

Triode Type DET 16

(HF AMPLIFIER)

General. The DET 16 is a transmitting triode fitted with a thoriated tungsten filament and a carbon anode. It is suitable for use at frequencies up to 30 Mc/s. The valve may also be used as a zero bias Class B amplifier.

Cooling. As the valve runs hot in operation, free air circulation should be allowed.

Mounting. The valve must be mounted vertically.

APPROXIMATE DATA

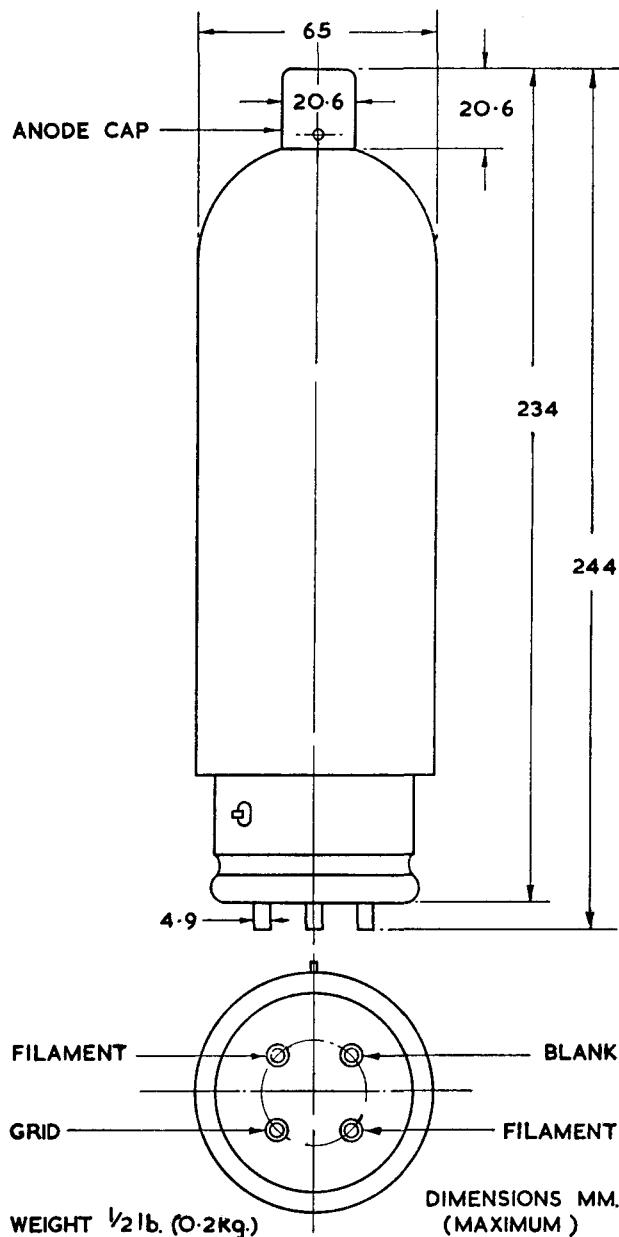
V_f	10.0	V
I_f	5.5	A
$V_{a(max)}$	3,000	V
$P_{a(max)}$	125	W
μ	taken at V_a 1,000 V I_a 125 mA	61
g_m		6.5 mA/V
r_a		9,400 Ω
C_{a-gl}		18.25 pF
C_{a-k}		10.3 pF
C_{gl-k}		10 pF

Typical Operation

(1) HF POWER AMPLIFIER AND OSCILLATOR. CLASS C TELEGRAPHY

(Unmodulated, one valve, key down conditions)

V_a	3,000	V
I_a	125	mA
V_{g1}	-375	V
I_{g1} (a)	25	mA
R_{g1-k}	15,000	Ω
P_a	125	W
P_{out}	250	W



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(2) PUSH-PULL AMPLIFIER. CLASS B

(Operating data per pair of valves unless otherwise stated)

	Quiescent	Full Output	
V_a	1,150	1,000	V
V_{g1}	0	0	
I_a	160	460	mA
$R_{L(a' a'')}$	—	5,000	Ω
$V_{in(pk)} (g_1' g_1'')$	—	200	V
$I_{g1} \text{ (mean)}$	—	60	mA
$P_a \text{ (per valve)}$	92	55	W
P_{out}	—	350	W
D_{max}	—	5	%

NOTE

(a) Subject to wide variation. The figures are approximate only.

