

R.F. TRIODE

EC97

Triode with low anode-to-grid capacitance intended for use as an r.f. amplifier in V.H.F. television tuners.

HEATER

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

V_h	6.3	V
I_h	215	mA

CAPACITANCES

	Shielded	Unshielded	
C_{a-g}	480	500	mpF
C_{g-k}	3.2	3.2	pF
C_{a-k}	210	250	mpF
$C_{g-k+h+S}$	5.0	5.0	pF
$C_{a-k+h+S}$	4.2	3.3	pF
C_{g-h}	280	280	mpF
C_{k-h}	2.5	2.5	pF

CHARACTERISTICS

V_a	135	V
V_g	-1.0	V
I_a	11	mA
g_m	13	mA/V
μ	65	
r_a	5.0	k Ω
V_g for $I_a = 100\mu A$	-5.0	V
V_g for 20 : 1 reduction in g_m	-3.1	V
V_g for 100 : 1 reduction in g_m	-5.0	V

OPERATING CONDITIONS

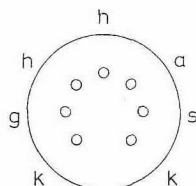
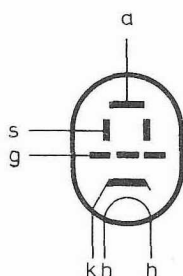
Condition	1	2	3	4	
V_b	135	135	135	135	V
R_a	1.0	1.0	2.2	2.2	k Ω
R_k	82	0	0	0	Ω
R_g	0	1.0	0.22	1.0	M Ω
R_{g-a}	—	—	22	22	M Ω
I_a	10.5	13	14	14	mA
g_m	13	15.5	16	16	mA/V
V_g for 100 : 1 reduction in g_m	-5.0	-4.8	-6.0	-11	V

Condition	5	6	7	8	
V_b	200	200	200	200	V
R_a	5.6	5.6	6.8	6.8	k Ω
R_k	82	0	0	0	Ω
R_g	0	1.0	0.22	0.56	M Ω
R_{g-a}	—	—	22	22	M Ω
I_a	12	13	14	14	mA
g_m	14	15.5	16	16	mA/V
V_g for 100 : 1 reduction in g_m	-7.5	-7.3	-9.0	-12.5	V

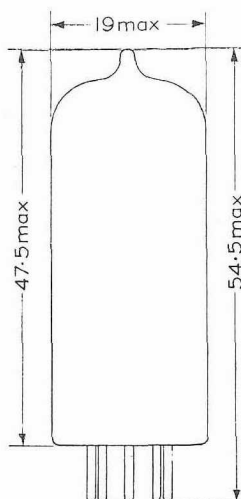
I_a and g_m curves corresponding to conditions 1 to 4 are given on pages C2 and C3, and for conditions 5 to 8 on pages C4 and C5.

DESIGN CENTRE RATINGS

$V_{a(b)}$ max.	550	V
V_a max.	200	V
p_a max.	2.2	W
I_k max.	20	mA
$-V_g$ max.	50	V
R_{g-k} max.	1.0	M Ω
V_{h-k} max.	100	V
R_{h-k} max.	20	k Ω

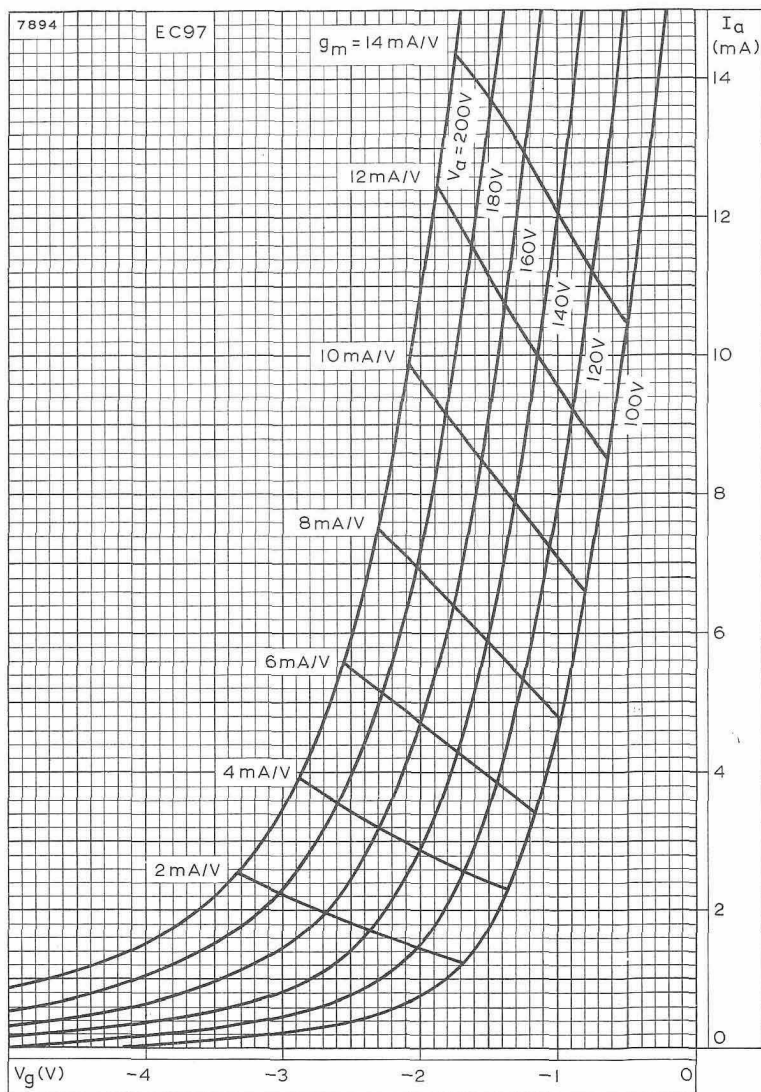


B7G Base

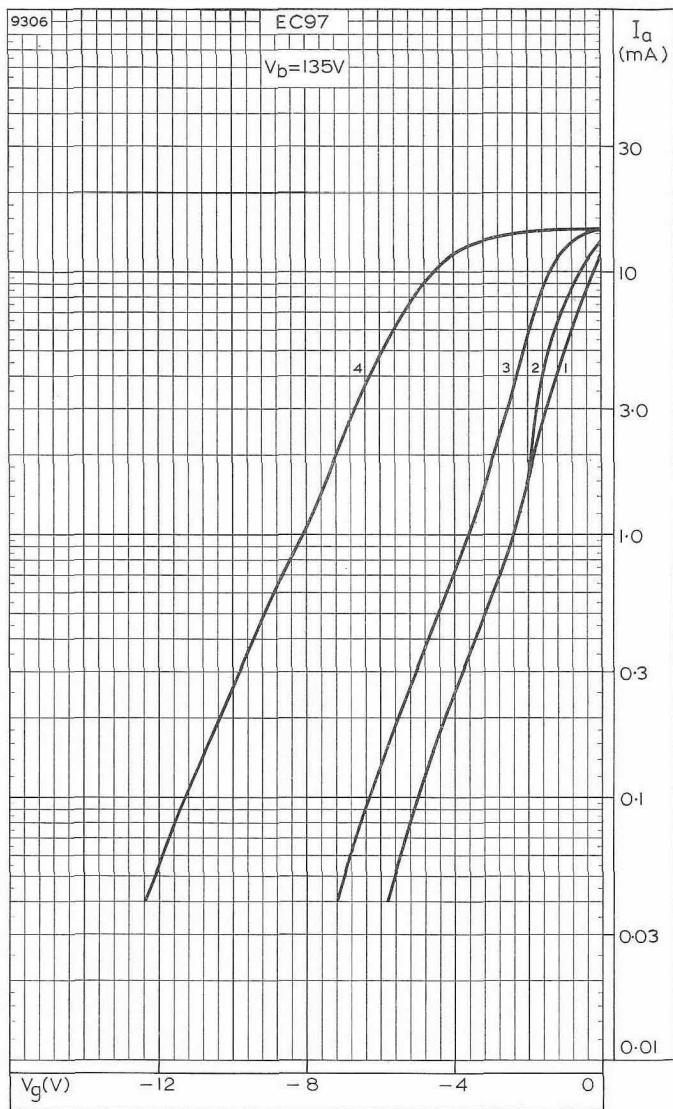


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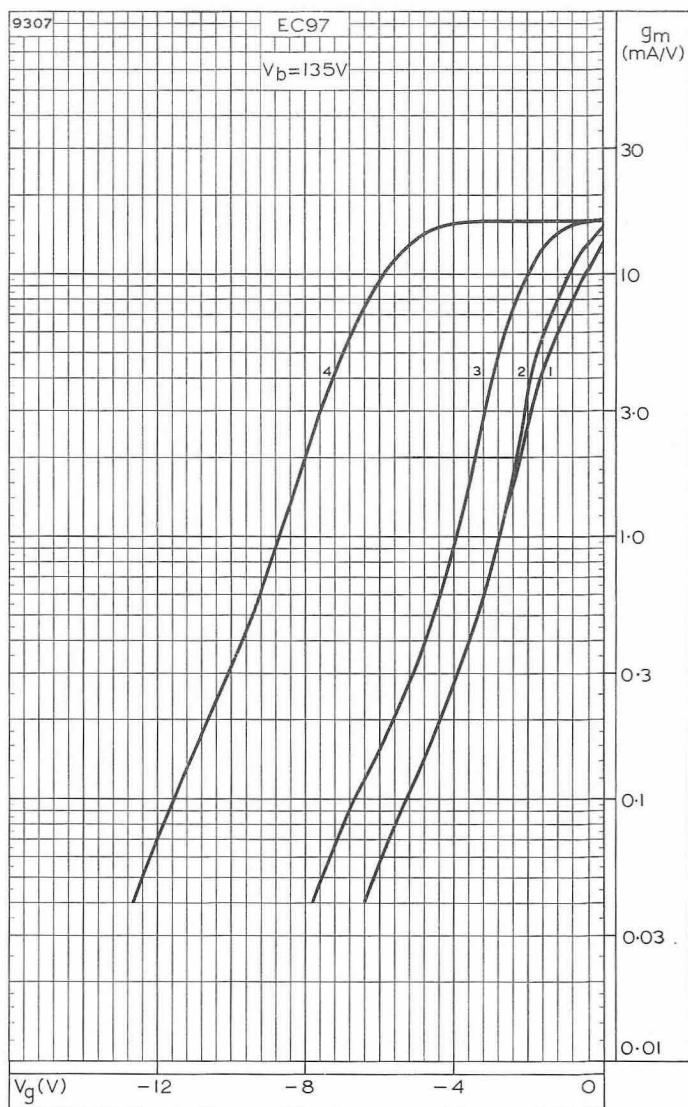
All dimensions in mm



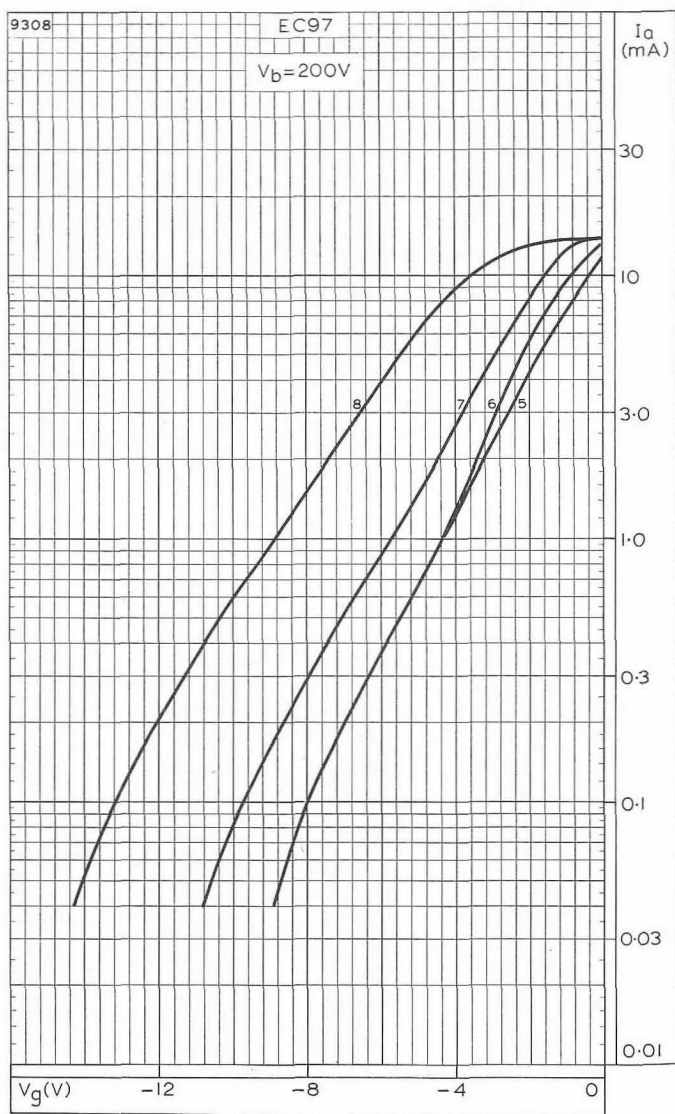
ANODE CURRENT PLOTTED AGAINST GRID VOLTAGE WITH ANODE VOLTAGE AS PARAMETER AND WITH MUTUAL CONDUCTANCE CONTOURS



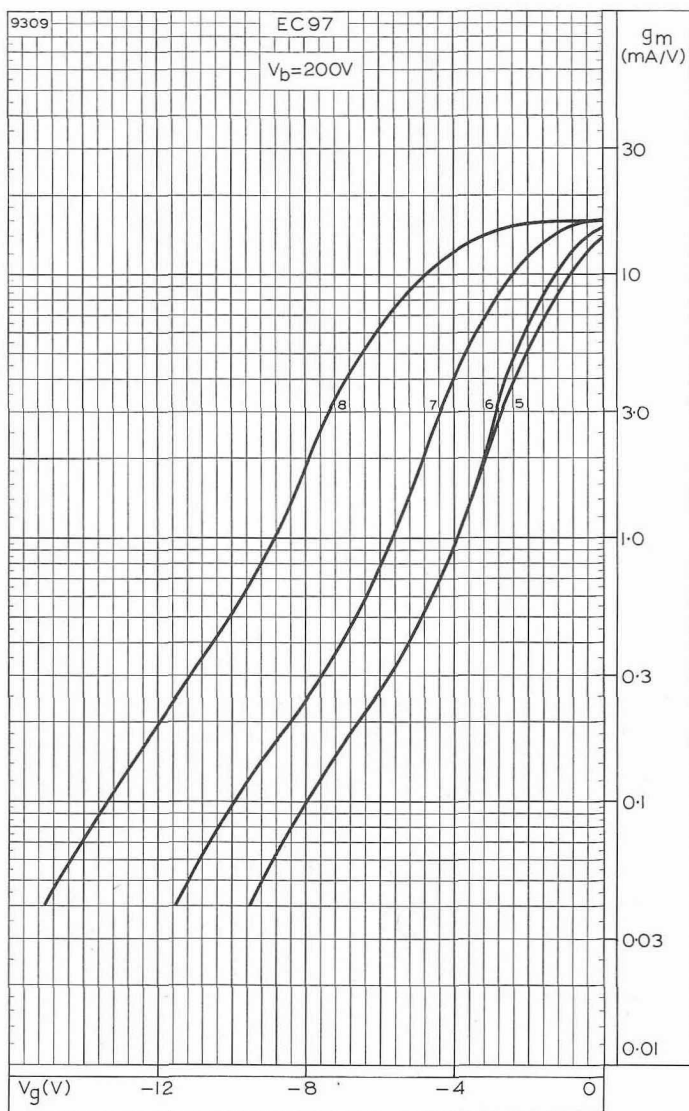
ANODE CURRENT PLOTTED AGAINST GRID VOLTAGE. $V_b = 135V$
Curve numbers refer to Operating Conditions on page D1.



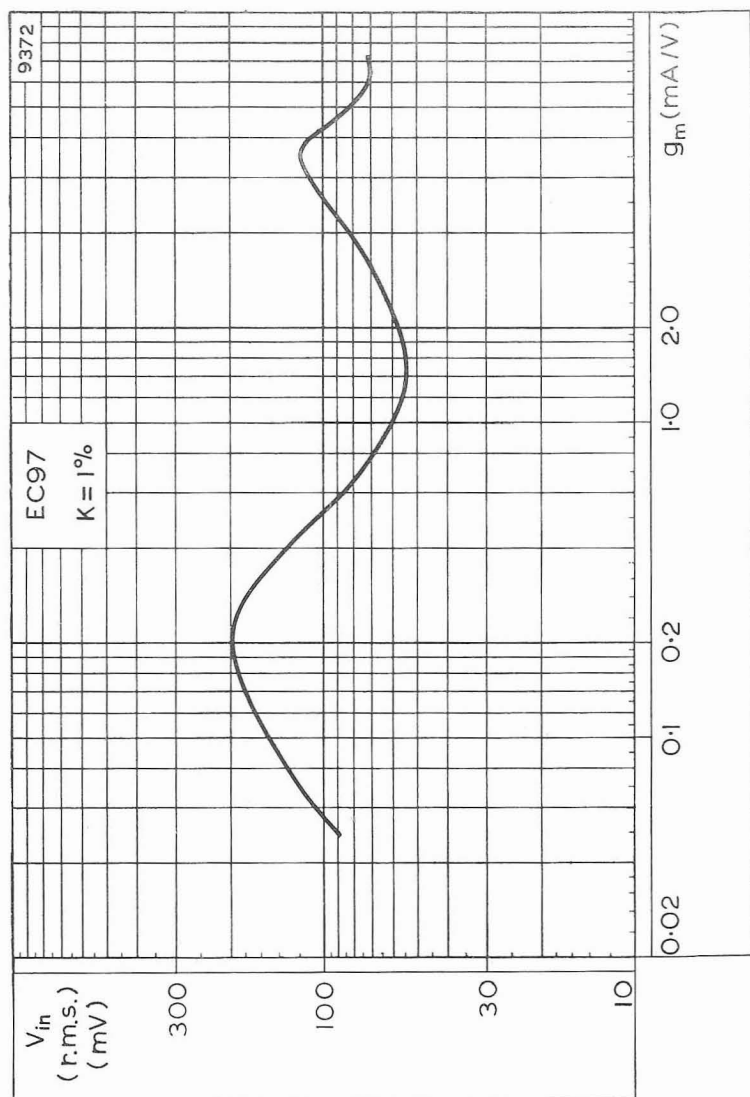
MUTUAL CONDUCTANCE PLOTTED AGAINST GRID VOLTAGE. $V_b = 135V$
Curve numbers refer to Operating Conditions on page D1.



ANODE CURRENT PLOTTED AGAINST GRID VOLTAGE. $V_b = 200V$
 Curve numbers refer to Operating Conditions on page D2.



MUTUAL CONDUCTANCE PLOTTED AGAINST GRID VOLTAGE. $V_b = 200V$
Curve numbers refer to Operating Conditions on page D2.



CROSS-MODULATION CURVE