



APP4C
13/6 10.5

VALVE



Triple-Grid Output Valve

CHARACTERISTICS:

- Indirectly Heated Cathode Heater 4.0+5% 1.95 amps.
- Max. Anode Volts 250
- Max. Screen Volts 250
- Average Anode Current 36 mA
- Average Screen Current 4 mA
- Slope (in wkg. point) 10 mA/V
- Optimum Load (R_L) 7,000 ohms
- Bias Resistance (R_B) 150 ohms
- Undist. Output (5% harmonics) 3.6 watts
- Input Volts (r.m.s.) 3.5 v.

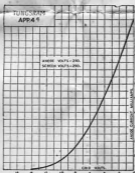


Fig. 1

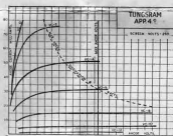


Fig. 2

The APP4C is an indirectly heated output valve for use in A.C. receivers.

This valve, which has the high slope of 10 mA/V, differs from the usual pentode in that its suppressor grid (g₃) is brought out to a separate pin, for the following reasons.

The use of normal pentodes with similar high slopes entails the use of grid and anode stoppers to ensure stable operations but these

may be omitted when using a triple-grid valve as shown in Fig. 3.

It is appreciated that this advantage is mainly of interest to Receiver Manufacturers or to Amateur Constructors, but it is obviously of value to the users of sets initially fitted with triple-grid valves in view of the reduced number of components necessary, and the reduction of the possible sources of trouble.

One further advantage of a valve operating without stoppers is that it gives its full nominal output to the loud speaker, part of which would otherwise be absorbed.

Other uses will be readily seen.

Tungsramp Valves are manufactured under British Patents Nos. 289,762; 289,763; 360,803; 311,105; 313,151; 365,687; 363,189; 382,486; 355,334; 341,826; 356,715; 361,770; 370,298; 361,170; 364,411; 388,686 and 395,989.

Date: October 1937. (This cancels previous Leaflet).

Figs. 1 and 2 show standard static curves of the APP4C whilst Fig. 3 is a circuit showing the system of operation.

Fig. 4 gives the pin connections when viewing the valve from the free end of the pins.

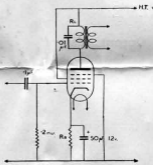


Fig. 3



Fig. 4

This Table shows the complete range of 4.0 Volt AC Valves.

	V _a	V _g	V _{g1}	V _{g2}	Normal	Max	Normal	R _a	C _g	Bias	USE	BASE		
I _b	Max	Max	Min.	Max.	I _a	I _g	S	Meg-	μF.	Resis.		(Standard		
								ohm		Min.		English)		
TX4	1.0	250	70	-1.5	-25	4.0	6.0	1.0	0.75	—	150	Pin Top		
VO4	.65	250	70	-1.5	-25	1.0	3.8	0.7	0.6	—	150	7 G1		
HP4106	1.0	250	100	-1.5	-35	5.0	1.3	3.5	—	3400	—	7 G4		
HP4115	1.1	250	100	-1.5	-12	4.3	1.5	3.4	—	3500	—	7 A		
VP4b	.65	250	250	-1.0	-50	10.0	2.5	4.0	2.8	—	.003	100	7 G1	
SP4b	.65	250	250	—	-3.0	3.2	1.5	4.0	2.7	—	—	—	7 G1	
HP4101	1.0	250	100	—	-3.0	3.5	1.8	3.5	—	5600	2	.002	600	7 A
AS4120	1.0	200	100	—	-2.0	3.0	.8	3.0	—	900	—	—	500	7 A
AS4125	1.2	200	100	-1.5	-40	3.0	.8	3.0	—	700	—	—	150	5 A
HL4	1.0	200	—	—	—	4.0	—	3.5	—	40	.011	—	1000	5 —
DD4	.65	250	—	—	—	.8	—	—	—	—	—	—	—	5 —
DDT4	.65	250	—	—	—	4.0	—	3.6	—	40	.011	—	1000	7 G
APP4120	1.2	250	250	-16.5	—	34	6.5	—	3.5	—	—	—	400	5 & 7
APP4a	1.2	250	250	-16.5	—	34	6.5	—	3.5	—	—	—	400	7 —
APP4b	2.0	250	250	-6.0	—	36	4.0	—	10.0	—	—	—	140	7 —
APP4c	2.0	250	250	-6.0	—	36	4.0	—	10.0	—	—	—	140	7 —
APP4d	2.0	250	250	-16.5	—	72	8.0	—	7.0	—	—	—	200	7 —
PP4	1.1	250	250	15	—	36	6.0	—	4.0	—	—	—	400	5 —
APV4	2.0	350	—	—	—	120	—	—	—	—	—	—	—	4 —
PV495	1.0	350	—	—	—	80	—	—	—	—	—	—	—	4 —
PV4	2.0	350	—	—	—	120	—	—	—	—	—	—	—	4 —
PV4201	2.0	600	—	—	—	180	—	—	—	—	—	—	—	4 —
PV4202	2.0	500	—	—	—	120	—	—	—	—	—	—	—	4 —

Complete ranges of AC/DC, Battery and American Valves also available.

NOTICE

In the event of this valve being returned, the manufacturers are under no obligation to return or replace it, should there be any necessity to break it for the purpose of a thorough examination.

Further Technical Information can be obtained from:—

TUNGSRAM ELECTRIC LAMP WORKS (Great Britain) Ltd.,
Tungsramp House, 82/84, Theobalds Road, London, W.C.1.

Telephone Holborn 3563-4-5-6

Factories in England, Austria, Czechoslovakia, Hungary, Poland and Italy.