@1000 c/s)18mH.
Primary D.C. Resistance	69 ohms
Primary Fundamental Resonance.....	100 Kc/s
Insertion Loss	0.18 db.

CONSTRUCTION

Transformer is vertically mounted, fitted with side covers and integral mounting feet.

Primary and Secondary leads 7" long approx.

DIMENSIONS

Height	4-13/16 inches
Width	3-7/8 inches
Length (over covers)	4-1/8 inches
Mounting Centres	(W) 3-5/16 inches (L) 2-5/16 inches
Approx. weight	8-3/4 lbs.

COLOUR CODE

Primary	Brown	Plate 1
	Red	CT.
	Blue	Plate 2
Secondary	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Black	Common

JUNE, 1965

FERGUSON

OPM14A

OUTPUT TRANSFORMER

Medium fidelity

TYPE OPM14A

Ferguson type OPM14A output transformer is a medium fidelity type designed to couple a push pull stage to a range of speaker voice coil impedances.

RATINGS

Nominal Power Rating	35W.
Frequency response	40 c/s - 30 Kc/s $\pm$ 2db.
Primary Impedances	8,000 ohms P.P.
	6,600 ohms P.P.
Secondary Impedance Taps	15 ohms
	8 ohms
	3.7 ohms
	2.0 ohms
Primary Inductance (@ 20V 50 c/s)	8,000 ohms = 40H.
	6,600 ohms = 30H.
Leakage Inductance	8,000 ohm - 15 ohm = 44 mH.
	6,600 ohm - 15 ohm = 35 mH.
Primary D.C. Resistance	420 ohms
Primary Fundamental Resonance	75 Kc/s.
Insertion Loss	0.41 db.

CONSTRUCTION

Vertical side covers. Integral mounting feet.

Leads P.V.C. insulation 10/010. 7 inches long Approx.

DIMENSIONS

Height	4-1/8 inches
Width	3-1/4 inches
Length (over covers).....	3-7/8 inches
Mounting Centres	(W) 2-1/2 inches (L) 2-3/8 inches
Approx. weight	5-3/4 lbs.

COLOUR CODE.

Primary	Brown & Blue - 8,000 ohms
	Pink & Violet - 6,600 ohms
Secondary	Green - 15 ohms
	White - 8 ohms
	Yellow - 3.7 ohms
	Orange - 2 ohms
	Black - Common

AUGUST 1965



OPM15A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM15A

Ferguson type OPM15A output transformer is a medium fidelity type designed for use in a universal test speaker unit.

For push pull operation the centre tap connects to B+ and the ends of the windings to the respective valve anodes.

For single ended operation one end of the winding connects to B+ and the other end to the valve anode, the centre tap being left unconnected.

The secondary is tapped and the speaker voice coil is connected to the required tap as indicated below, thus reflecting the desired load impedance to the primary winding.

RATINGS

Nominal power rating 10 watts
Frequency Response 40 c/s - 30,000 c/s $\pm$ 2db.
Primary Impedance.... 10,000, 7000, 5,000, 2,500 ohms S.E. or P.P.
Secondary Impedance 3.1 ohms nominal
Primary Inductance (@ 20V 50 c/s @ 0 mA D.C.).... fullwdg. = 39H.
Leakage Inductance (@ 1,000 c/s) fullwdg. = 60mH.
Primary D.C. Resistance 186 ohms.
Max. Primary D.C. for specific response 60 mA

CONSTRUCTION

Transformer is mounted in vertical side covers with integral mounting feet.

DIMENSIONS

Height 3-1/4 inches
Width 2-5/8 inches
Length 2-1/2 inches
Weight 3 lbs.

COLOUR CODE

<u>Primary.</u>	Yellow	Plate 1.
	Red	C.T.
	Orange	Plate 2.
<u>Secondary.</u>	Black	Common
	Brown	10,000 ohms
	Blue	7,000 ohms
	Grey	5,000 ohms
	Green	2,500 ohms

Connect other voice coil lead to impedance required.

AUGUST 1965

FERGUSON

OPM16A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM16A

Ferguson type OPM16A output transformer is a medium fidelity type designed to couple a 500 ohm line to a range of speaker voice coil impedances.

RATINGS

Nominal power ratings	10 watts
Frequency response.....	40 cps - 30,000 cps $\pm$ 2db
Primary Impedance	500 ohms
Secondary Impedance	15, 8, 3.7, 2 ohms
Primary Inductance (@ 20V 50 cps)	2.15 H.
Leakage Inductance (@ 1,000 cps 500 ohms - 15 ohms).....	3.0 mH
Primary D.C. Resistance	23 ohms
Insertion Loss	0.53 db.

CONSTRUCTION

Transformer is mounted in cadmium plated wrapover bracket with core locking tabs firmly crimped to the core.

DIMENSIONS

Height	2-5/16 inches
Width	2-3/8 inches
Length	2-3/4 inches
Overall length	3-3/4 inches
Mounting Centres (Nominal)	3-1/8 inches
Approx. weight	2 lbs.

COLOUR CODE

<u>Primary.</u>	Red Pink	500 ohms
<u>Secondary.</u>	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Black	Common

AUGUST 1965

FERGUSON

OPM17A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM17A

Ferguson type OPM17A output transformer is a medium fidelity type designed to couple a 500 ohm line to a range of speaker voice coil impedances.

RATINGS

Nominal power rating.....	15 watts
Frequency response.....	30 c/s - 30,000 c/s $\pm$ 2db
Primary Impedance	500 ohms
Secondary Impedances	15 ohms
	8 ohms
	3.7 ohms
	2 ohms
Primary Inductance (@ 20V. 50 c/s)	12.OH.
Leakage Inductance (@ 1,000 c/s)	2.5mH.
Primary D.C. Resistance	28 ohms
Insertion loss	0.72 db.

CONSTRUCTION

Transformer is mounted in cadmium plated wrapover bracket, with core locking tabs firmly crimped to the core. Slotted mounting feet are provided.

DIMENSIONS

Height	2-3/8 inches
Width (over coils)	2-1/2 inches
Length	2-3/4 inches
Overall length (including mounting feet)	3-3/4 inches
Nominal mounting centres	3-1/8 inches
Approx. weight	1-3/4 lbs

COLOUR CODE

<u>Primary.</u>	Red	Start
	Pink	Finish
<u>Secondary.</u>	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Brown	Common

JUNE 1965

FERGUSON

OPM18A

OUTPUT TRANSFORMER

MEDIUM FIDELITY

TYPE OPM18A

Ferguson type OPM18A output transformer is a medium fidelity type designed to couple a 500Ω line to a range of speaker voice coil impedances.

RATINGS

Nominal Power Rating	25 watts
Frequency Response	40 c/s - 30,000 c/s.
Primary Impedance	500 ohm $\pm$ 2db.
Secondary Impedances	15 ohms
	8 ohms
	3.7 ohms
	2 ohms
Primary Inductance	(@ 20V 50 c/s.) = 2.4 H.
Leakage Inductance..	(@ 1000 c/s.) 500 ohm to 15 ohm = 2.8 mH.
Primary D.C. Resistance	27 ohms
Insertion Loss	0.48 db.

CONSTRUCTION

Vertically mounted in side covers, with integral mounted feet.

LEADS:- Primary ..10/.010 P.V.C. insulated. 7" long.

Secondary ..enamelled copper wire P.V.C. sleeved 7" long.

DIMENSIONS

Height	3-5/16 inches
Width	2-5/8 inches
Length (over covers)	3 inches
Mounting Centres	(W) 2-3/16 inches (L) 2-3/16 inches
Approx. weight	3-1/4 lbs.

COLOUR CODE

Primary.	Red	Start
	Pink	Finish
Secondary.	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Black	Common

NOTE: WHERE TWO OR MORE CONDUCTORS ARE ENCLOSED WITHIN A "NYLEX" SLEEVE, THESE CONDUCTORS MUST BE SOLDERED TOGETHER TO MAINTAIN CONTINUITY.

AUGUST, 1965.



OPM19A

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM19A

Ferguson type OPM19A output transformer is a medium fidelity type designed to couple a single ended output stage to a range of line impedances.

RATINGS

Nominal power rating	5 watts
Frequency response	40 c/s - 30,000 c/s $\pm$ 2db
Primary Impedances	7,000 ohms
	5,000 ohms
Secondary Impedances	500 ohms
	250 ohms
	166 ohms
	100 ohms
Primary Inductance (@ 20V 50 c/s)	7,000 Ω = 16.5 H.
	5,000 Ω = 12.5 H.
Leakage Inductance (@ 1,000 c/s).....	7,000 Ω -500 Ω = 25 mH.
	5,000 Ω -500 Ω = 19.5 mH.
Primary D.C. Resistance	453 ohms
Max. Primary D.C. for specific response	7,000 Ω =.035A
	5,000 Ω =.045A
Primary Fundamental Resonance	93 Kc/s.
Insertion Loss	.96 db.

CONSTRUCTION

Transformer is mounted in cadmium plated wrapover bracket with core locking tabs firmly crimped to the core.

DIMENSIONS

Height	2-5/16 inches
Width	2-1/4 inches
Length (over coils)	2-3/4 inches
Overall length (Incl. mounting feet)	3-3/4 inches
Mounting centres	3-1/8 inches
Approx. weight	1-3/4 lbs.

COLOUR CODE

Primary.....	Red	H.T.
	Violet	5,000 ohms
	Blue	7,000 ohms
Secondary.....	Green	500 ohms
	White + trace	250 ohms
	Yellow + trace	166 ohms
	Orange	125 ohms
	Black	Common

FERGUSON

OUTPUT TRANSFORMER
MEDIUM FIDELITY
TYPE OPM20A

RATINGS

CONSTRUCTION

Slotted mounting feet are provided.

DIMENSIONS

COLOUR CODE

<u>Primary</u>	Red	B+
	Violet	10,000 ohms
	Blue	8,000 ohms
<u>Secondary</u>	Green	15 ohms
	White	8 ohms
	Yellow	3.7 ohms
	Orange	2 ohms
	Black	Common

AUGUST 1965



OPM21A

100 WATT MEDIUM FIDELITY OUTPUT TRANSFORMER TYPE OPM21A

Ferguson type OPM21A is primarily intended for use in the "100 WATT P.A. AMPLIFIER" described in Radio, Television & Hobbies, July 1960.

RATING

Nominal Power Rating 100 watts
 Frequency response 40-30,000 cps $\pm$ 2db
 Primary Impedance 4500 Ohms Plate to Plate
 Screen Tap Impedance 20% of Plate Impedance
 Primary D.C. Resistance (Total @ 20°C) 92 Ohms
 Max. D.C. Primary Current (each half) 180 Milliamperes
 Max. D.C. Prim.Unbalance (For Stated Response).. 10 Milliamperes
 Primary Inductance (At 10V 50 cps) 25 Henries
 Leakage Inductance (Prim. to full Sec.) Less than 6 Millihenries
 Secondary Impedances 500, 281, 125, 31.25 ohms
 Secondary D.C. Resistance (Each Winding) 5 ohms

DIMENSIONS

Height 4-7/8 inches
 Width (W) 3-7/8 inches
 Length (L) (Over Covers) 4-3/4 inches
 Mounting Centres 3-3/8 (W) x 3 (L) inches
 Mounting Holes 7/32 inch. dia.
 Approximate weight 12 lbs.
 Mounting Vertical side covers with mounting feet.

COLOUR CODE

Primary. PLATE 1 - Brown PLATE 2 - Blue, C.T. - Red
 SCREEN 1 - Orange SCREEN 2 - Yellow

Secondary.

For 500 Ohm Output

Join - Green to Violet, Pink to Yellow + trace, White + trace
 Red + trace.

Take output from - Black & Grey.

For 281 Ohm Output

Join White + trace & Red + trace.
 Join - Black to Violet, Green to Pink & Yellow + trace.

Take output from - Black-Violet junction & Grey.

For 125 Ohm Output

Join - Black to Violet, Green to Pink & Yellow + trace &
 Red + trace, White + trace to Grey.

Take output from - Black-Violet junction & White + trace -
 Grey junction.

For 31.25 Ohm Output.

Join - Black to Violet & Yellow + trace & Red + trace,
 Green to Pink & White + trace & Grey.

Take output from - Black-Violet-Yellow + trace - Red + trace
 junction and Green-Pink-White + trace - Grey junction.