



OUTPUT TRIODE

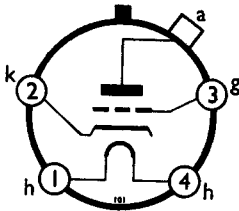
7.5V INDIRECTLY HEATED

DA42

JUNE, 1955

A power triode designed to operate in pairs at zero grid bias in Class B audio amplifiers.

BASE CONNECTIONS AND VALVE DIMENSIONS



View from underside of base.

Base : Medium 4 Pin Bayonet.

Bulb : Dome Top Tubular.

Max overall length : 156 mm.

Max seated length : 141 mm.

Max diameter : 52 mm.

Top Cap : CT2

HEATER

V_h	7.5	V
I_h	1.2	A

RATING

V_a	1000 max.	V
P_a	40 max.	W

CHARACTERISTICS

V_a	1000	V
I_a	40	mA
g_m	3.0	mA/V
r_a	24	k Ω
μ	72	

CAPACITANCES

C_{g-kh}	5.2 pF	C_{a-kh}	1.0 pF	C_{g-a}	4.0 pF
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DA42

TYPICAL OPERATION

Push-Pull Class B. Two valves. Data per pair.

V_a	1,000	V
V_g	0	V
I_a (o)	50	mA
I_a (max. sig.)	275	mA
I_g	50	mA
i_g (pk) (per valve)	100	mA
v_{in} (g-g) (pk)	200	V
p_{dr}	5	W
p_a (o) per valve)	25	W
p_a (max. sig.) (per valve)	50	W
R_L (a-a)	10	k Ω
P_{out}	175	W
D	6	%
z_{in} (g-g)	4	k Ω
z_{out}	15	k Ω

The conditions given above apply to normal speech and music only. Continuous 100% tone modulation will result in excessive dissipation and for such applications, $R_L(a-a)$ should be increased to 12 k Ω , resulting in a reduction of power output to 150 W.

GENERAL

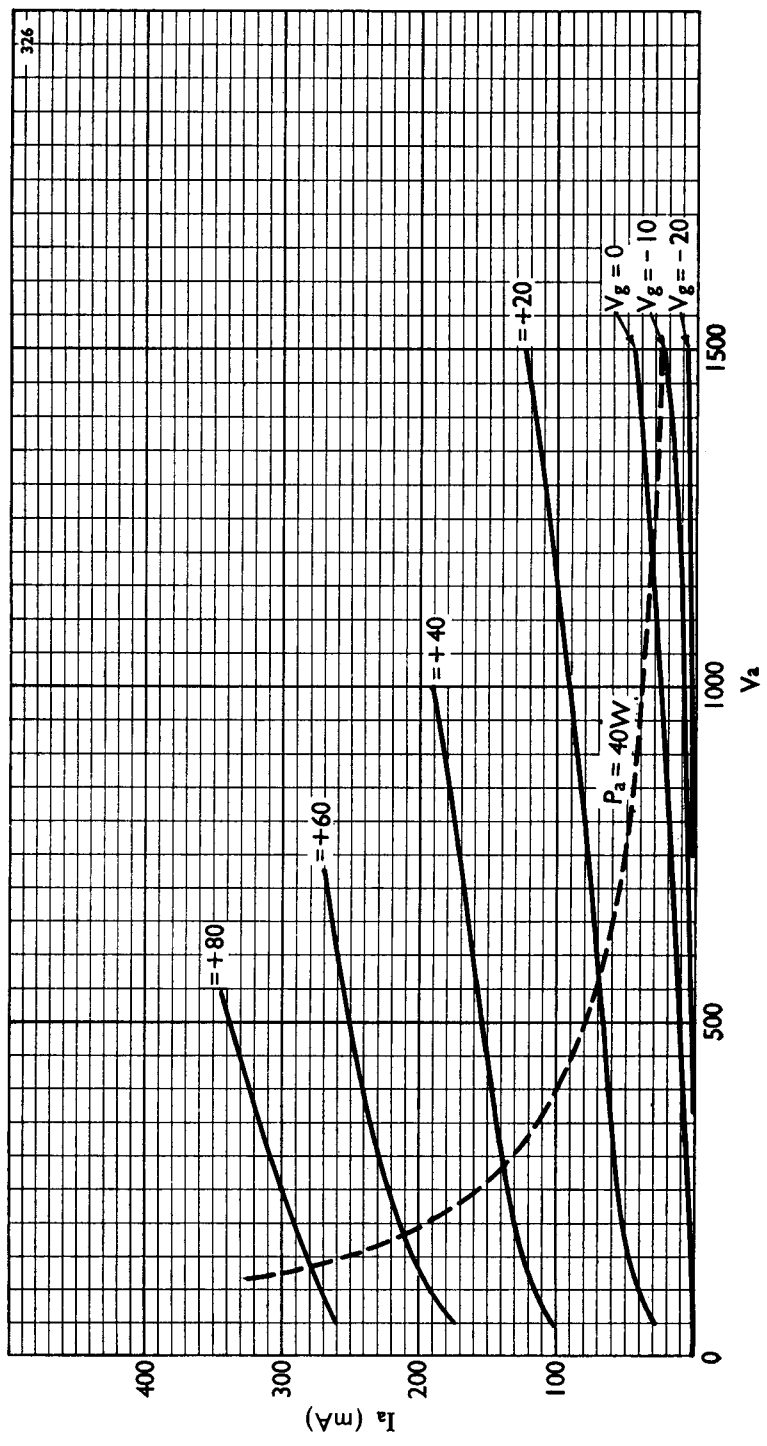
The DA42 may be used as a replacement for the DA41 in existing equipment. In such cases, since the heater and cathode of the DA42 are not internally connected it is essential that pin 2 of the valve socket is earthed.

MOUNTING

Vertical with base down.

VENTILATION

No special precautions are necessary. The temperature of the hottest part of the bulb must not exceed 225°C.



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DA42

