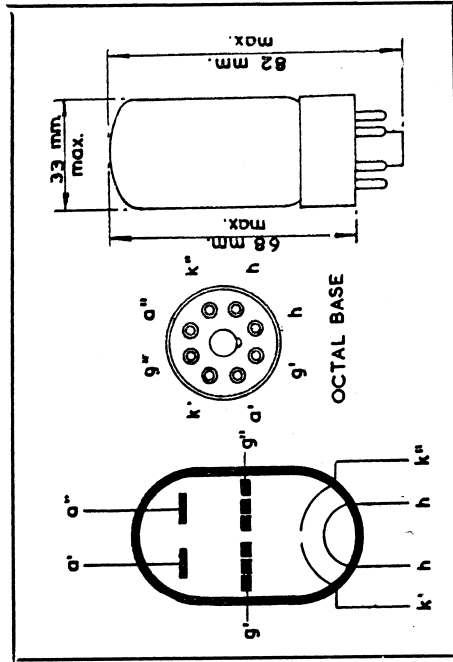


ECC33 TWIN TRIODE (Separate Cathodes)



HEATER (The heaters of the two cathodes are connected in series)

V_h 6.3 V
 I_h 0.4 A

CAPACITANCES

$C_{a-k''}$ 0.75 $\mu\mu\text{F}$
 C_{a-g} 2.5 $\mu\mu\text{F}$
 C_{in-g} 3.5 $\mu\mu\text{F}$
 $C_{out'}$ 1.2 $\mu\mu\text{F}$
 $C_{out''}$ 1.5 $\mu\mu\text{F}$

CHARACTERISTICS (each section)

V_a 250 V
 V_g -4.0 V
 I_a 9.0 mA
 G_m 3.6 mA/V
 μ 35
 r_a 9,700 Ω

LIMITING VALUES (each section)

$V_{a(g)}$ max. 300 V
 V_a max. 550 V
 P_a max. 2.5 W
 I_k max. 20 mA
 R_{g-k} max. 1.5 M Ω
 V_{h-k} max. 100 V
 R_{h-k} max. 20,000 Ω

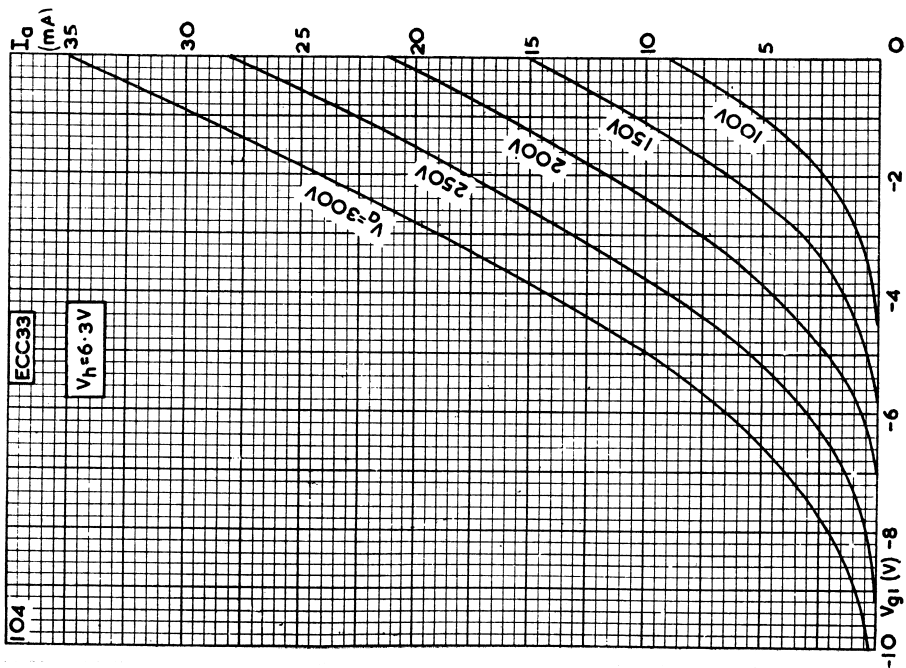
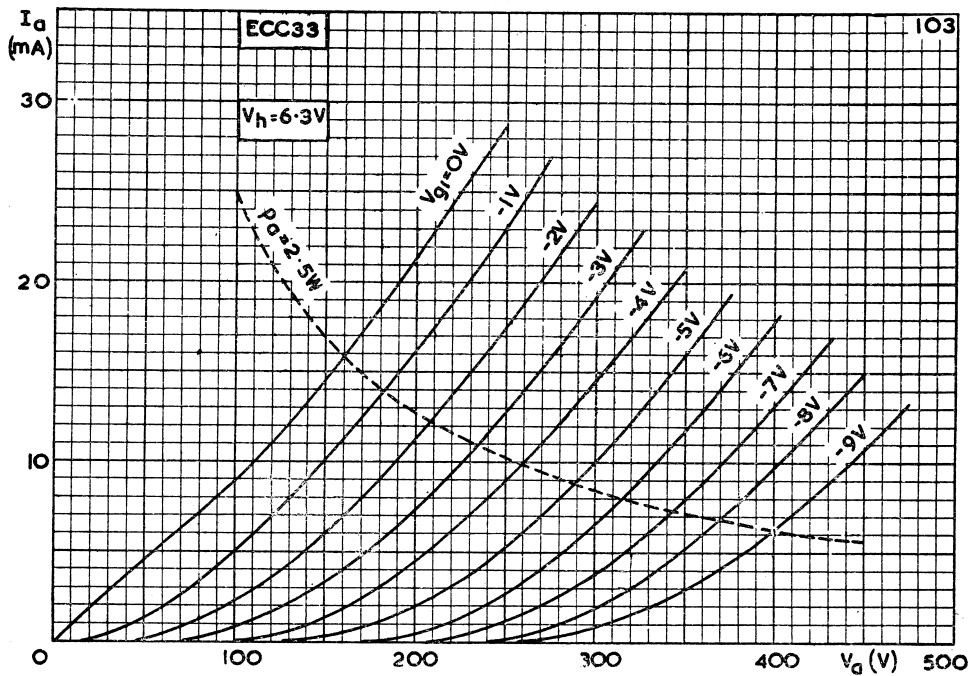
OPERATING CONDITIONS AS R.C. COUPLED AMPLIFIER

V_b (V)	R_a (Ω)	I_b (mA)	R_k (Ω)	V_{in} (V)	V_{out} (V)	D_{out} (%)	R_{ct} (Ω)	A.F.
400	47,000	4.0	1200	25.5	74	6.1	150,000	
350	47,000	3.5	1200	25	62.5	5.9	150,000	
300	47,000	3.0	1200	25	50	5.6	150,000	
250	47,000	2.5	1200	25	41	5.6	150,000	
200	47,000	2.0	1200	24.5	30.5	5.3	150,000	
400	100,000	2.05	2200	28	78.5	5.7	330,000	
350	100,000	1.8	2200	27.5	66.5	5.6	330,000	
300	100,000	1.55	2200	27	54.5	5.6	330,000	
250	100,000	1.3	2200	27	43	5.4	330,000	
200	100,000	1.05	2200	26.5	43	5.2	330,000	
400	220,000	1.1	3900	28	74.5	5.1	680,000	
350	220,000	0.98	3900	28	63	5.0	680,000	
300	220,000	0.83	3900	28	51	5.0	680,000	
250	220,000	0.7	3900	27.5	41	4.8	680,000	
200	220,000	0.53	3900	27	30.5	4.8	680,000	

* Output voltage at the start of I_{gr} . At output voltages lower than those shown, the distortion is approximately proportional to voltage.

** Grid resistor of following valve.

ECC33 TWIN TRIODE (Separate Cathodes)



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