R.F. PENTODE

EF91

High slope pentode primarily intended for use as r.f. and i.f. amplifier or mixer valve.

HEATER

Suitable for series or parallel operation

V_h	6.3	V
I_h	300	mA

CAPACITANCES

	Unshielded	*Shielded*	←
C_{in}	7.1	7.1	pF
C_{out}	2.1	3.1	pF
C_{a-g1}	<20	<10	mpF

CHARACTERISTICS

V_a	250	V
V_{g3}	0	V
V_{g2}	250	V
V_{g1}	−2.0	V
I_a	10	mA
I_{g2}	2.6	mA←
g_m	7.6	mA/V
r_a	>500	kΩ←
μ_{g1-g2}	70	
R_{eq}	1.2	kΩ
r_{g1} (f = 50Mc/s)	6.5	kΩ←
V_{g3} for cut-off (I_a<50μA)	−120	V←

OPERATING CONDITIONS AS MIXER

V_b	250	V
V_{g3}	0	V
R_k	470	Ω
R_{g1}	1.0	MΩ
I_a	6.0	mA←
I_{g2}	1.5	mA←
I_{g1}	2.0	μA←
$V_{osc\ (r.m.s.)}$	4.0	V←
g_c	2.5	mA/V
$g_{m(eff.)}$	3.2	mA/V←
r_a	880	kΩ←

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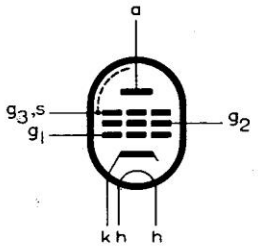
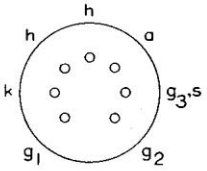
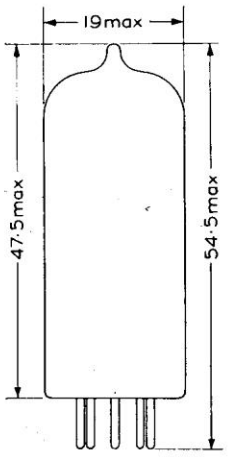
LIMITING VALUES

$V_{a(b)}$ max.	550	V
V_a max.	300	V
p_a max.	2.5	W
$V_{g2(b)}$ max.	550	V
V_{g2} max.	300	V
p_{g2} max.	650	mW
$-V_{g1}$ max.	50	V
I_k max.	15	mA
R_{g1-k} max.	250	kΩ←
V_{h-k} max.	150	V
T_{bulb} max.	210	°C←





B7G Base

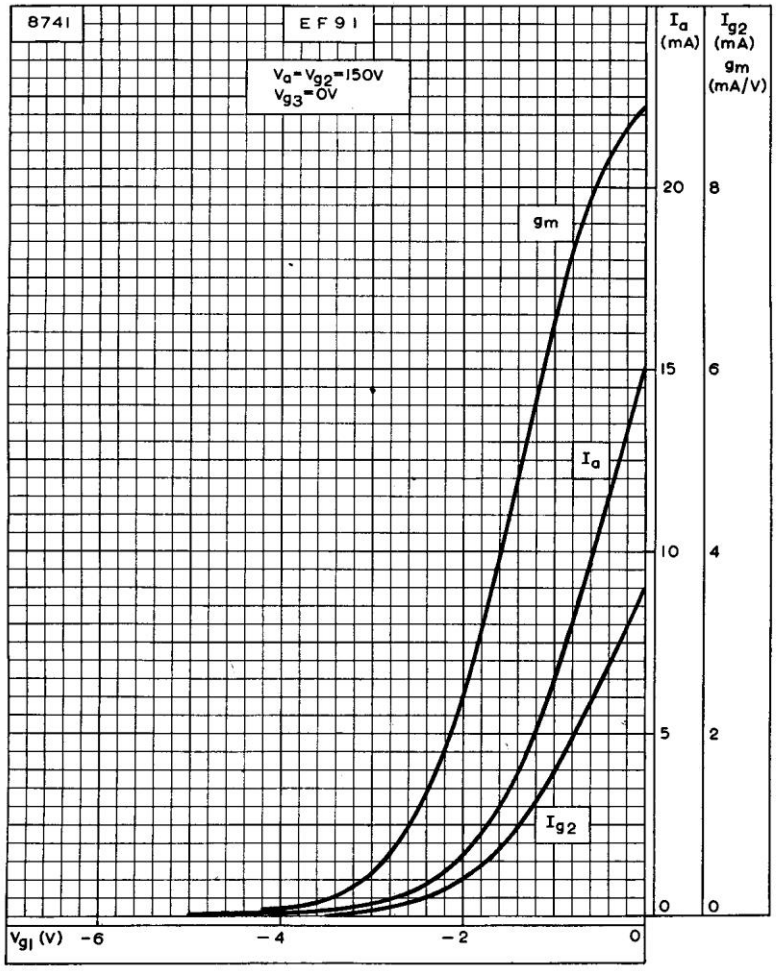


All dimensions in mm

8723

R.F. PENTODE

EF91



ANODE CURRENT, SCREEN-GRID CURRENT AND MUTUAL CONDUCTANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE. $V_a = V_{g2} = 150V$

EF91

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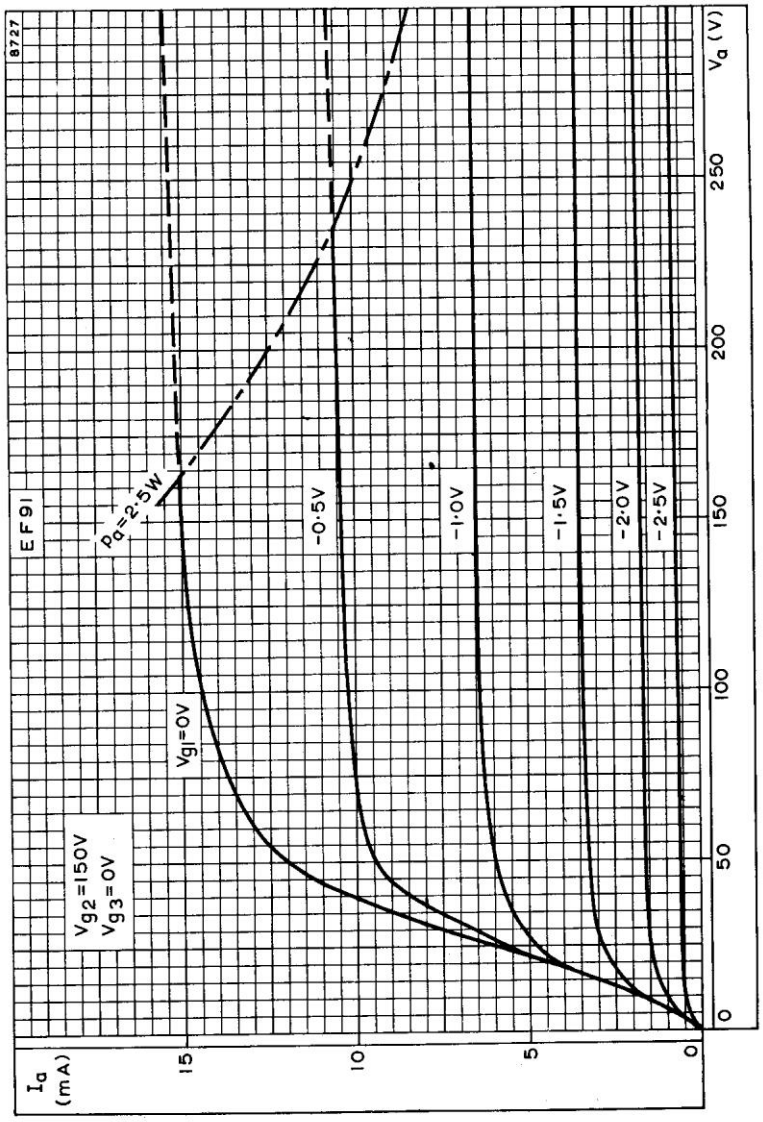
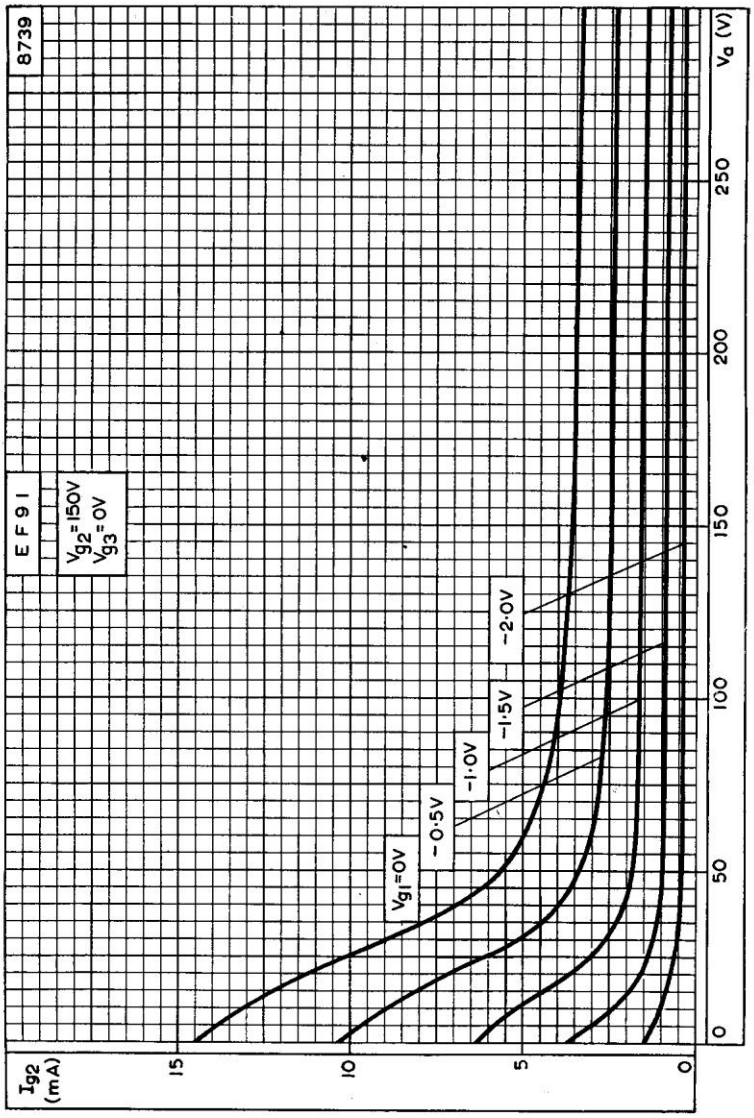


ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL GRID VOLTAGE AS PARAMETER. V_{g2} = 150V



SCREEN-GRID CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. V_{g2} = 150V

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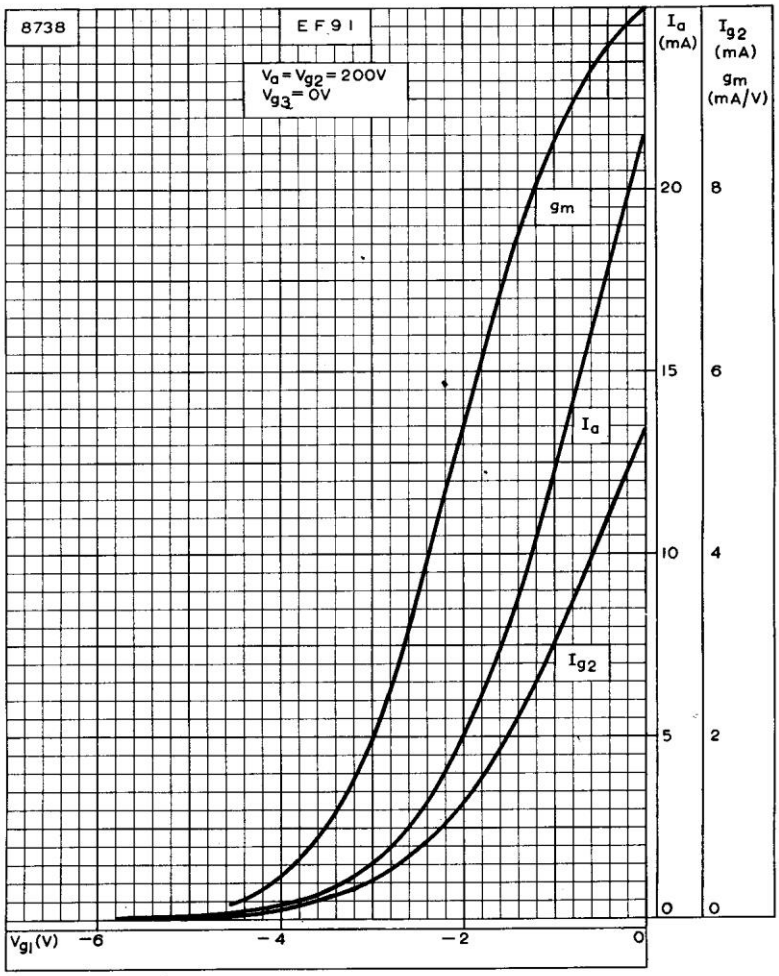
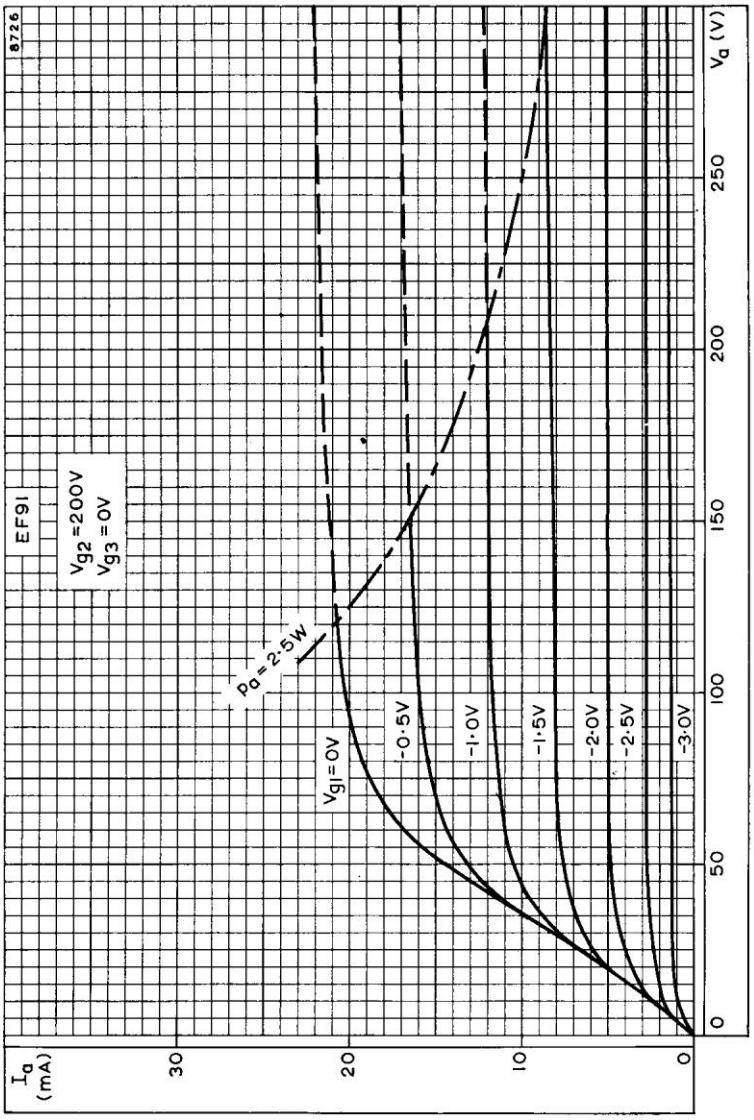


ANODE CURRENT, SCREEN-GRID CURRENT AND MUTUAL CONDUCTANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE. $V_a = V_{g2} = 200V$



ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. V_{g2} = 200V

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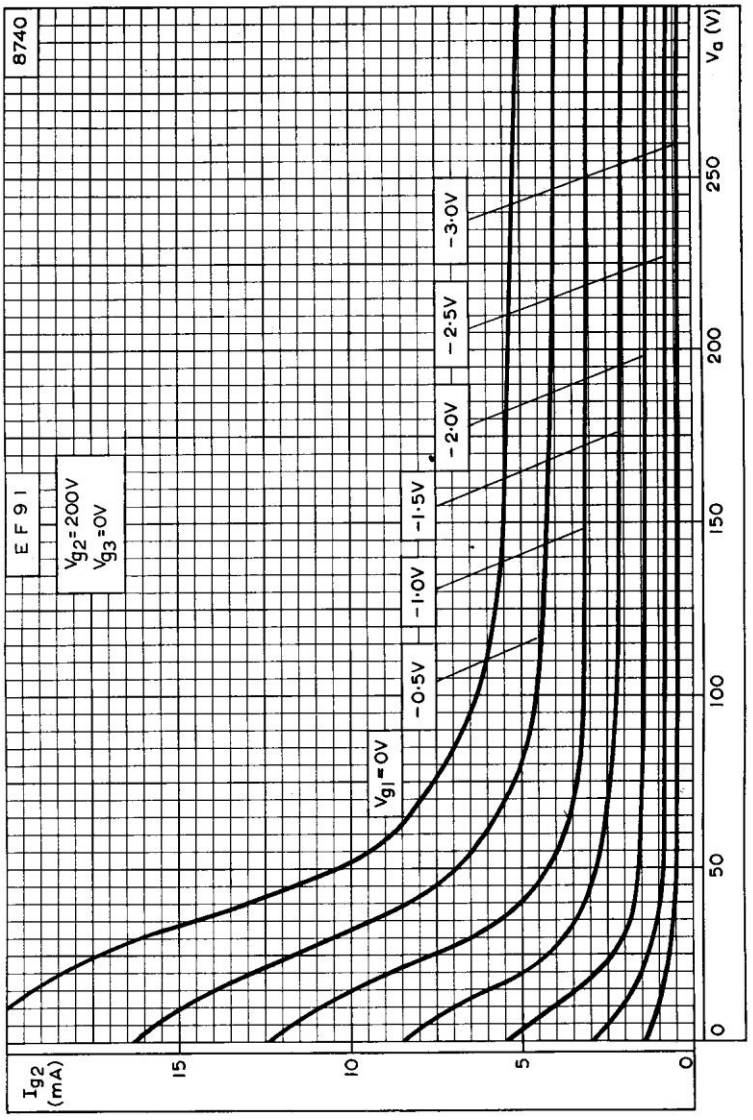
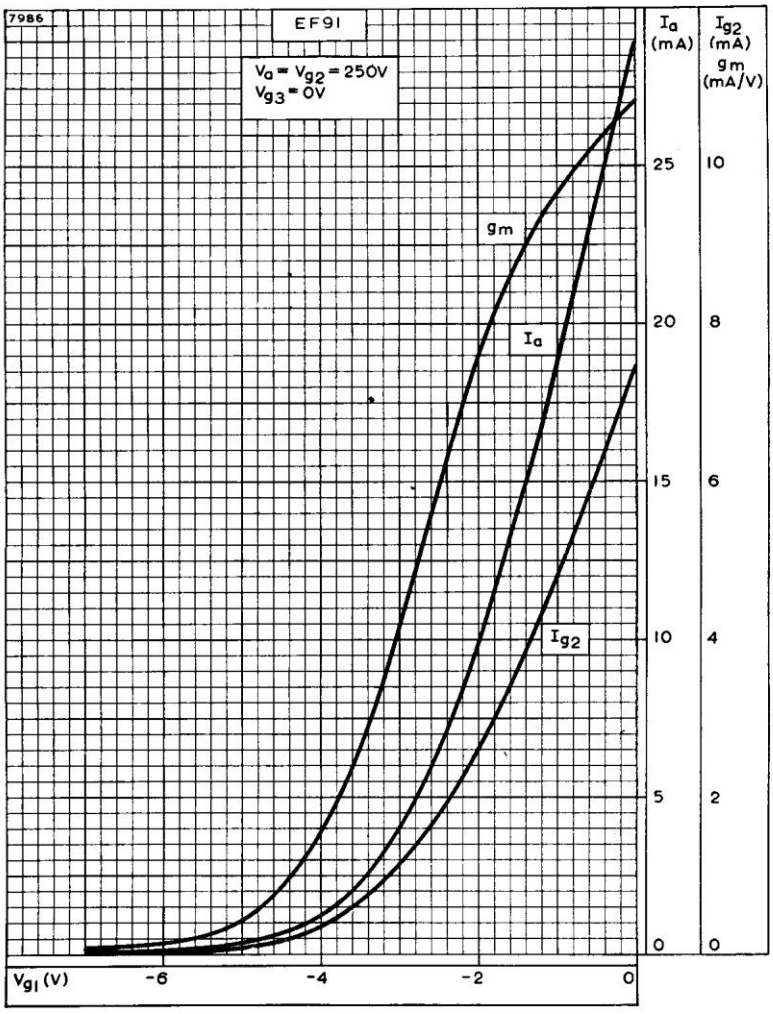


SCREEN-GRID CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. V_{g2} = 200V



ANODE CURRENT, SCREEN-GRID CURRENT AND MUTUAL CONDUCTANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE. $V_a = V_{g2} = 250V$

EF91

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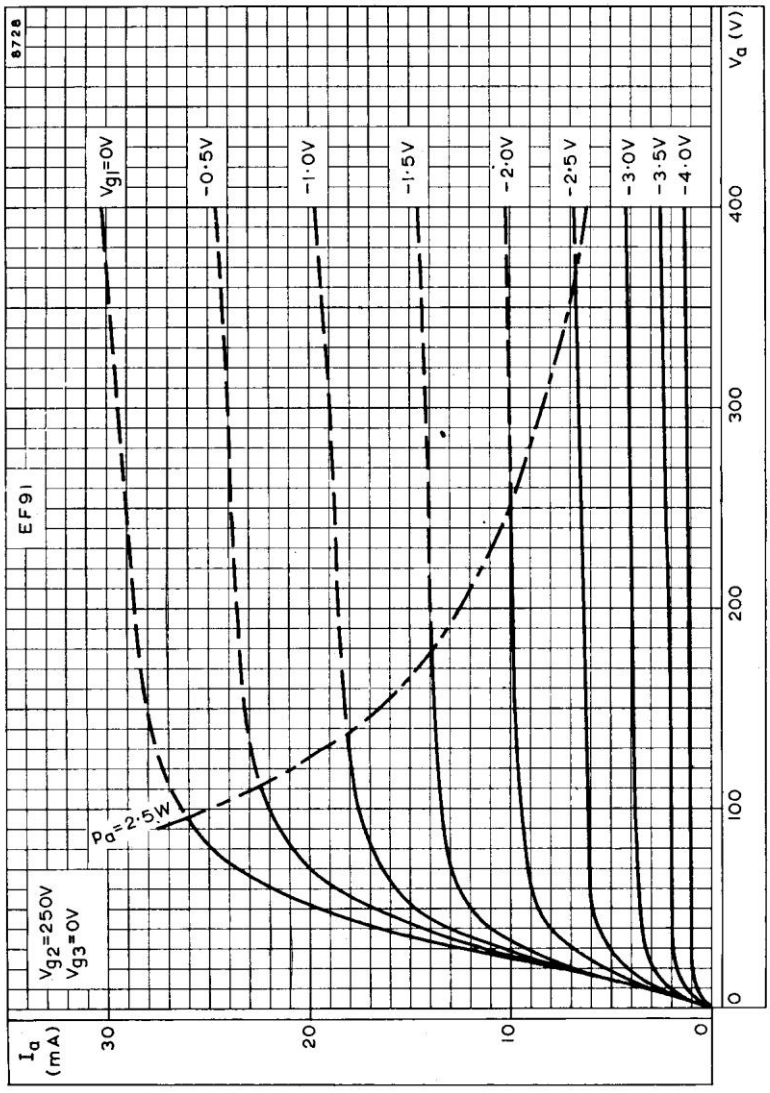
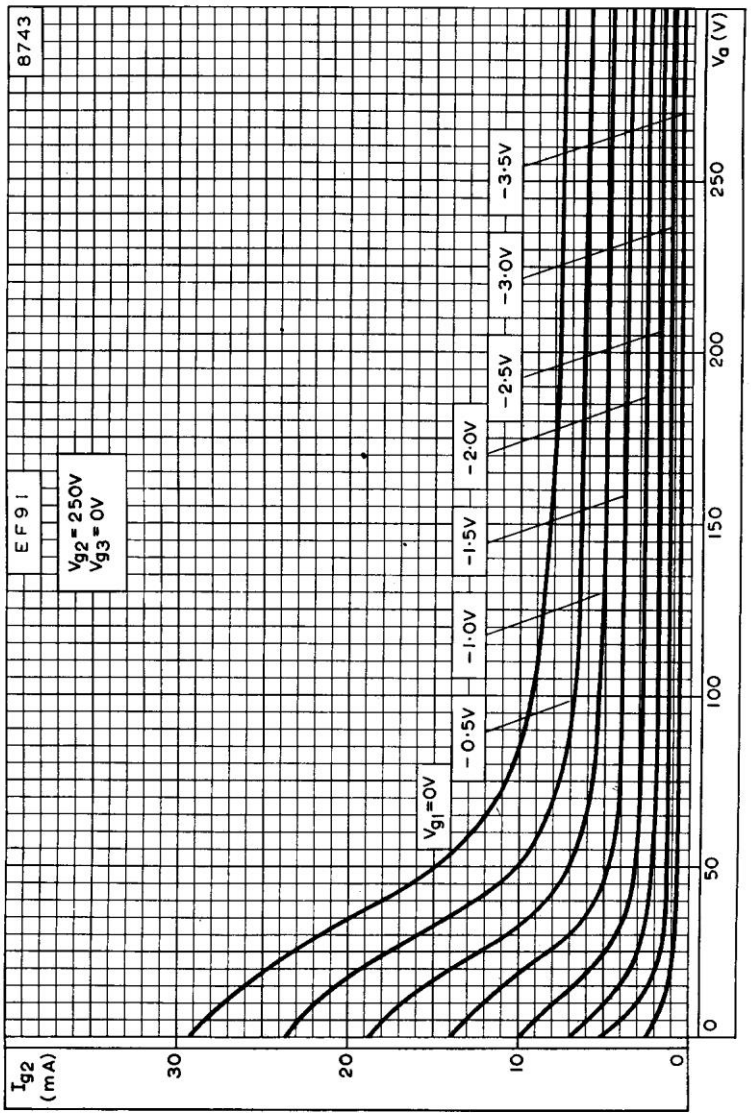


ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. V_{g2} = 250V



SCREEN-GRID CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. V_{g2} = 250V

EF91

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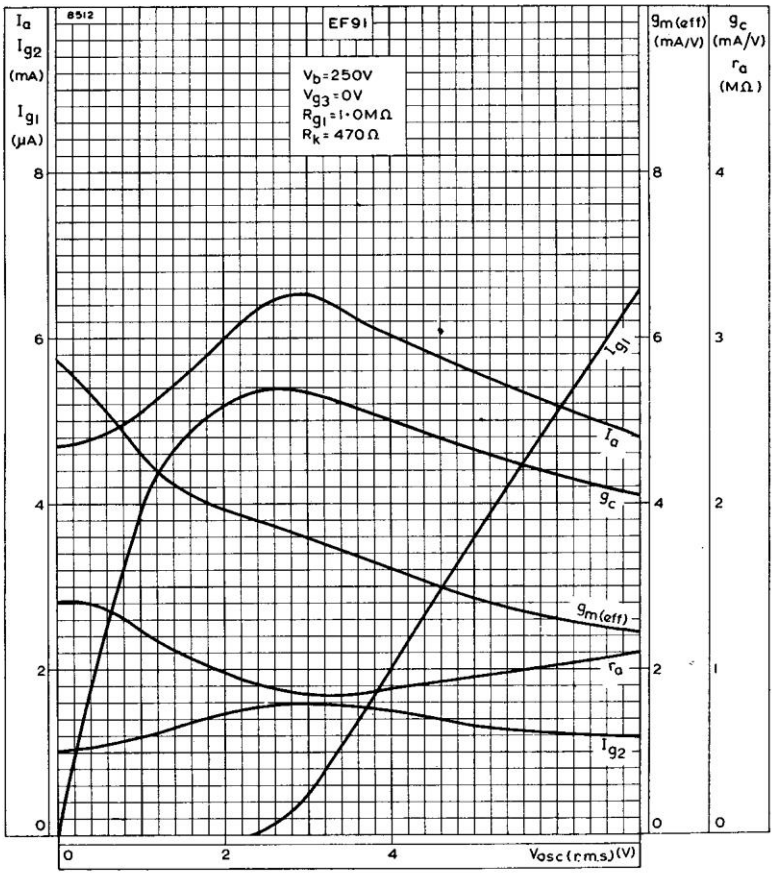
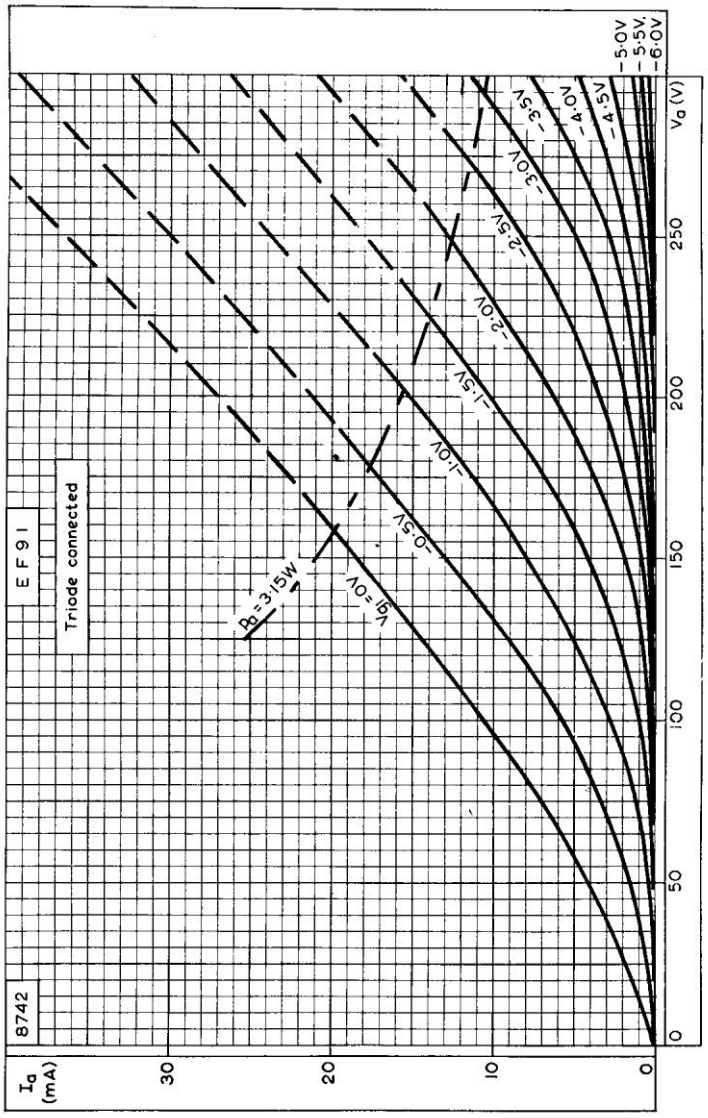


PERFORMANCE CURVES WHEN USED AS FREQUENCY CHANGER



ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER, WHEN TRIODE CONNECTED

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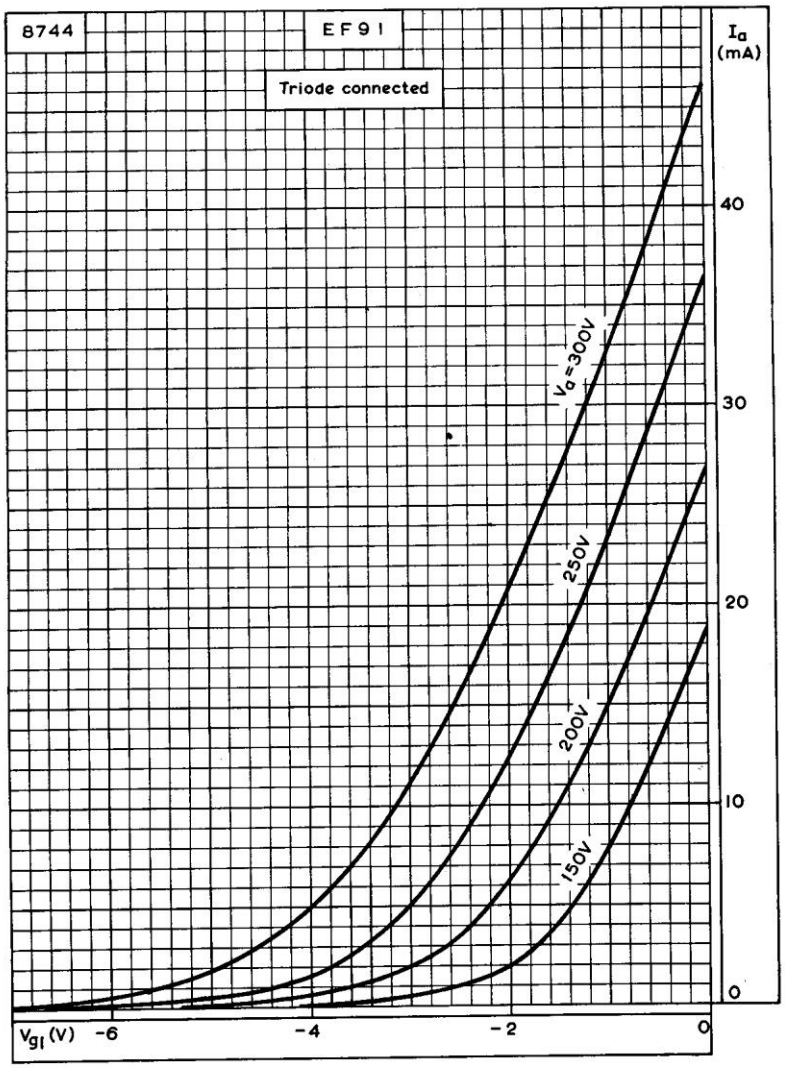
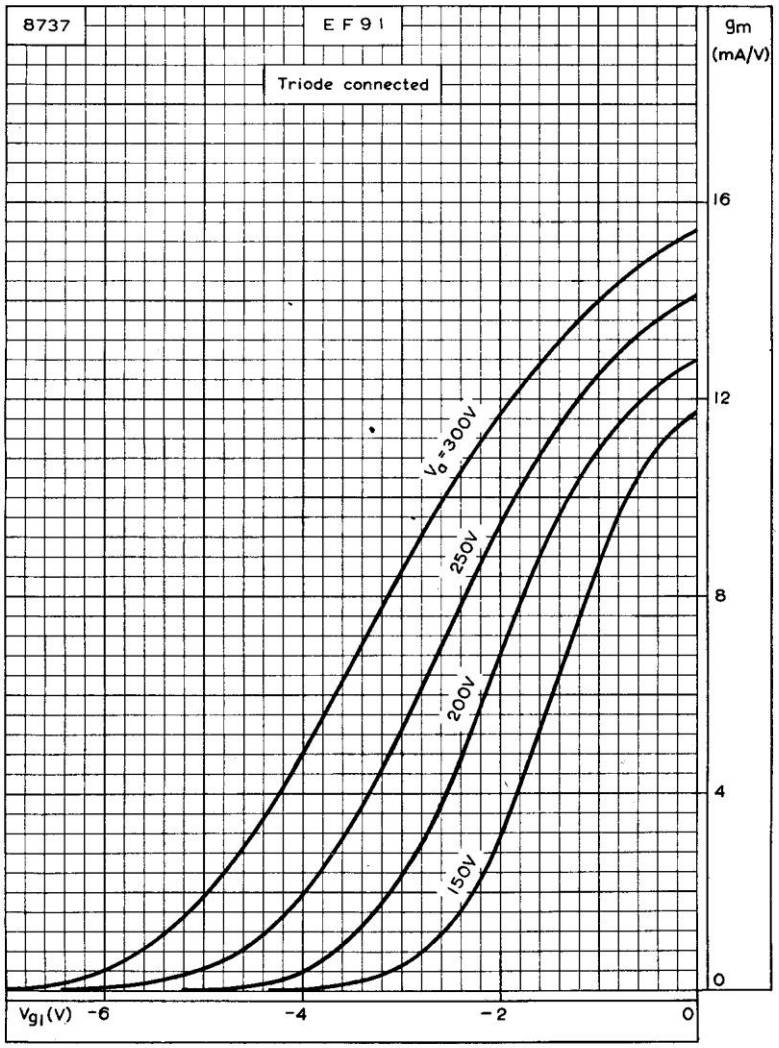


ANODE CURRENT PLOTTED AGAINST CONTROL-GRID VOLTAGE WITH ANODE VOLTAGE AS PARAMETER, WHEN TRIODE CONNECTED



MUTUAL CONDUCTANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE WITH ANODE VOLTAGE AS PARAMETER, WHEN TRIODE CONNECTED