

## VIDEO OUTPUT PENTODE

# EL822

Video output pentode having a high mutual conductance.

### HEATER

$V_h$	6.3	V
$I_h$	750	mA

### CAPACITANCES (unshielded)

$C_{in}$	12	pF
$C_{out}$	6.0	pF
$C_{a-g1}$	<0.1	pF

### CHARACTERISTICS

#### Pentode connection

$V_a$	250	250	250	V
$V_{g3}$	0	0	0	V
$V_{g2}$	150	200	250	V
$V_{g1}$	-2.5	-5.0	-7.0	V
$I_a$	40	37.5	42.5	mA
$I_{g2}$	5.0	4.8	4.8	mA
$g_m$	13	12.2	12.5	mA/V
$\mu_{g1-g2}$	23	23	23	
$r_a$	100	90	90	k $\Omega$
$T_{bulb}$	190	200	220	$^{\circ}$ C

#### Triode connection ( $g_2$ connected to a)

$V_a$	150	V
$I_a$	45	mA
$V_{g1}$	-2.5	V
$g_m$	14.6	mA/V
$r_a$	1.56	k $\Omega$
$\mu$	23	

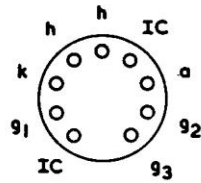
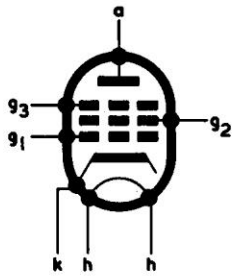
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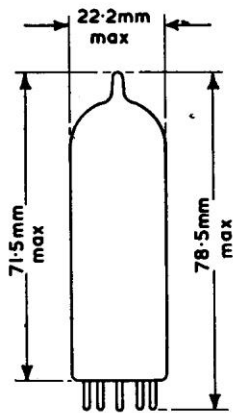
### DESIGN CENTRE RATINGS

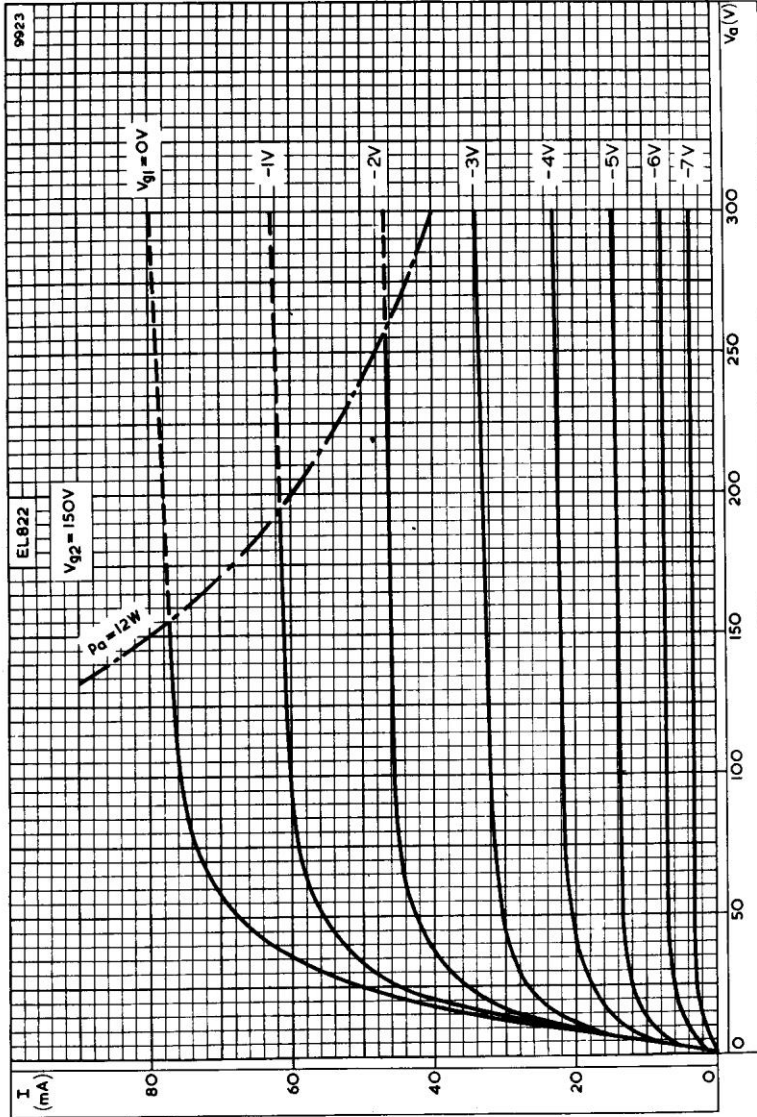
$V_{a(b)}$ max.	550	V
$V_a$ max.	275	V
$p_a$ max.	12	W
$V_{g2(b)}$ max.	550	V
$V_{g2}$ max.	275	V
$p_{g2}$ max.	2.5	W
$I_k$ max.	60	mA
$R_{g1-k}$ max.	100	k $\Omega$
$V_{h-k}$ max.	90	V
$T_{bulb}$ max.	220	$^{\circ}$ C

3310



B9A Base

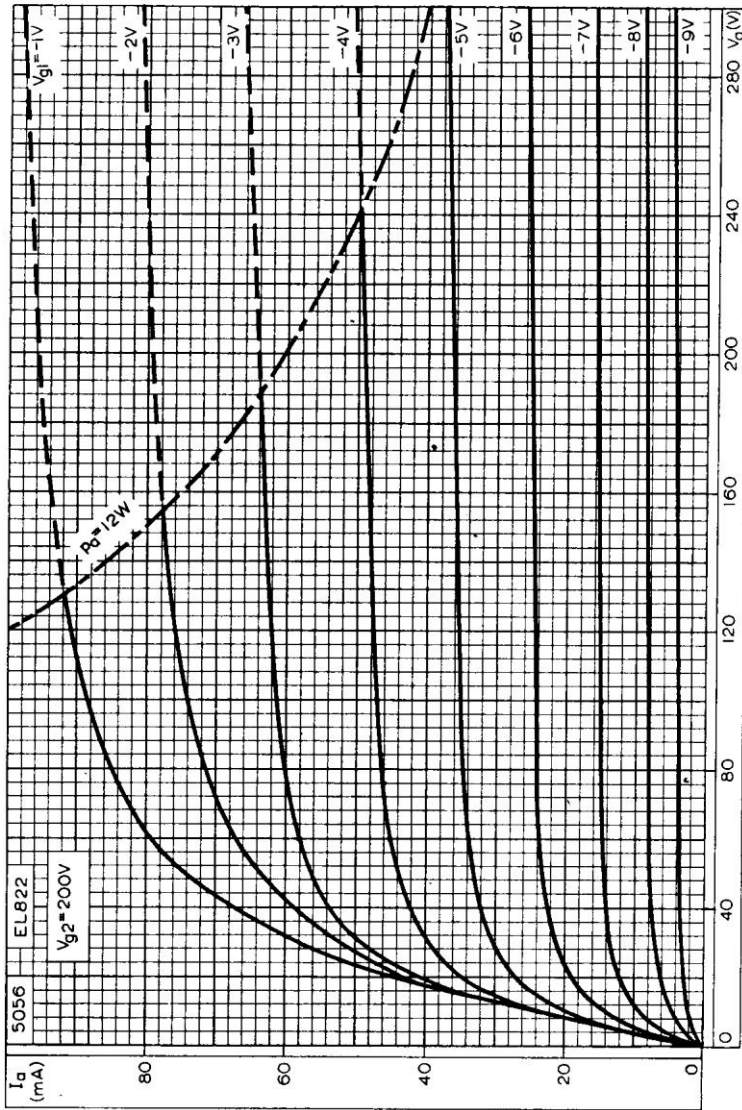




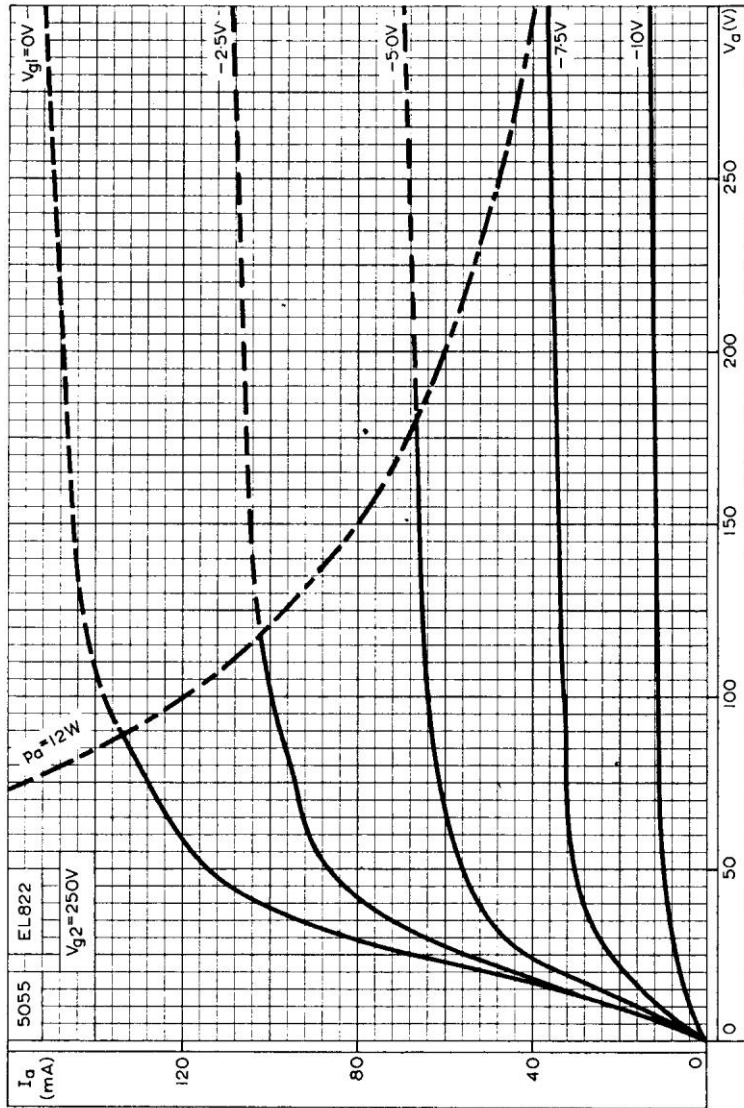
ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER.  $V_{g2} = 150V$

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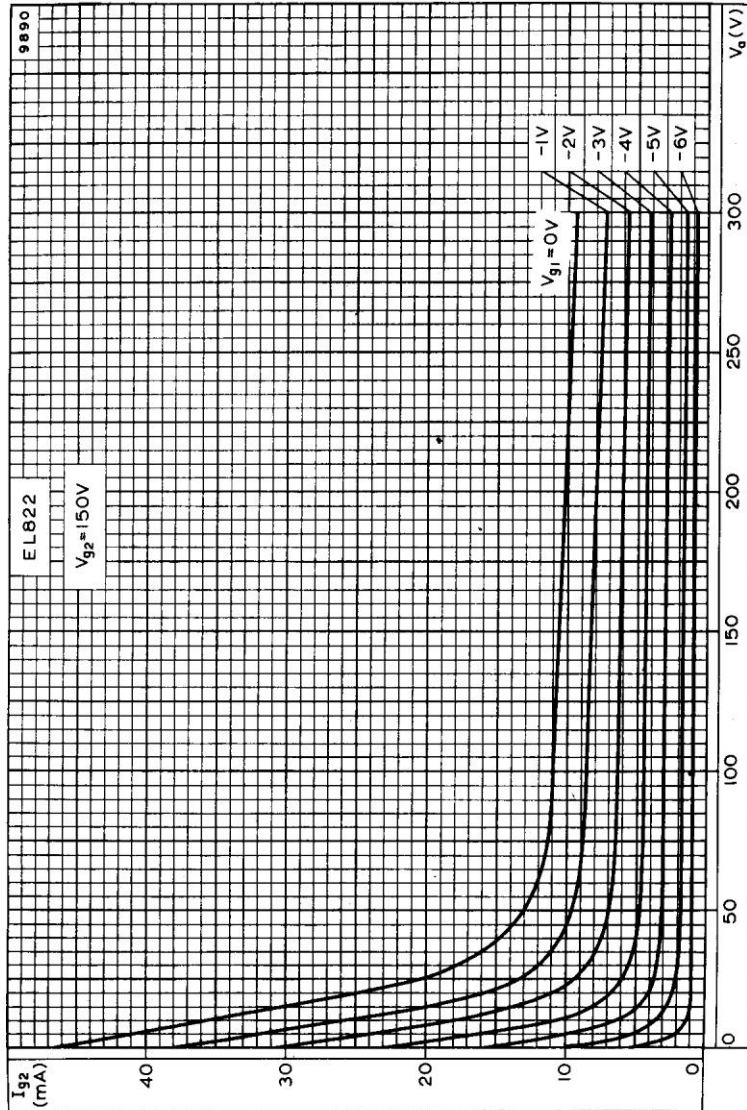
ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER.  $V_{g2} = 200V$



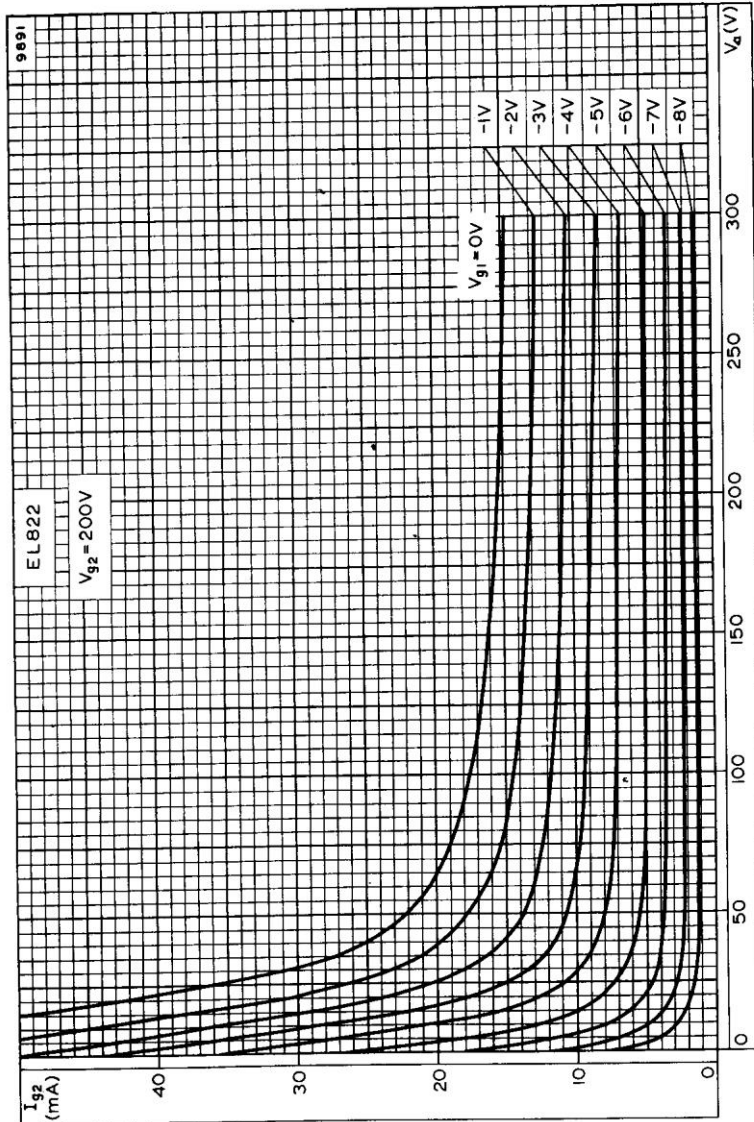
ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER.  $V_{g2} = 250V$

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## VIDEO OUTPUT PENTODE



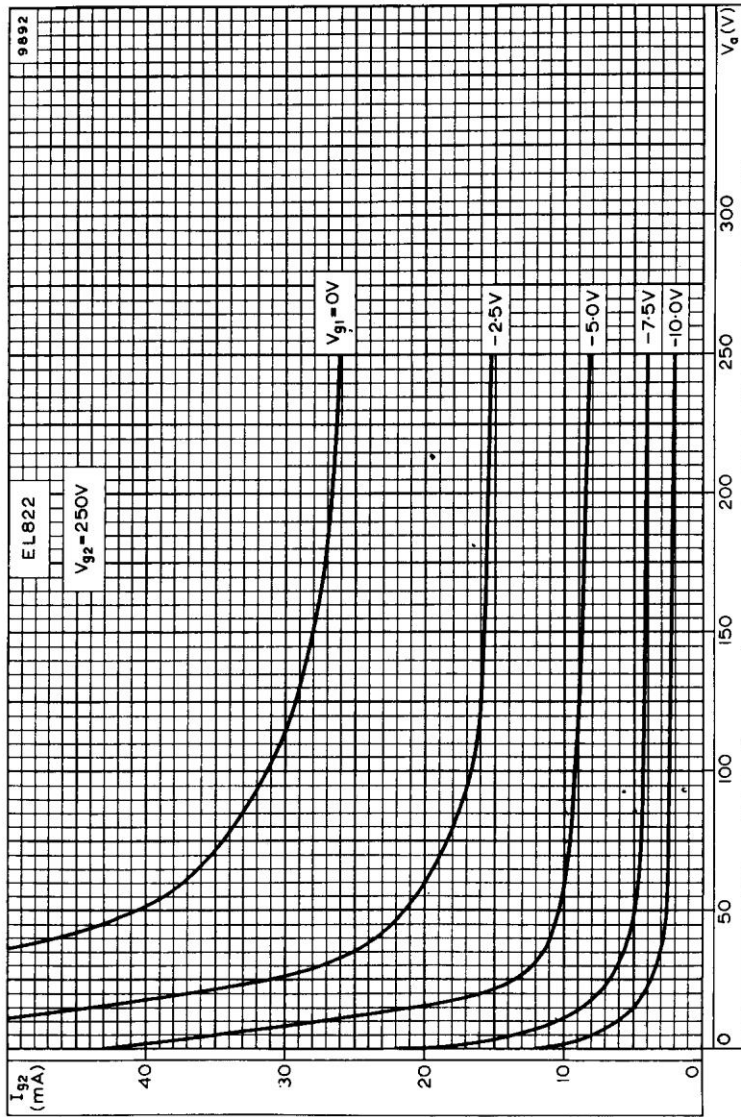
SCREEN-GRID CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER.  $V_{g2}=150V$



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

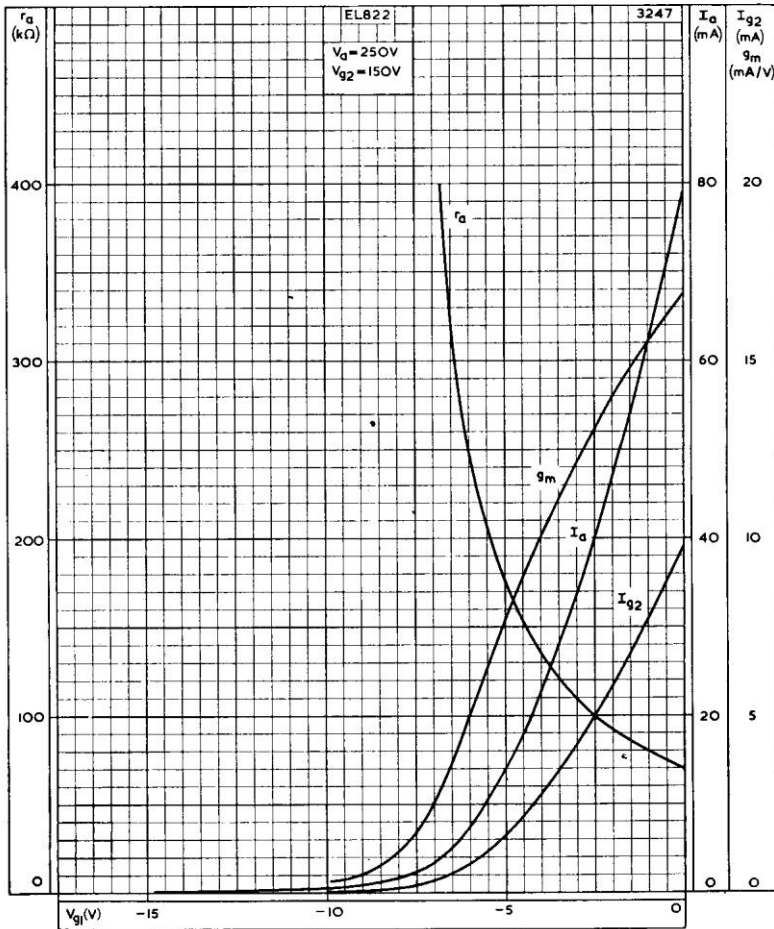
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SCREEN-GRID CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER.  $V_{g2} = 250V$

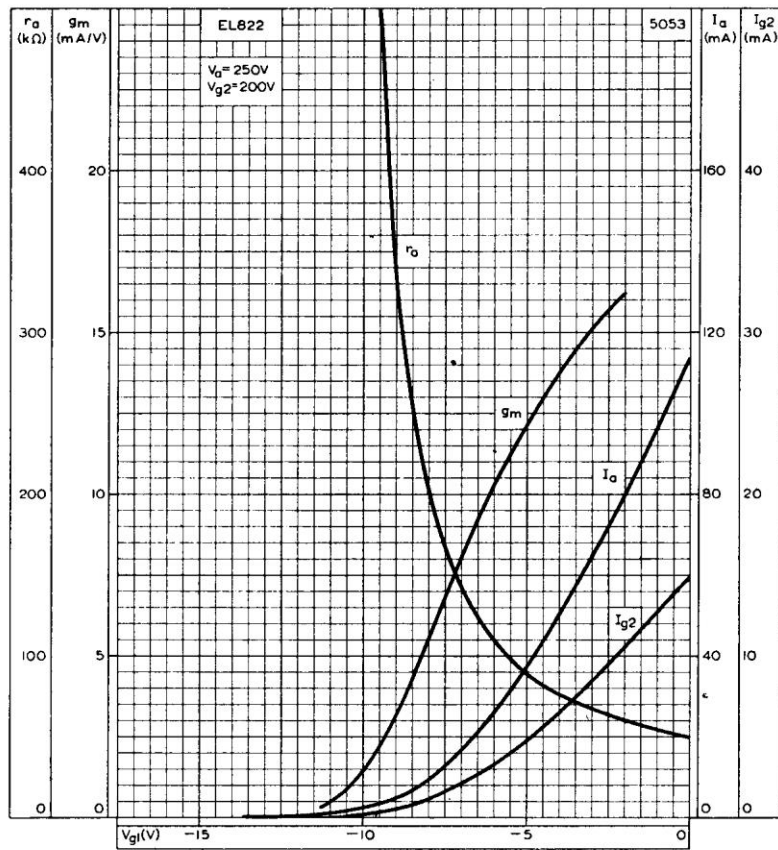




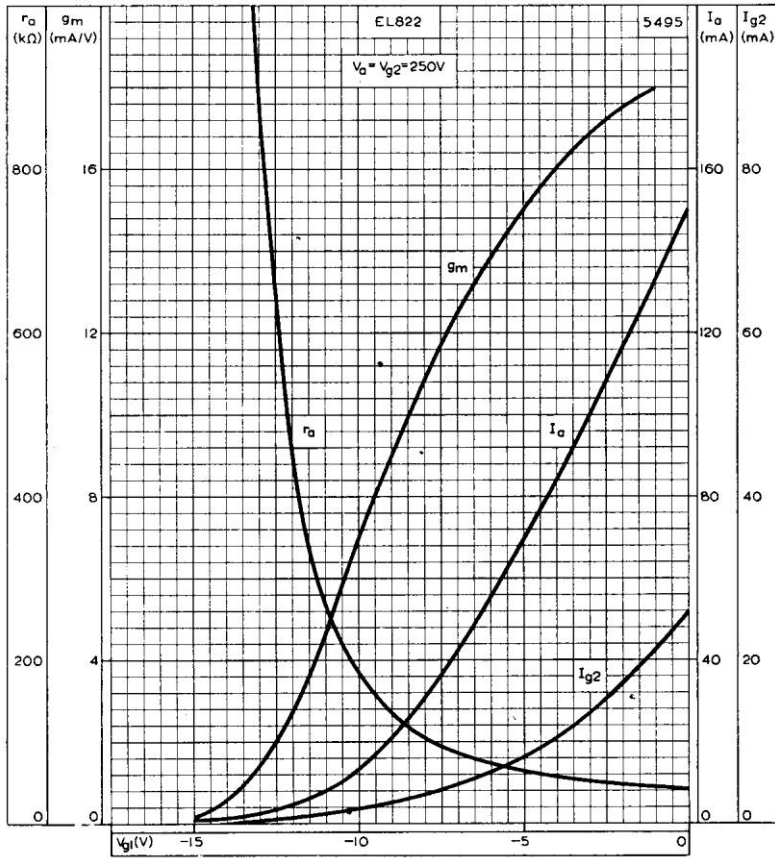
ANODE AND SCREEN-GRID CURRENTS, MUTUAL CONDUCTANCE AND ANODE IMPEDANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE  
 $V_a = 250V, V_{g2} = 150V$

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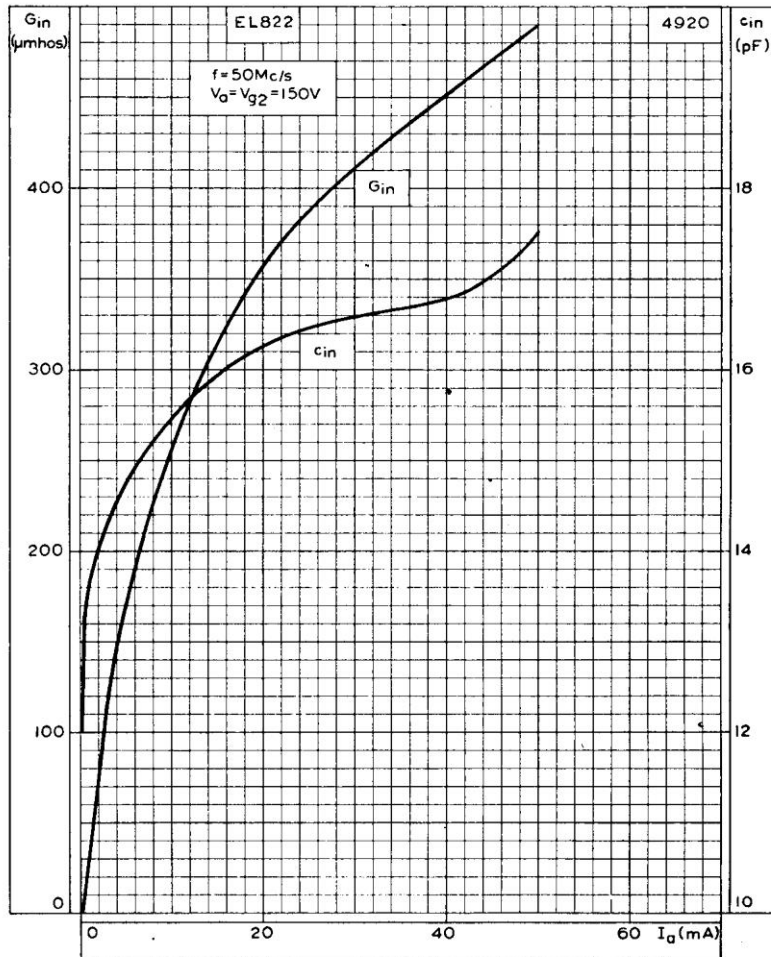
ANODE AND SCREEN-GRID CURRENTS, MUTUAL CONDUCTANCE AND ANODE IMPEDANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE  
 $V_b = 250V$ ,  $V_{g2} = 200V$



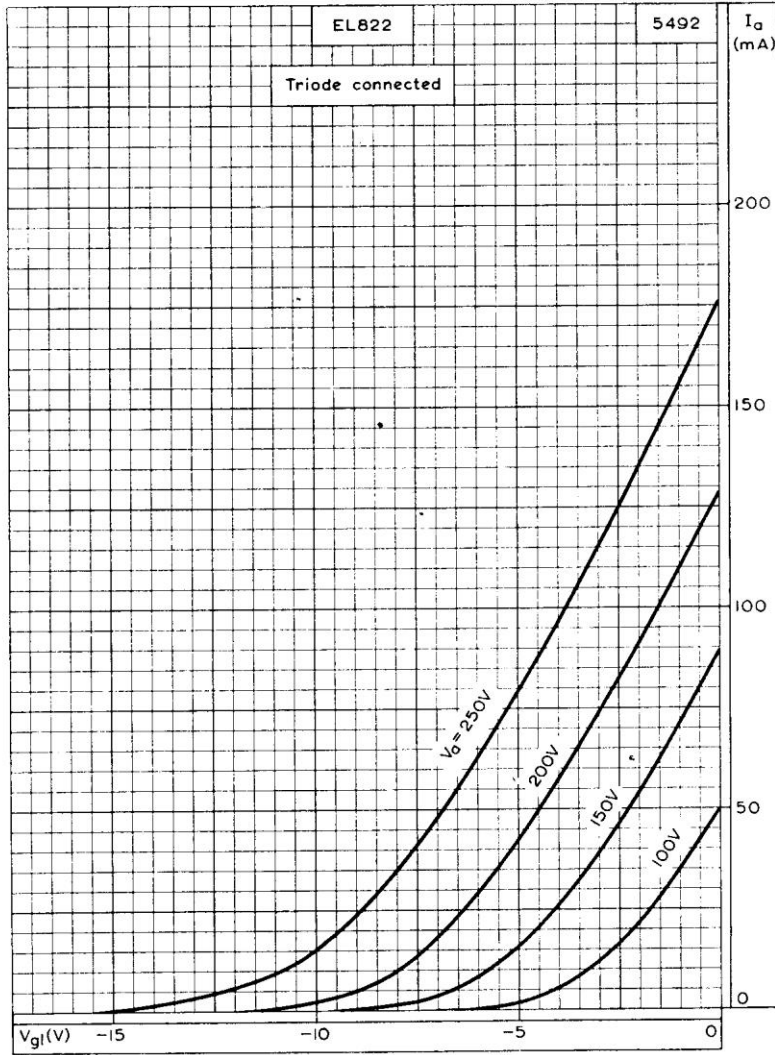
ANODE AND SCREEN-GRID CURRENTS, MUTUAL CONDUCTANCE AND ANODE IMPEDANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE  
 $V_a = V_{g2} = 250V$

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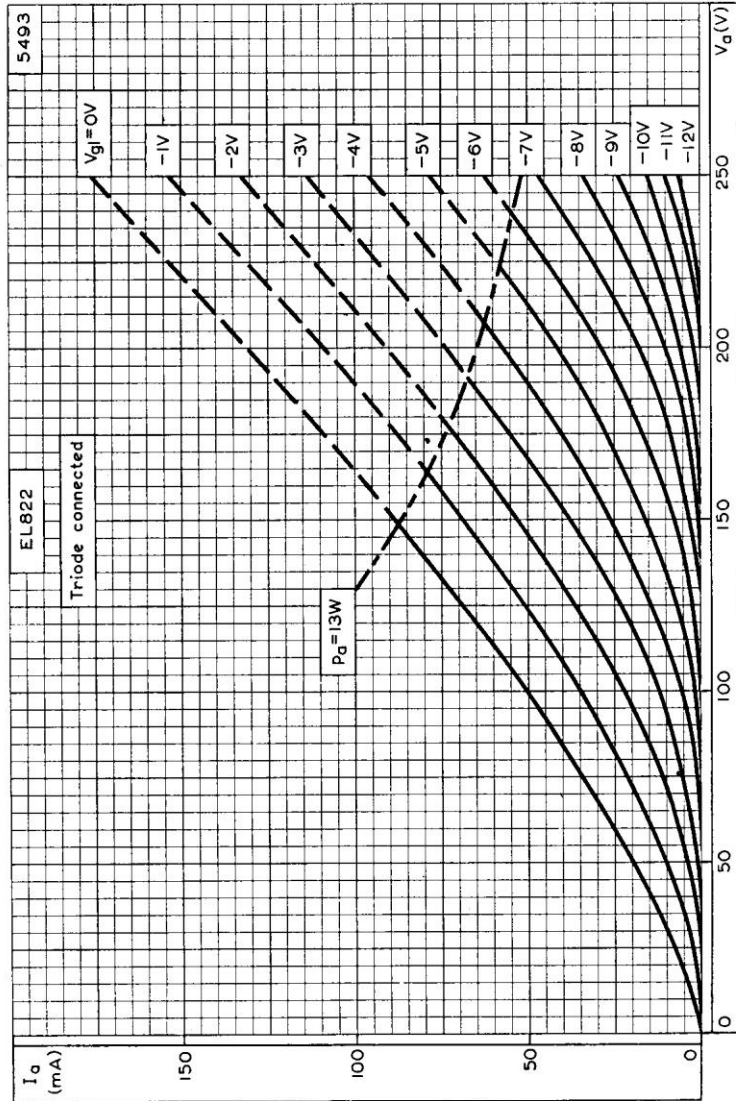
INPUT CAPACITANCE AND INPUT CONDUCTANCE PLOTTED AGAINST ANODE CURRENT



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

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## VIDEO OUTPUT PENTODE



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