

R.F. PENTODE

EF184

Frame-grid sharp cut-off pentode for use as an i.f. amplifier in television receivers.

HEATER

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

V_h	6.3	V
I_h	300	mA

CAPACITANCES

C_{in}	10	pF
C_{out}	3.0	pF
C_{a-g1}	5.5	mpF←
C_{g1-g2}	2.8	pF

CHARACTERISTICS

V_a	170	200	V
V_{g2}	170	200	V
V_{g3}	0	0	V
I_a	10	10	mA
I_{g2}	4.1	4.1	mA
V_{g1}	-2.0	-2.5	V
g_m	15.6	15	mA/V
r_a	330	380	k Ω
μ_{g1-g2}	60	60	
r_{g1} (f = 40Mc/s)	9.5	11	k Ω
R_{eq} (f = 40Mc/s)	—	330	Ω ←

OPERATING CONDITIONS

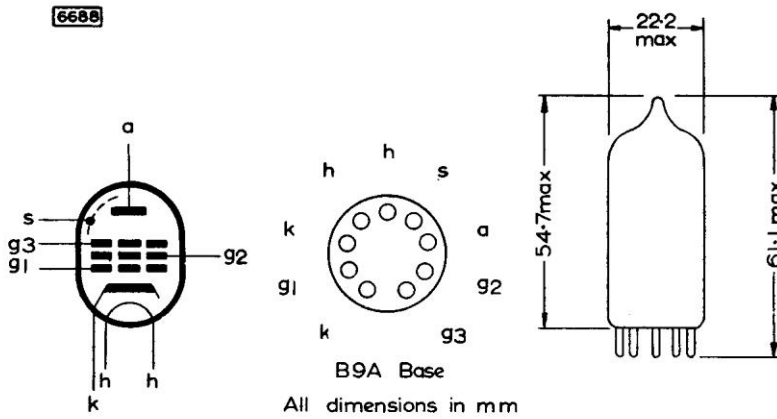
$V_{a(b)}$	170	200	230	V
$V_{g3(b)}$	0	0	0	V
$V_{g2(b)}$	170	200	230	V
R_k	140	140	140	Ω
R_{g2}	0	7.5	15	k Ω
I_a	10	10	10	mA
I_{g2}	4.1	4.1	4.1	mA
g_m	15.6	15.6	15.6	mA/V
r_a	330	510	680	k Ω
r_{g1} (f = 40Mc/s)	10	10	10	k Ω
R_{eq} (f = 40Mc/s)	300	300	300	Ω

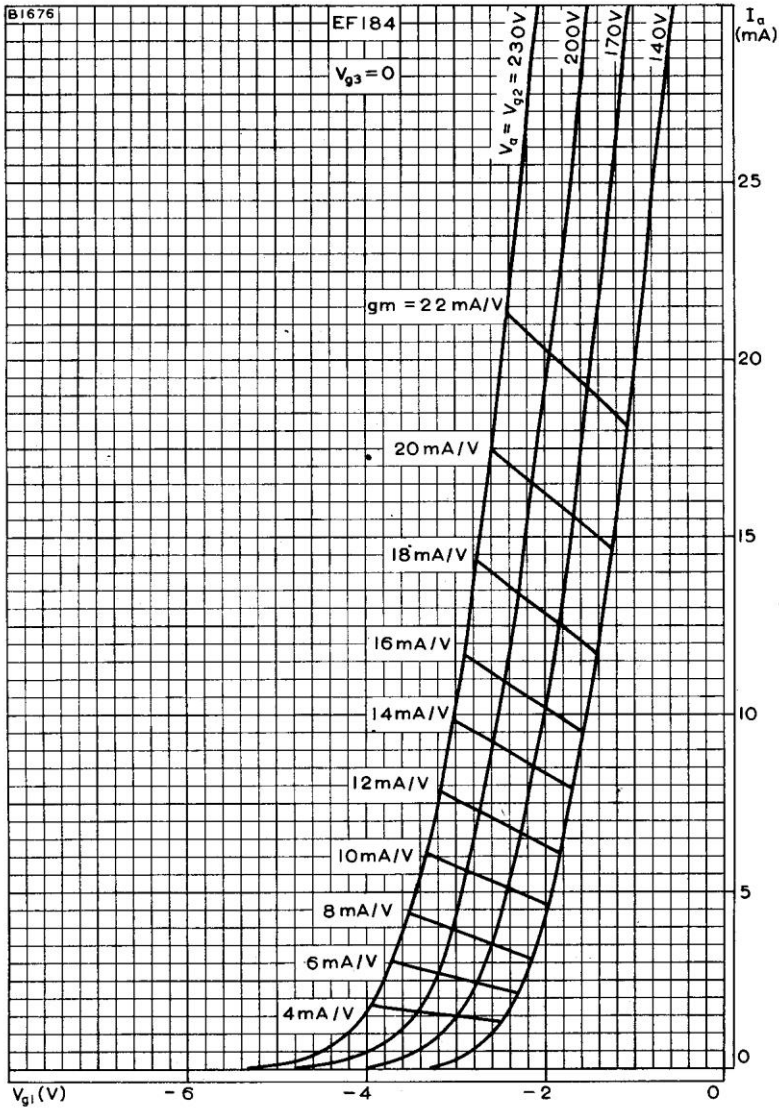
EF184

R.F. PENTODE

DESIGN CENTRE RATINGS

$V_{a(b)}$ max.	550	V
V_a max.	250	V
p_a max.	2.5	W
$V_{g2(b)}$ max.	550	V
V_{g2} max.	250	V
p_{g2} max.	900	mW
$-V_{g1(pk)}$ max.	50	V
I_k max.	25	mA
R_{g1-k} max.	1.0	M Ω
V_{h-k} max.	150	V
R_{h-k} max.	20	k Ω
T_{bulb} max.	180	$^{\circ}$ C

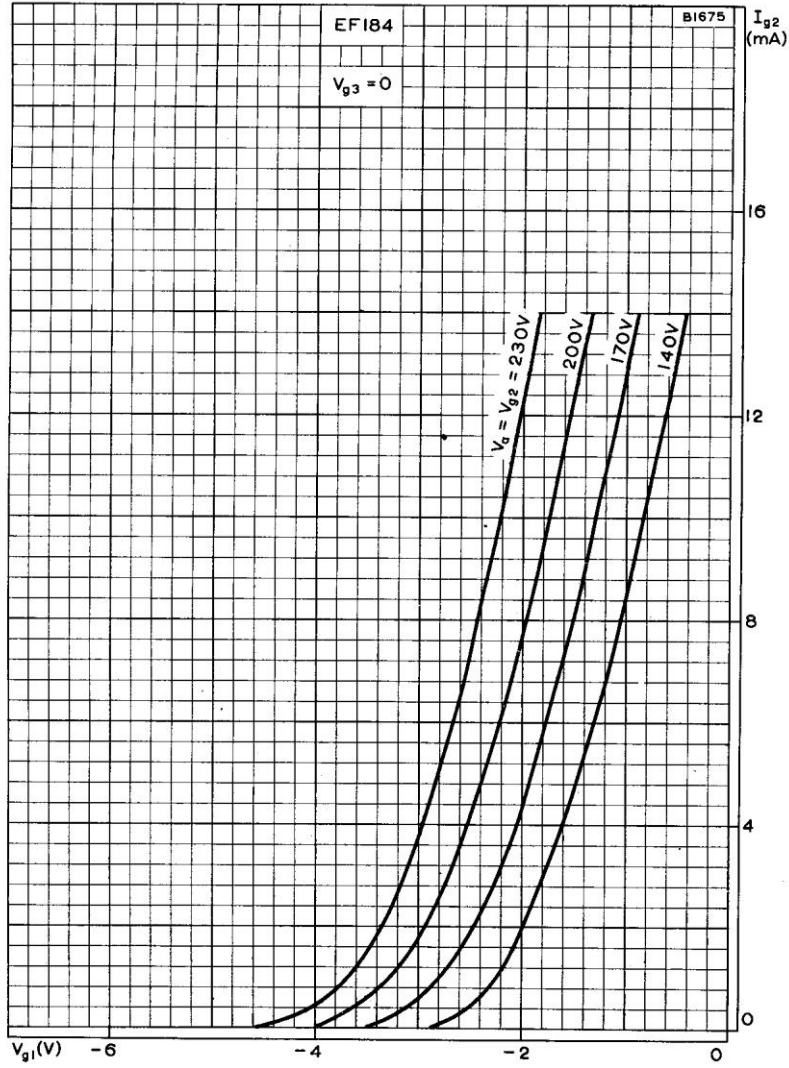




ANODE CURRENT PLOTTED AGAINST CONTROL-GRID VOLTAGE WITH ANODE AND SCREEN-GRID VOLTAGES AS PARAMETER AND WITH MUTUAL CONDUCTANCE CONTOURS

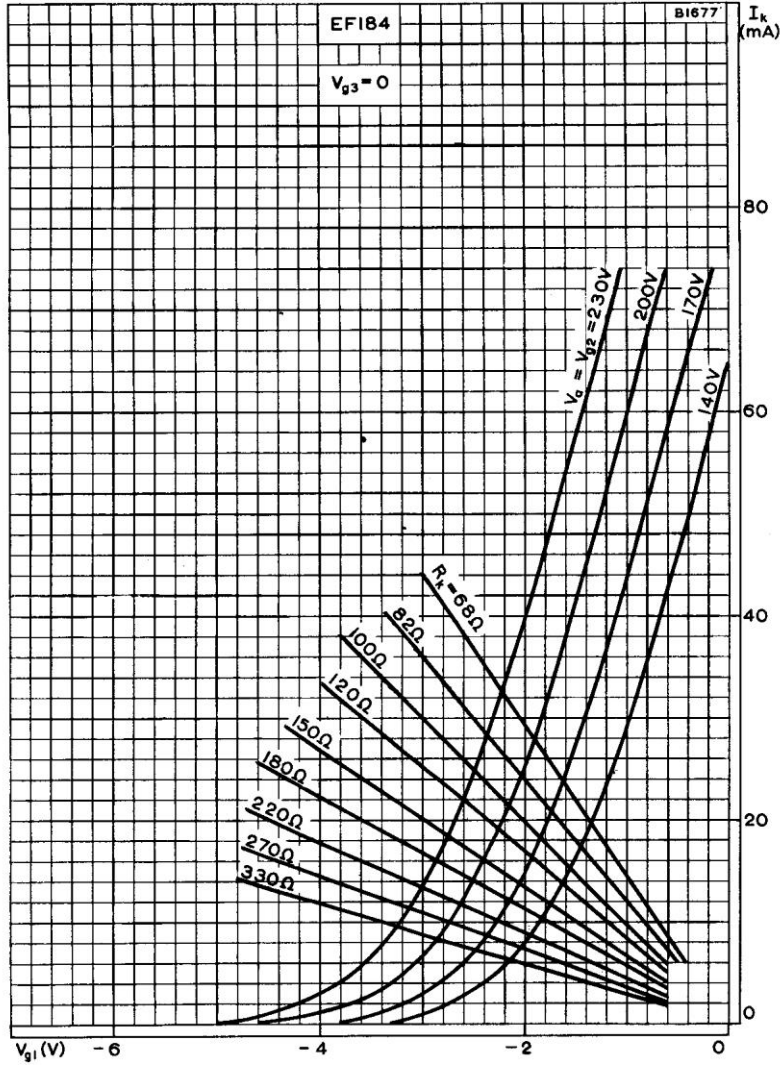
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SCREEN-GRID CURRENT PLOTTED AGAINST CONTROL-GRID VOLTAGE
WITH ANODE AND SCREEN-GRID VOLTAGES AS PARAMETER

EF184

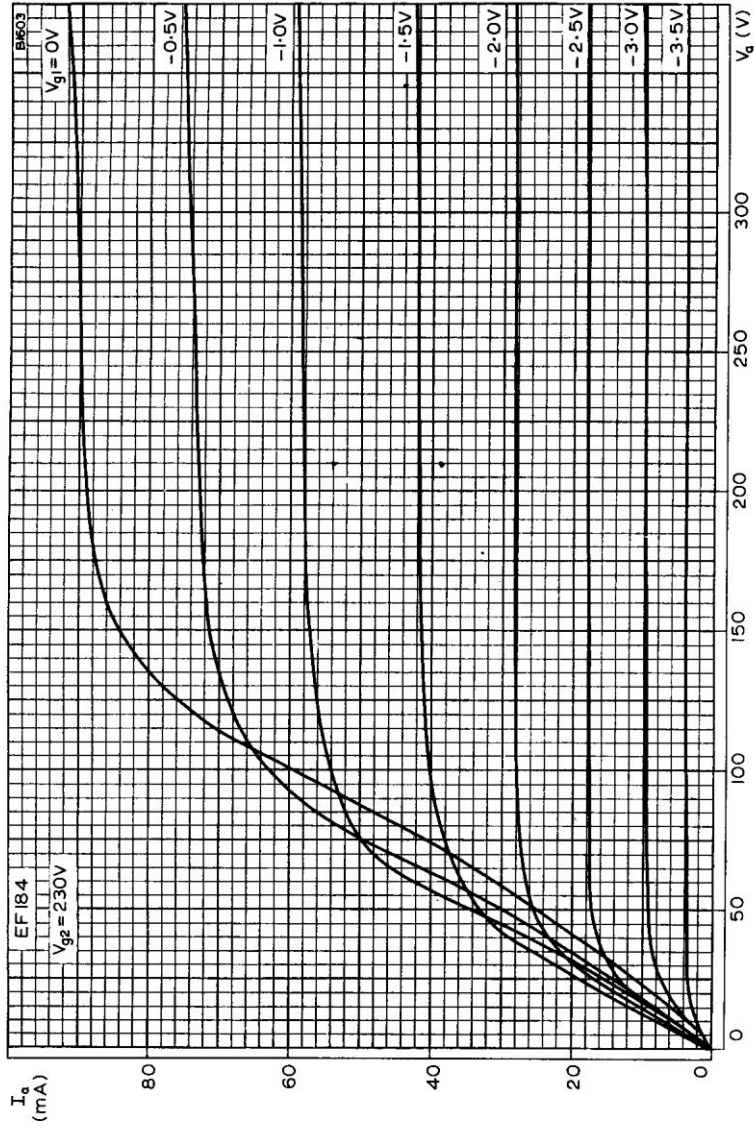


CATHODE CURRENT PLOTTED AGAINST CONTROL-GRID VOLTAGE WITH ANODE AND SCREEN-GRID VOLTAGES AS PARAMETER

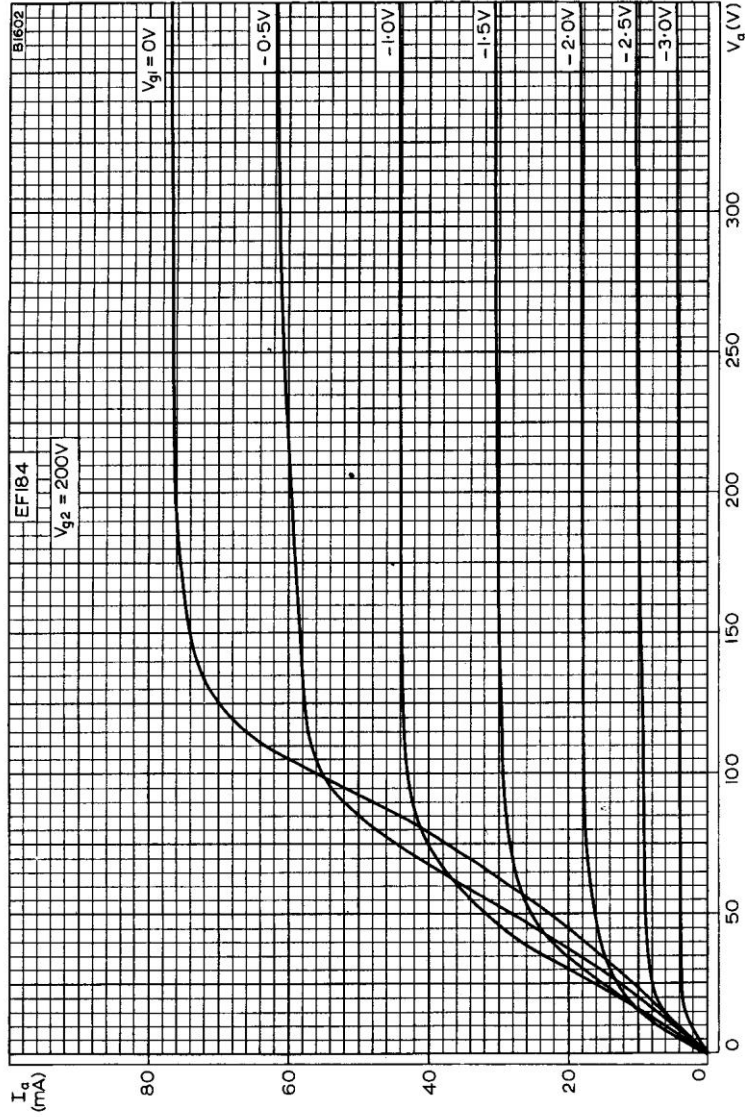


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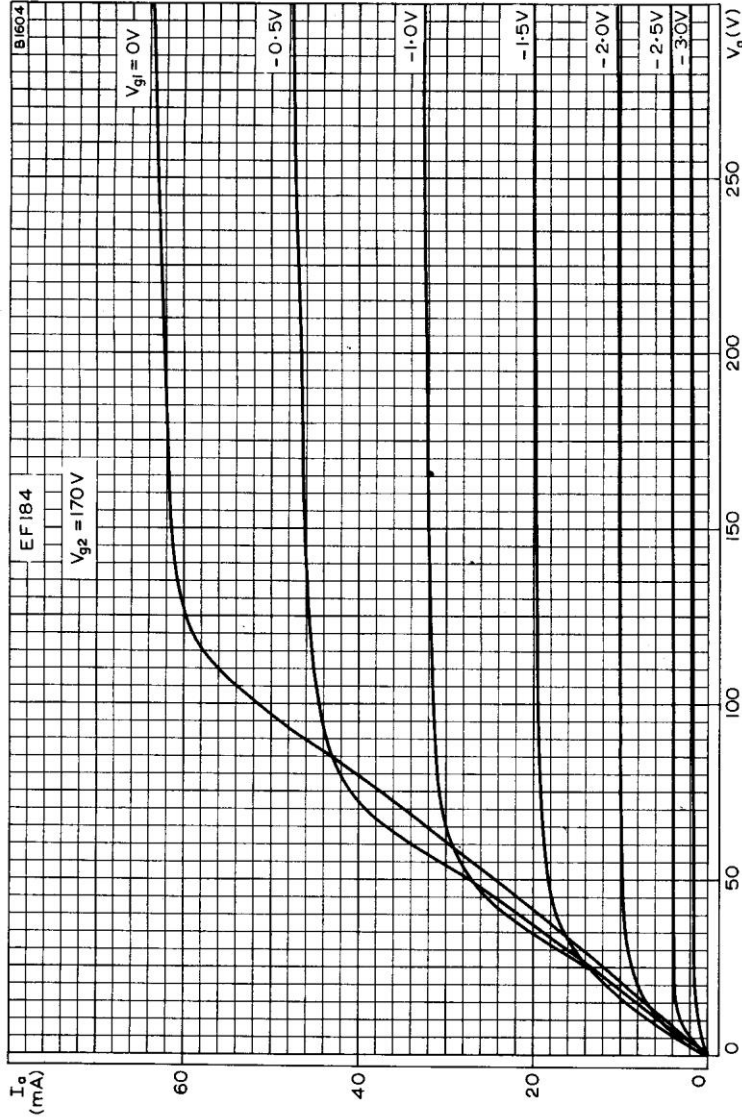
ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. $V_{g2} = 230V$



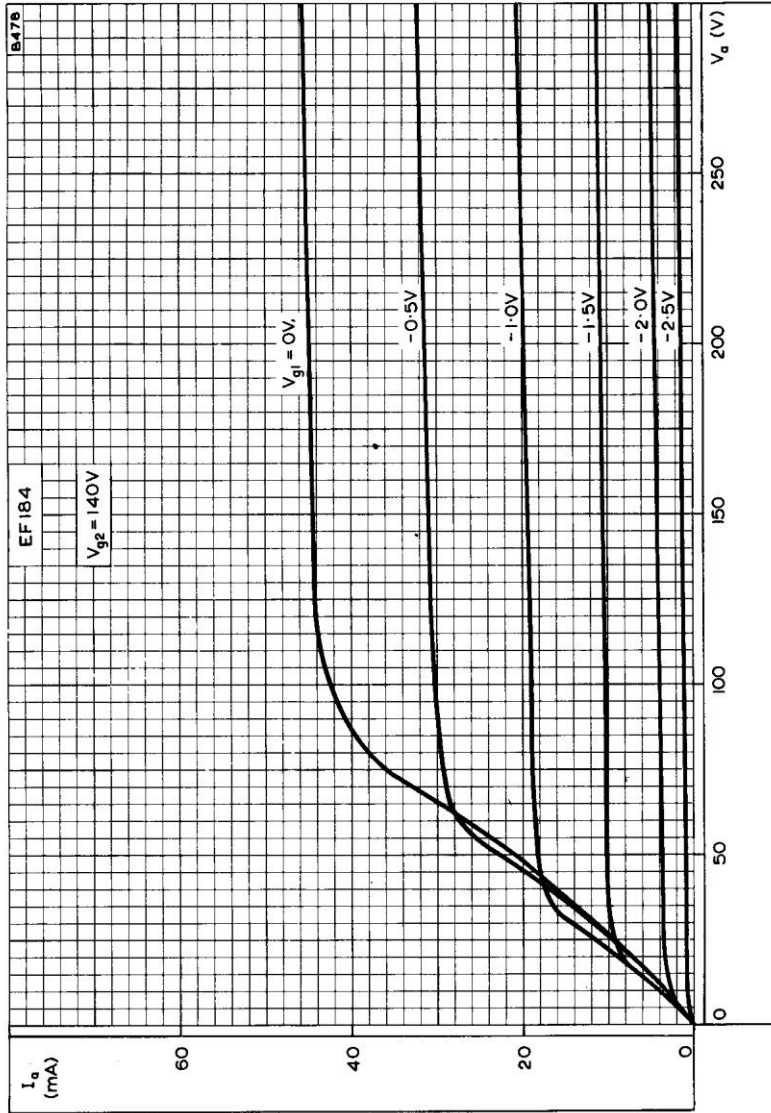
ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. $V_{g2} = 200V$

EF184

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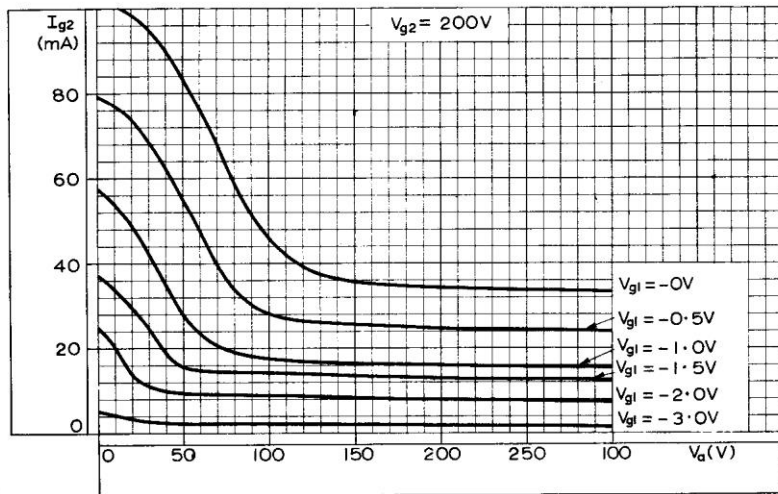
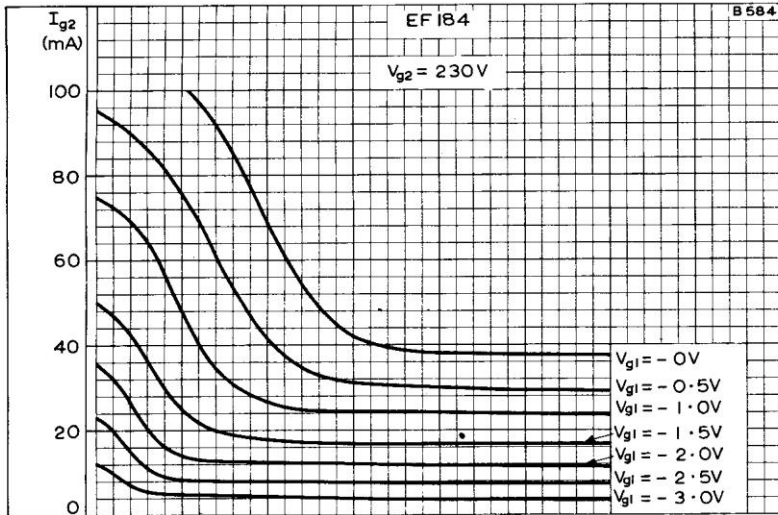
ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. $V_{g2} = 170V$



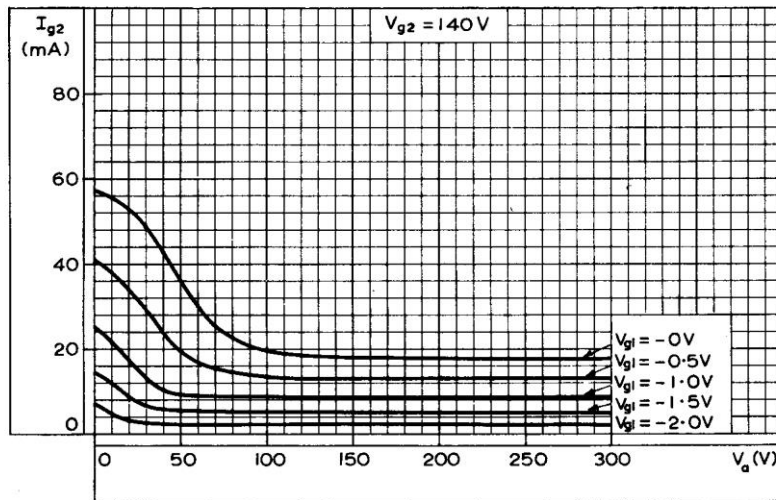
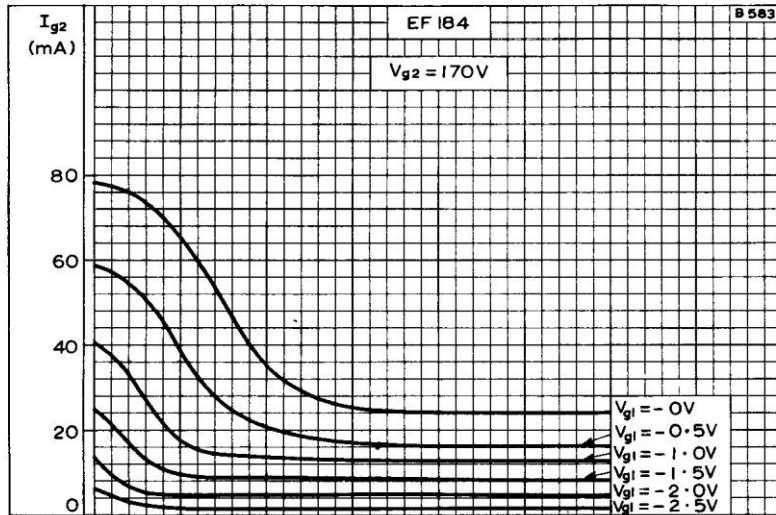
ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. $V_{g2} = 140V$

EF184

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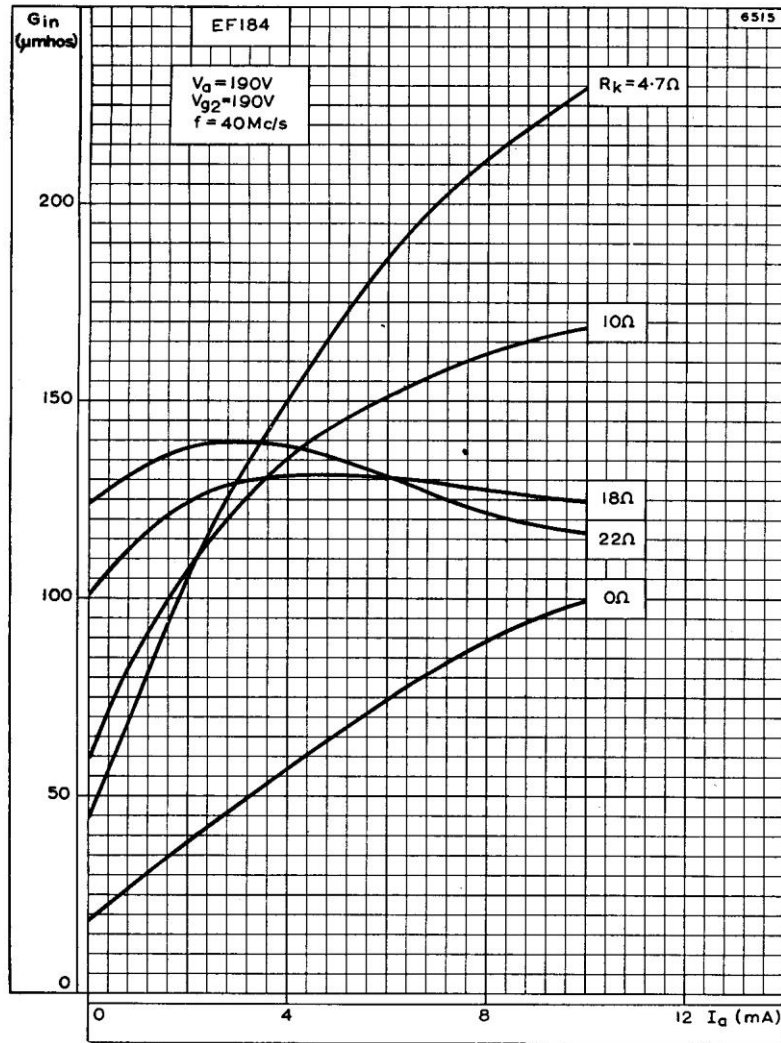
SCREEN-GRID CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER



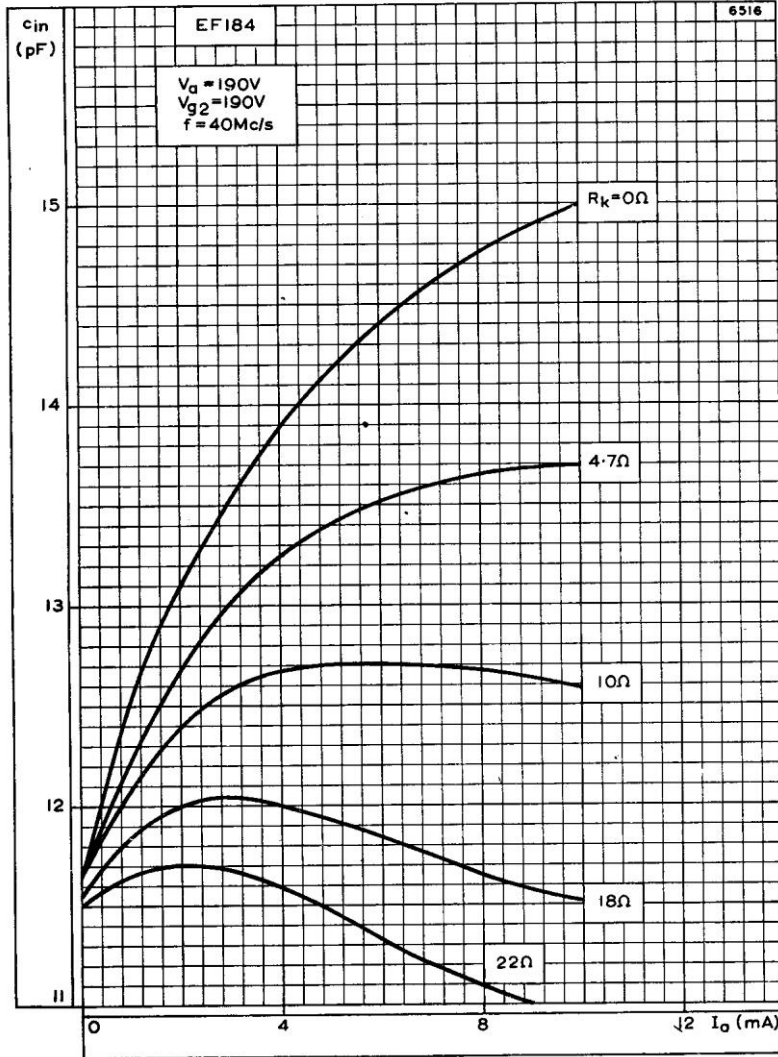
SCREEN-GRID CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER

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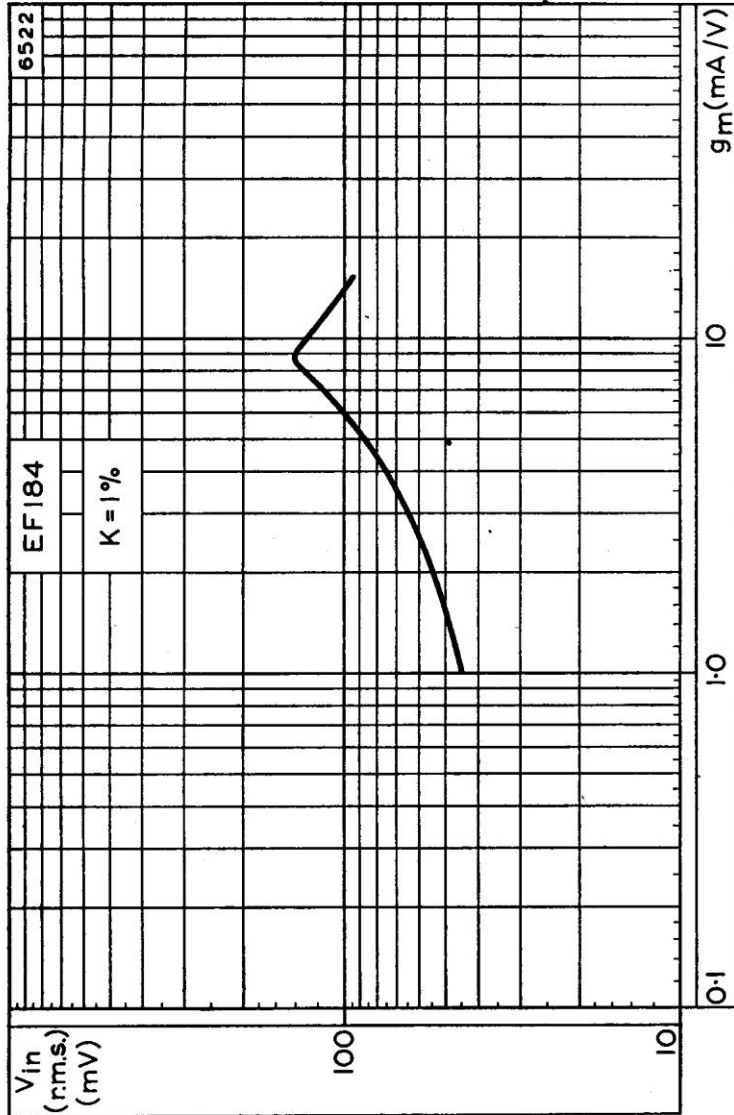
INPUT CONDUCTANCE PLOTTED AGAINST ANODE CURRENT WITH VARIOUS VALUES OF CATHODE RESISTOR



INPUT CAPACITANCE PLOTTED AGAINST ANODE CURRENT WITH VARIOUS VALUES OF CATHODE RESISTOR

EF184

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CROSS-MODULATION CURVE

