

Output pentode with centre-tapped filament,
suitable for R.F. and A.F. applications.

FILAMENT

This valve is suitable for D.C. operation only.

Series V_f applied across the two filament sections in series, between pins 1 and 7. V_{g1} referred to pin 1.

Parallel V_f applied across the two filament sections in parallel, between pin 5 and pins 1 and 7 connected together. V_{g1} referred to pin 5.

	Series	Parallel	
V_f	2.8	1.4	V
I_f	0.1	0.2	A

For series filament operation a shunting resistor must be connected across one filament section, between pins 1 and 5 to by-pass the excess cathode current in this section. The value of the resistor should be such that the voltage across the shunted section equals that across the other section.

MOUNTING POSITION

Any

CAPACITANCES (without external shield)

C_{a-g1}	<0.34	μF
C_{in}	4.8	μF
C_{out}	4.2	μF

OPERATING CONDITIONS AS CLASS "A" A.F. AMPLIFIER.

Parallel filament connection

V_a	135	150	V
V_{g2}	90	90	V
V_{g1}	-7.5	-8.4	V
$I_{a(o)}$	14.8	13.3	mA
I_a (max. sig.)	14.9	14.1	mA
$I_{g2(o)}$	2.6	2.2	mA
I_{g2} (max. sig.)	3.5	3.5	mA
g_m	1.9	1.9	mA/V
r_a	90	100	k Ω
R_a	8	8	k Ω
$v_{in(pk)}$	7.5	8.4	V
P_{out}	600	700	mW
D_{tot}	5	6	%

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suitable for R.F. and A.F. applications.*

OPERATING CONDITIONS

As R.F. power amplifier at 50 Mc/s. (Intermittent operation)

V_a	150	V
V_{g2}	135	V
R_{g1}	200	k Ω
I_a	18.3	mA
I_{g2}	6.5	mA
I_{g1}	0.13	mA
P_{out} (approx.)	1.2	W

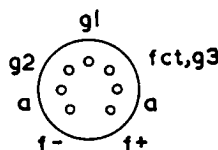
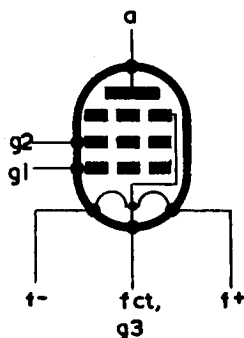
LIMITING VALUES

(a) A.F. power amplifier

V_a max.	150	V
V_{g2} max.	90	V
p_a max.	2	W
p_{g2} max.	0.4	W
$I_{k(o)}$ max.	18	mA

(b) R.F. power amplifier (intermittent operation)

V_a max.	150	V
V_{g2} max.	135	V
V_{g1} max.	-30	V
p_a max.	2	W
p_{g2} max.	0.9	W
p_{in} max.	3	W
I_a max.	20	mA
I_{g1} max.	0.25	mA
I_k max.	25	mA



B7G Base

