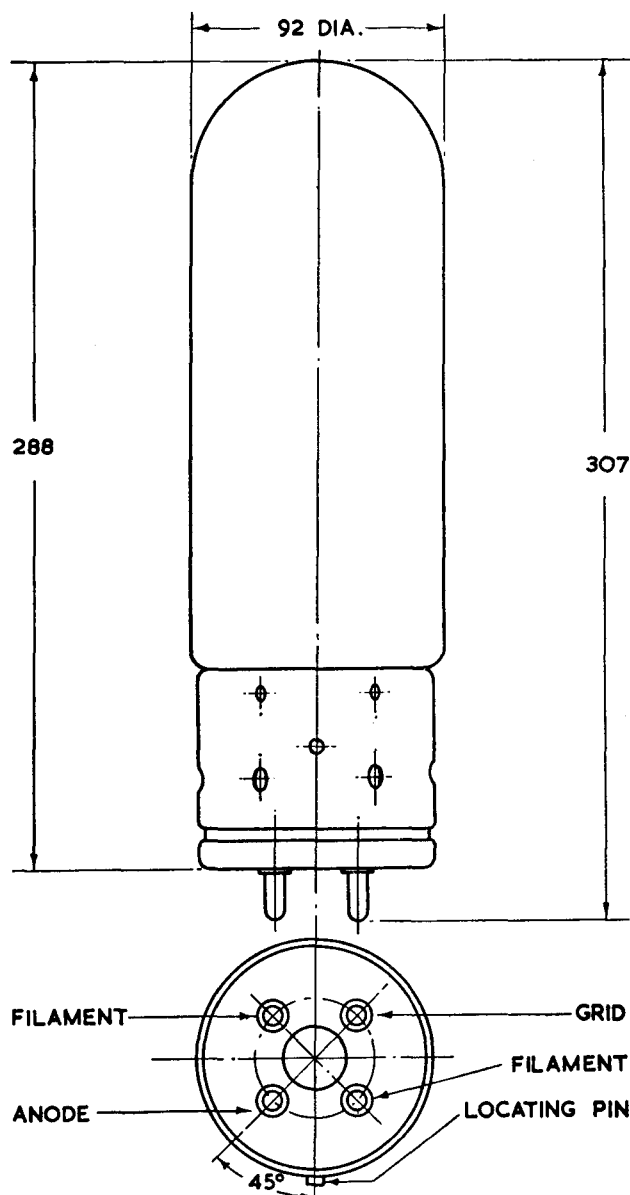


(HF AMPLIFIER AND OSCILLATOR, AND AF AMPLIFIER)

Mounting. The valve must be mounted vertically with the anode uppermost.

V_f		10	V			
I_f		10	A			
$V_{a(max)}$		2.7	kV			
$V_{a(pk)(max)}$		6	kV			
$I_{gl(rf)(max)}$		2	A			
$P_a(max)$		250	W			
$P_{gl(max)}$		20	W			
$I_{k(pk)(max)}$		4	A			
r_a	$\left. \begin{array}{l} \\ \\ \\ \end{array} \right\} \text{ taken at } V_a$	700 V	$\left\{ \begin{array}{l} 2,450 \\ 22 \\ 9 \\ 21 \end{array} \right.$	Ω mA/V mA/V		
μ						
g_m		150 V				
$g_m \text{ (taken at } \frac{1}{2} I_{k(pk)})$						
C_{a-f}			7.5	pF		
C_{a-gl}			24	pF		
C_{gl-f}			14	pF		



DIMENSIONS IN
MM. MAXIMUM.

Head Office: Marconi House, Chelmsford, England. Telephone: Chelmsford 3221. Telegraphic Address: Expanse, Chelmsford

**(1) RF POWER AMPLIFIER AND
OSCILLATOR. CLASS C TELEGRAPHY**
(Unmodulated, one valve, key down conditions)

Maximum Ratings			
V_a	2	kV	
V_{g1}	-300	V	
I_a	500	mA	
P_a	250	W	
P_{g1}	20	W	

Typical Operation			
V_a	2	kV	
V_{g1}	-190	V	
$V_{g1(pk)}$	315	V	
I_a	450	mA	
I_{g1} (a)	40	mA	
Z_a	2,100	Ω	
P_{dr} (a)	15	W	
P_a	250	W	
P_{out}	650	W	
P_{load} (b)	550	W	

(2) RF POWER AMPLIFIER. CLASS C.
(Anode modulated, carrier conditions, one valve, 100% modulation.)

Maximum Ratings			
V_a	1.6	kV	
V_{g1}	-300	V	
I_a	400	mA	
P_a (c)	165	W	
P_{g1}	20	W	

Typical Operation			
V_a	1.6	kV	
V_{g1}	-150	V	
$V_{g1(pk)}$	260	V	
I_a	325	mA	
I_{g1} (a)	30	mA	
Z_a	2,400	Ω	
P_{dr} (a)	9	W	

P_a	165	W
P_{out}	355	W
P_{load} (b)	300	W

(3) AF AMPLIFIER. CLASS AB1

(Conditions per pair of valves unless otherwise stated.)

Note. The power supply impedance should not exceed 400 Ω .

$V_{a(zero-sig)}$	2.2	2.7	kV
$V_{a(max-sig)}$	2	2.5	kV
V_{g1}	-80	-115	V
$V_{in(pk)(g_1'-g_1'')}$	180	230	V
$I_a(zero-sig)$	100	120	mA
$I_a(max-sig)$	300	360	mA
$P_a(zero-sig)$ per valve	110	160	W
$P_a(max-sig)$ per valve	190	250	W
R_L	10	12	k Ω
P_{out}	250	400(d)	W
D	< 5	5	%

(4) AF AMPLIFIER. CLASS AB2

(Conditions per pair of valves unless otherwise stated.)

Note. The power supply impedance should not exceed 400 Ω .

$V_{a(zero-sig)}$	2.2	2.7	kV
$V_{a(max-sig)}$	2	2.5	kV
V_{g1}	-80	-115	V
$V_{in(pk)(g_1'-g_1'')}$	350	400	V
$I_a(zero-sig)$	100	120	mA
$I_a(max-sig)$	480	530	mA
$I_{g1(max-sig)}$	30	30	mA
$P_a(zero-sig)$ per valve	110	160	W
$P_a(max-sig)$ per valve (c)	160	210	W
R_L	10	12	k Ω
P_{out}	650	900(d)	W
D	< 6	6	%

NOTES

- (a) Subject to wide variation.
- (b) Assuming a circuit transfer efficiency of 85%.
- (c) If the mean depth of modulation is low, higher values of P_a may be permissible. The value of P_a under modulated conditions, must never exceed 250 W.
- (d) This valve may vary by $\pm 6\%$.
- (e) $P_{a(max)}$, under class AB2 push-pull conditions, occurs at approximately half full output.

