

DOUBLE TRIODE

12A7-7
CV455

ECC81

Double triode primarily intended for use as a frequency changer or r.f. amplifier at frequencies up to 300Mc/s.

HEATER

Suitable for series or parallel operation, a.c. or d.c.

The heater is centre-tapped and the two sections may be operated in series or in parallel with one another.

Series

V_h applied between pins 4 and 5

Parallel

V_h applied between pin 9 and pins 4 and 5 connected together

	Series	Parallel	V
V_h	12.6	6.3	
I_h	150	300	mA

CAPACITANCES

* C_{a-g}	1.6	pF
* C_{in}	2.3	pF
$C_{a-k} + h$	0.45	pF
$C_{a-k}'' + h$	0.35	pF
* C_{a-k}	0.2	pF
* C_{h-k}	2.5	pF
* $C_{k-g} + h$	4.7	pF
$C_{a-g} + h$	1.9	pF
$C_{a-g}'' + h$	1.8	pF
C_{a-a}	< 0.4	pF
C_{g-h}	< 0.17	pF
C_{g-g}''	< 0.005	pF
C_{a-g}''	< 0.07	pF
C_{a-g}'	< 0.04	pF

*Each section

CHARACTERISTICS (each section)

V_a	100	170	200	250	V
I_a	3.0	8.5	11.5	10	mA
V_g	-1.0	-1.0	-1.0	-2.0	V
g_m	3.75	5.9	6.7	5.5	mA/V
μ	62	66	70	60	
r_a	16.5	11	10.5	11	k Ω
* r_{g-k}	21	16	14	25	k Ω

*Measured at $f = 50\text{Mc/s}$

LIMITING VALUES (each section)

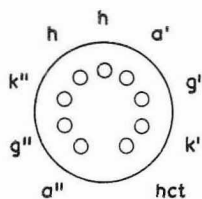
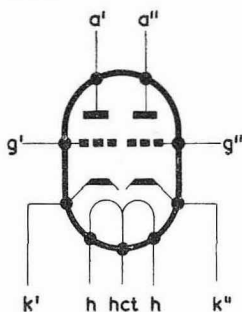
$V_{a(b)}$ max.	550	V
V_a max.	300	V
p_a max.	2.5	W
I_k max.	15	mA
$-V_g$ max.	50	V
V_g ($I_g = +0.3\mu\text{A}$)	-1.3	V
R_{g-k} max. (self-bias)	1.0	M Ω
V_{h-k} max.	150	V
R_{h-k} max.	20	k Ω

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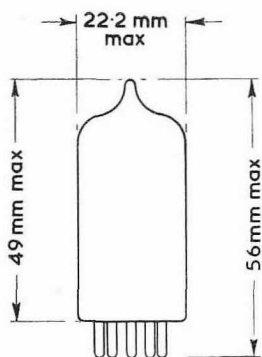
DOUBLE TRIODE

Double triode primarily intended for use as a frequency changer or r.f. amplifier at frequencies up to 300Mc/s.

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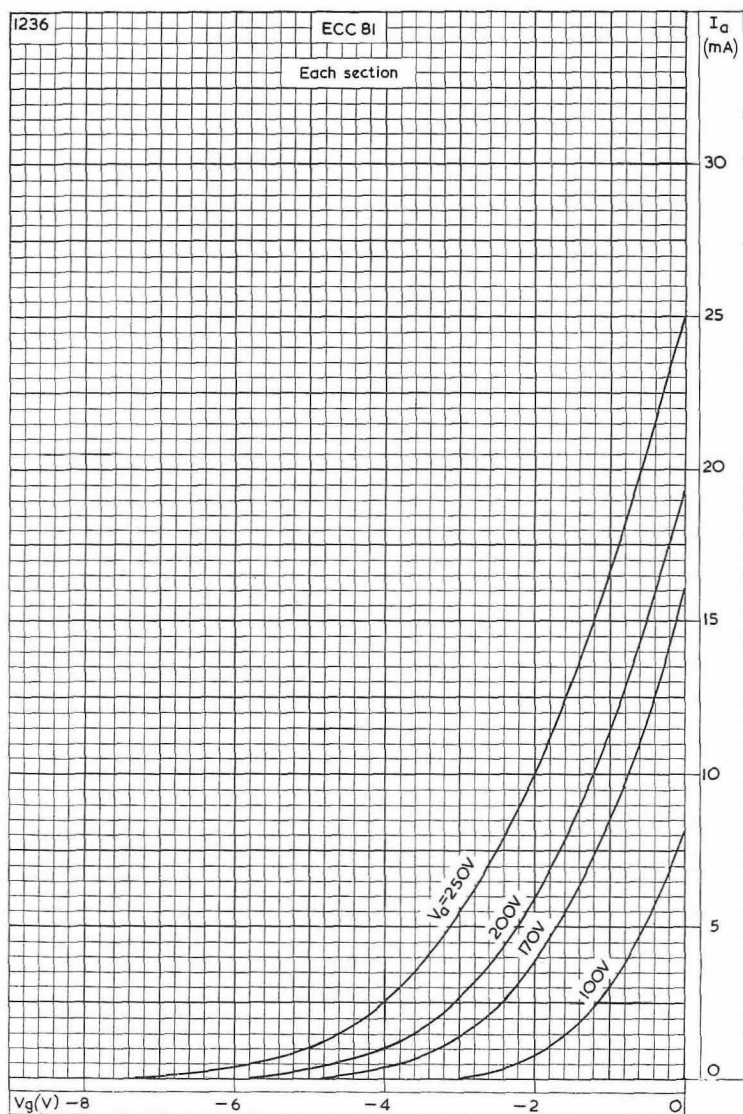
B9A Base



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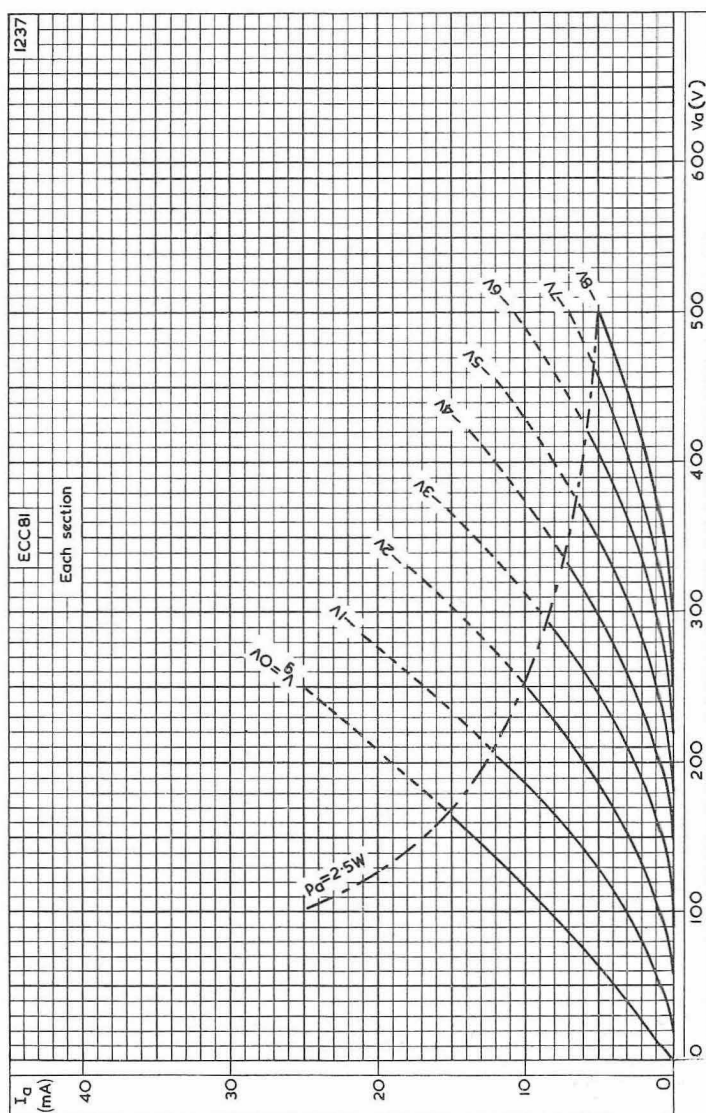


ANODE CURRENT PLOTTED AGAINST GRID VOLTAGE, WITH ANODE VOLTAGE AS PARAMETER (EACH SECTION)

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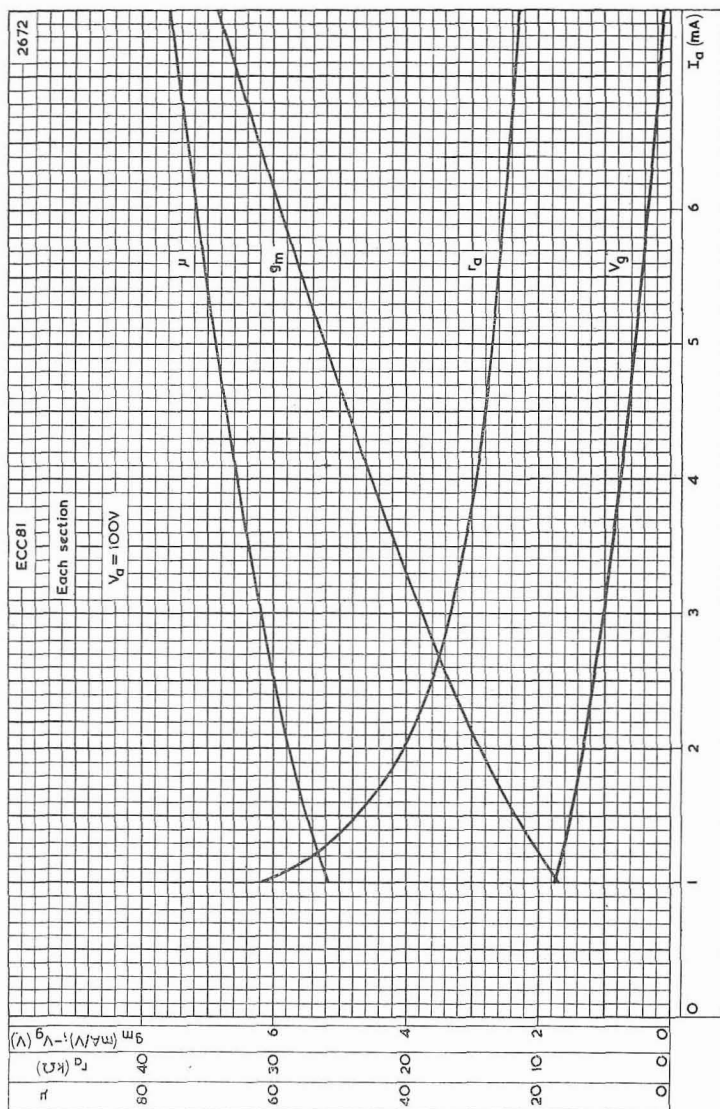


ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE, WITH GRID VOLTAGE AS PARAMETER (EACH SECTION)

DOUBLE TRIODE

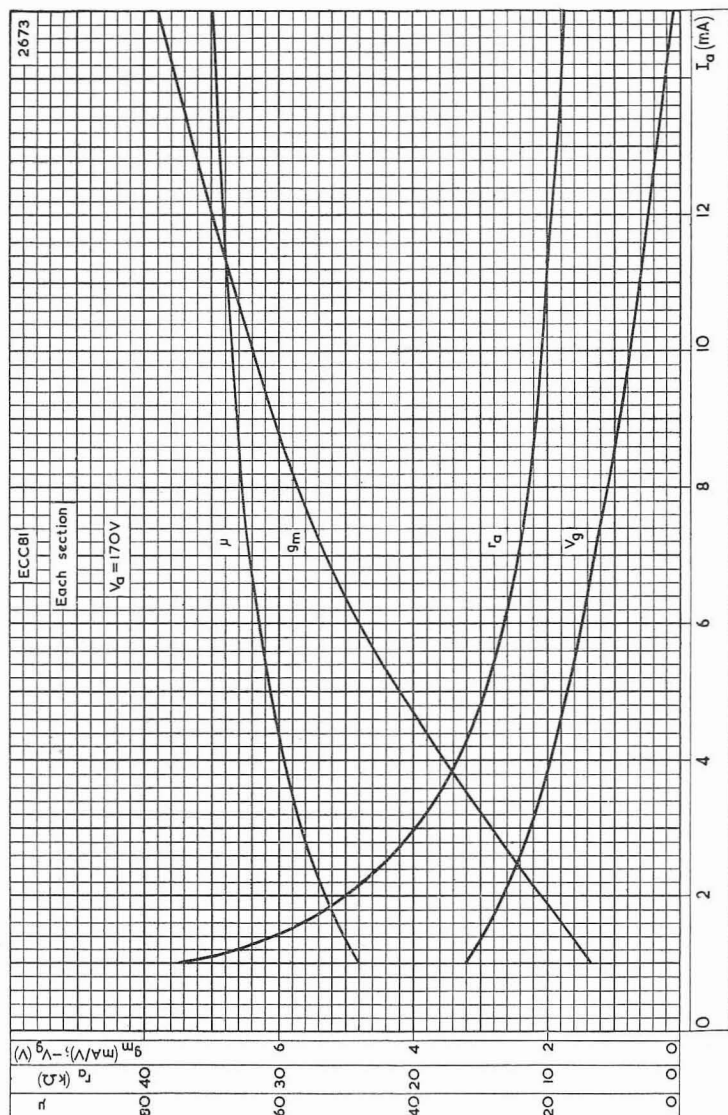
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GRID VOLTAGE, MUTUAL CONDUCTANCE, AMPLIFICATION FACTOR AND INTERNAL RESISTANCE PLOTTED AGAINST ANODE CURRENT, FOR ANODE VOLTAGE OF 100V (EACH SECTION)

Double triode primarily intended for use as a frequency changer or r.f. amplifier at frequencies up to 300Mc/s.

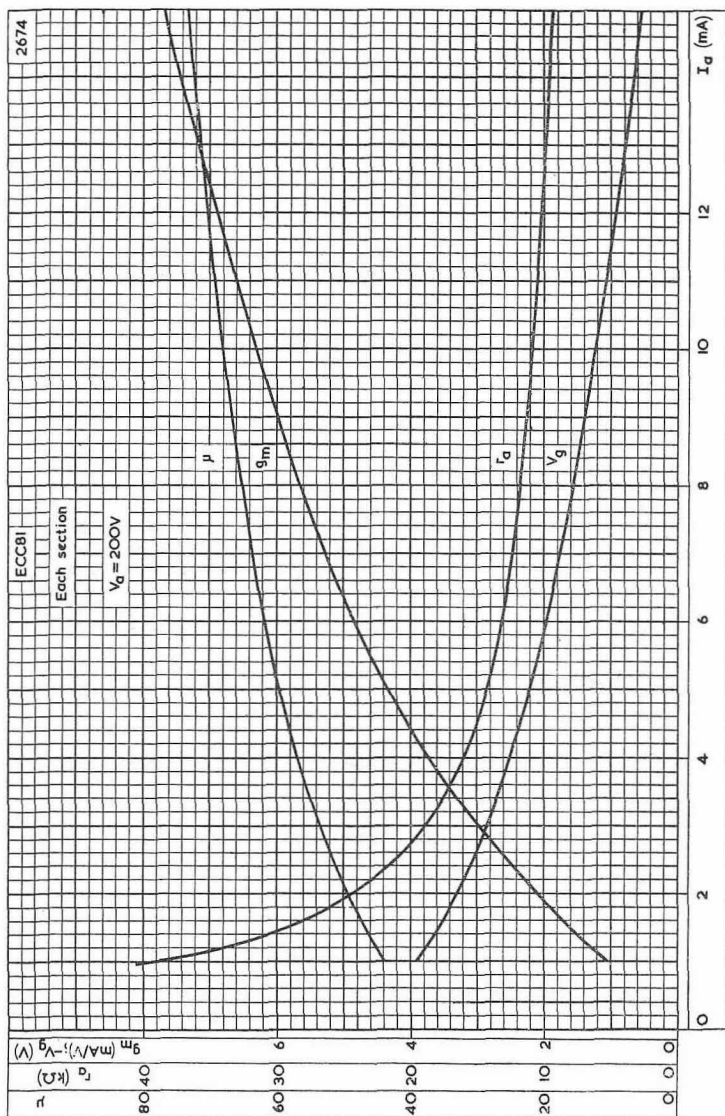


GRID VOLTAGE, MUTUAL CONDUCTANCE, AMPLIFICATION FACTOR, AND INTERNAL RESISTANCE PLOTTED AGAINST ANODE CURRENT, FOR ANODE VOLTAGE OF 170V (EACH SECTION)

DOUBLE TRIODE

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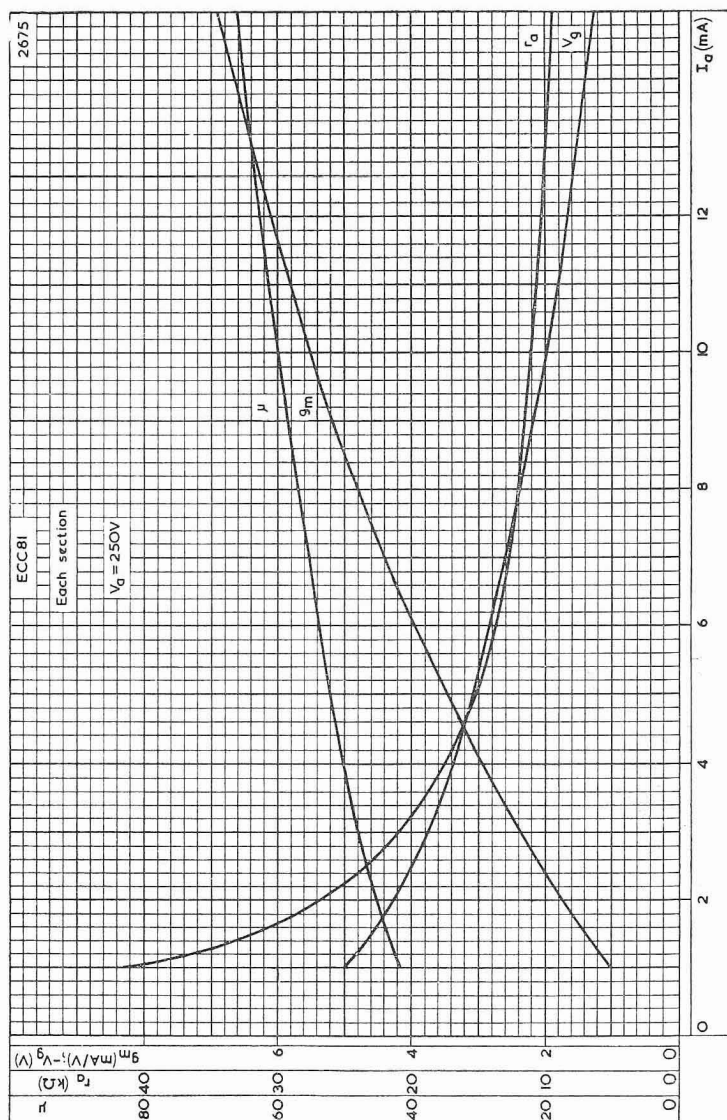


GRID VOLTAGE, MUTUAL CONDUCTANCE, AMPLIFICATION FACTOR AND INTERNAL RESISTANCE PLOTTED AGAINST ANODE CURRENT, FOR ANODE VOLTAGE OF 200V (EACH SECTION)

ECC81

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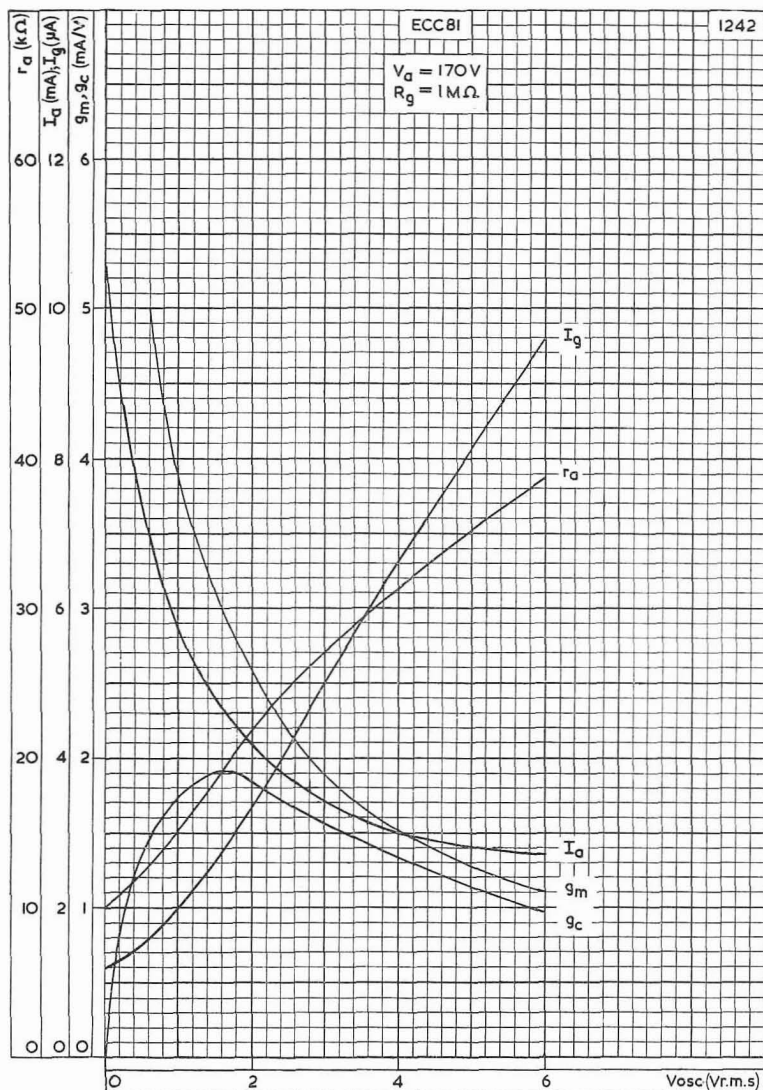


GRID VOLTAGE, MUTUAL CONDUCTANCE, AMPLIFICATION FACTOR AND INTERNAL RESISTANCE PLOTTED AGAINST ANODE CURRENT, FOR ANODE VOLTAGE OF 250V (EACH SECTION)

DOUBLE TRIODE

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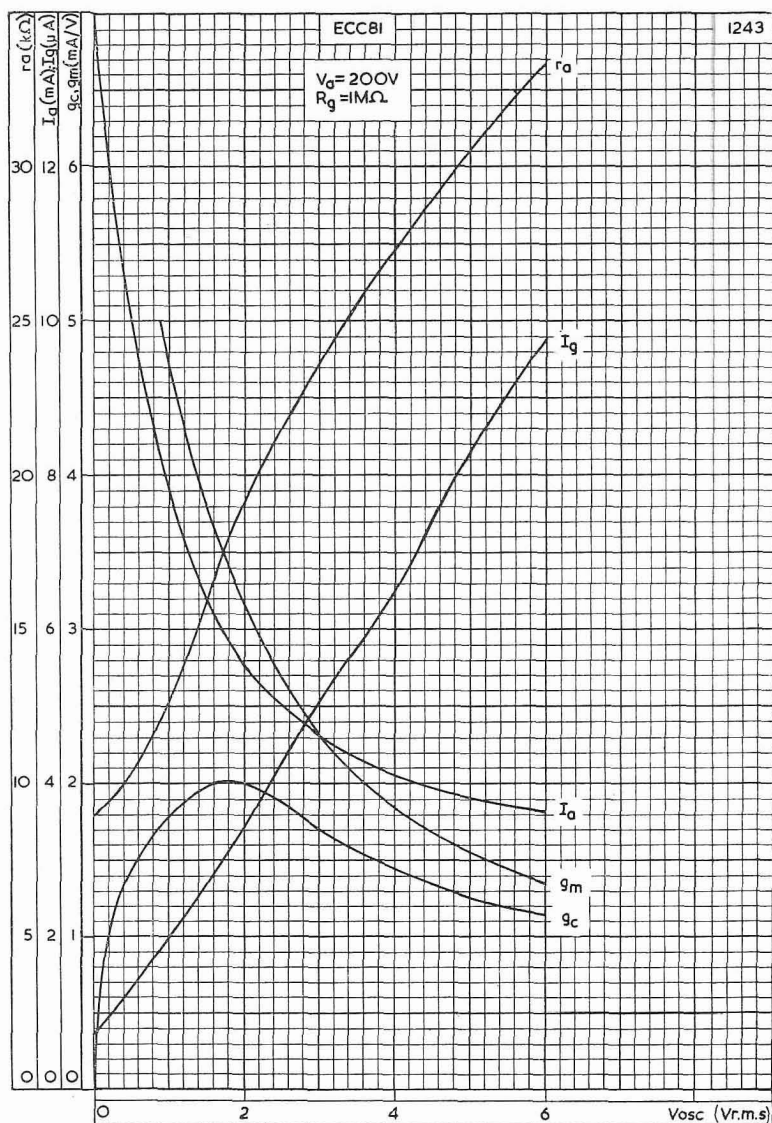


PERFORMANCE CURVES AS FREQUENCY CHANGER AT ANODE VOLTAGE OF 170V

ECC81

DOUBLE TRIODE

Double triode primarily intended for use as a frequency changer or r.f. amplifier at frequencies up to 300Mc/s.



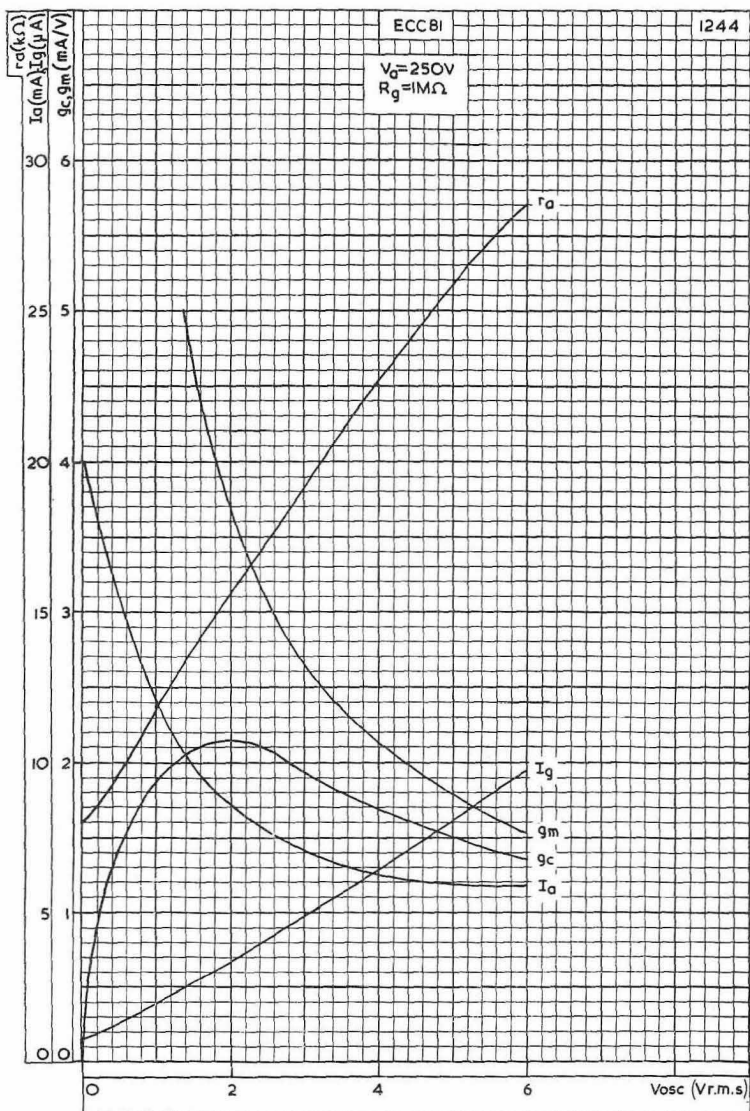
PERFORMANCE CURVES AS FREQUENCY CHANGER AT ANODE VOLTAGE
OF 200V



DOUBLE TRIODE

ECC81

Double triode primarily intended for use as a frequency changer or r.f. amplifier at frequencies up to 300Mc/s.



PERFORMANCE CURVES AS FREQUENCY CHANGER AT ANODE VOLTAGE OF 250V

