



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

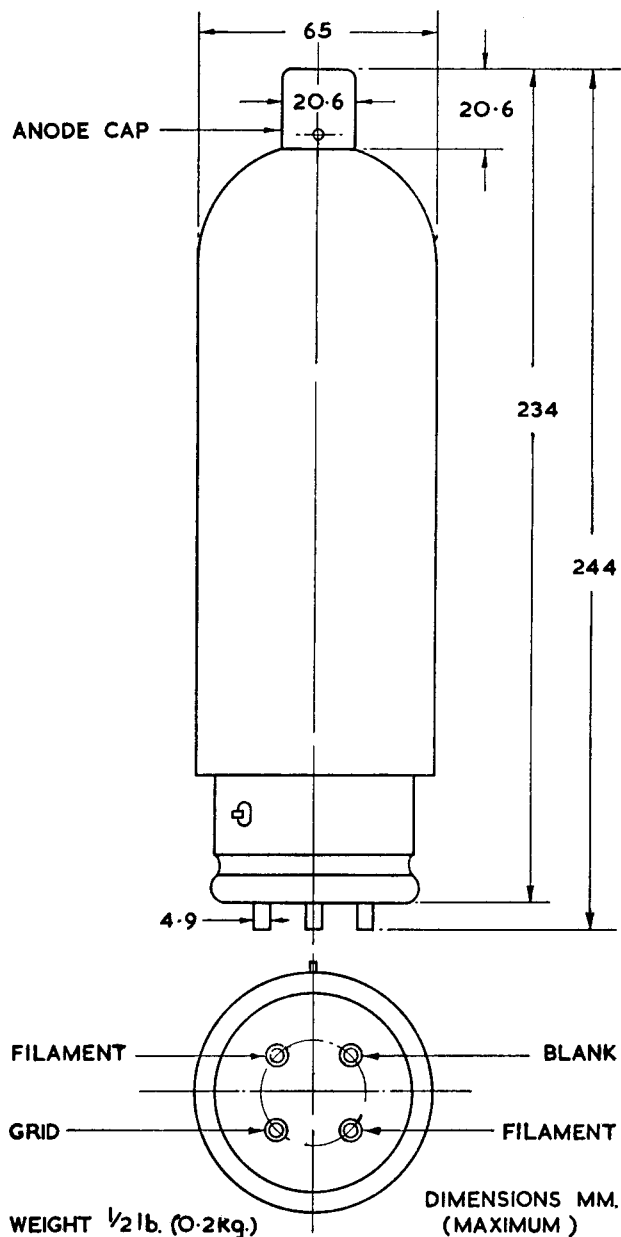
V_f		10.0	V			
I_f		5.5	A			
$V_{a(max)}$		3,000	V			
$P_{a(max)}$		125	W			
μ	taken at	61				
g_m				V_a 1,000 V	6.5	mA/V
r_a				I_a 125 mA	9,400	Ω
C_{a-gl}		18.25	pF			
C_{a-k}		10.3	pF			
C_{gl-k}		10	pF			

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_{gl}		-375	V
I_{gl}	(a)	25	mA
R_{gl-k}		15,000	Ω
P_a		125	W
P_{out}		250	W



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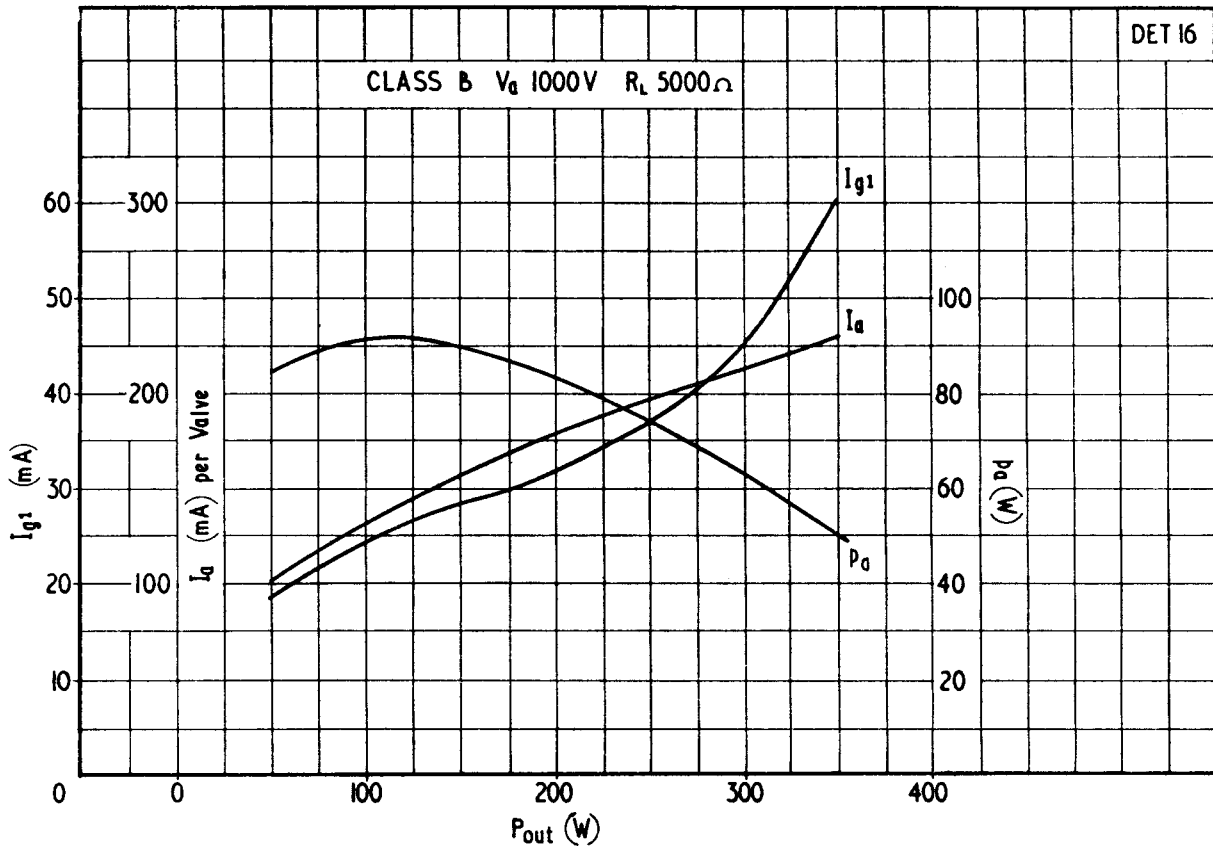
(2) PUSH-PULL AMPLIFIER. CLASS B

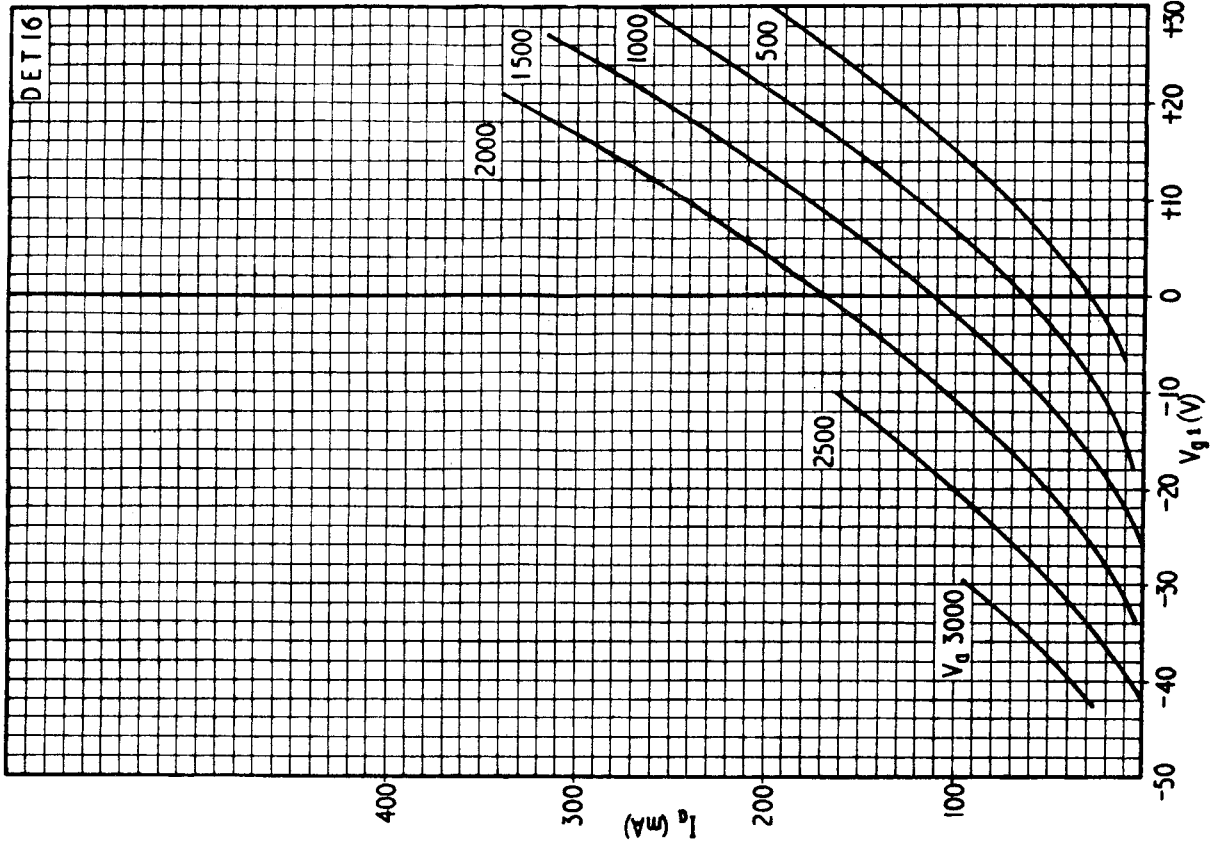
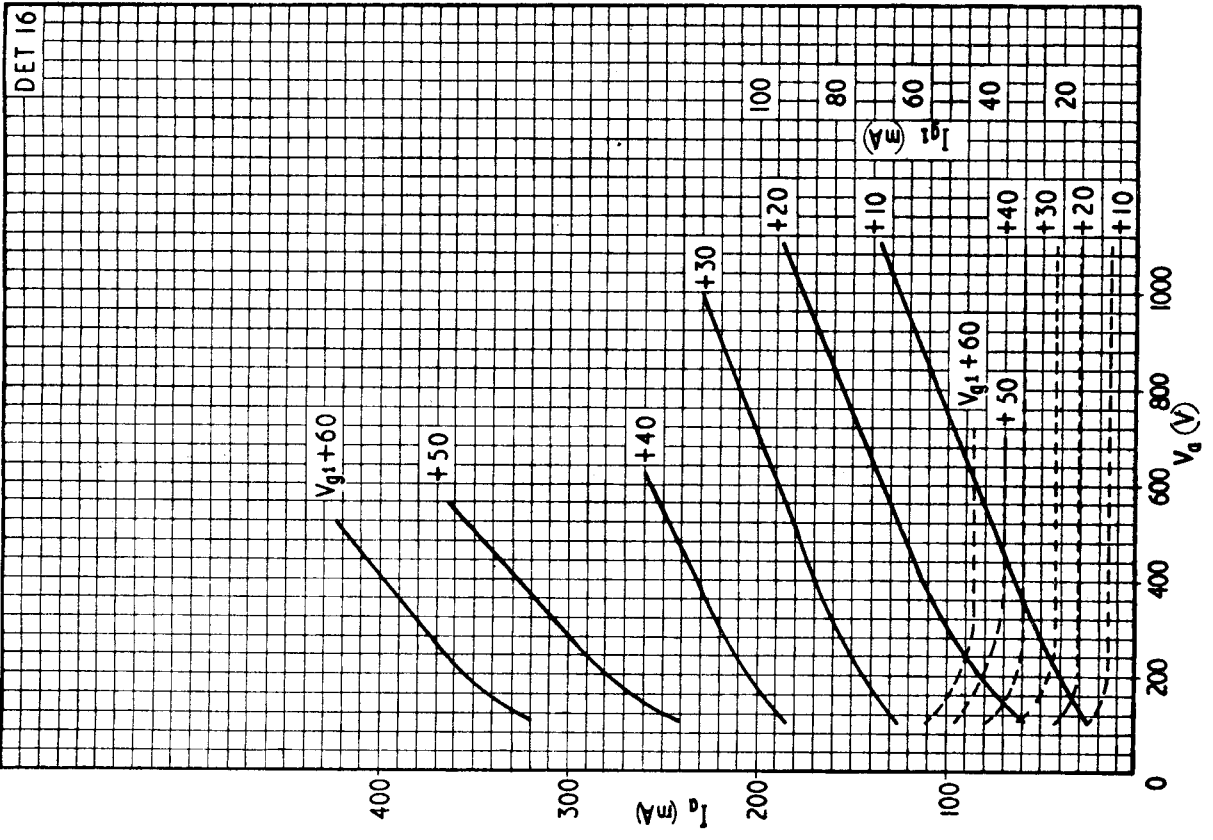
(Operating data per pair of valves unless otherwise stated)

	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
$V_{in(pk)} (\xi_1' \xi_1'')$	-	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.





DET 16

