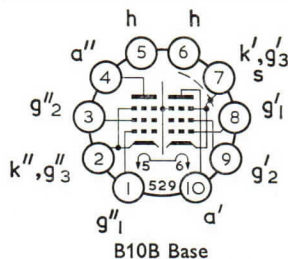


### DOUBLE PENTODE



### GENERAL

This double pentode, is intended for use in television receivers with the 'L' section as a high gain video output stage and the 'F' section as a sync separator, A.G.C. amplifier or I.F. amplifier. Particular care has been taken in the design of the valve to reduce coupling between sections to a minimum. The 'L' section is on pins 7, 8, 9 and 10.

Heater Current	$I_h$	0.3	A
Heater Voltage	$V_h$	17	V

### RATINGS

		Output 'L' Section'	Amplifier 'F' Section''	
Maximum Anode Dissipation	$P_{a(max)}$	5.0	1.5	W
Maximum Screen Grid Dissipation	$P_{g2(max)}$	2.5	0.5	W
Intermittent rating, short duration		3.2	—	W
Maximum Anode Supply Voltage	$V_{a(b)max}$	—	550	V
Maximum Anode Voltage	$V_{a(max)}$	250	250	V
Maximum Screen Grid Supply Voltage	$V_{g2(b)max}$	—	550	V
Maximum Screen Grid Voltage	$V_{g2(max)}$	250	250	V
Maximum Heater to Cathode Voltage	$V_{h-k(max)}$	200	200	V
Maximum Cathode Current	$I_{k(max)}$	60	15	mA
Intermittent rating, short duration		85	—	mA
Maximum Grid 1 to Cathode Resistance	$R_{g1-k(max)}$	1.0	1.0	MΩ

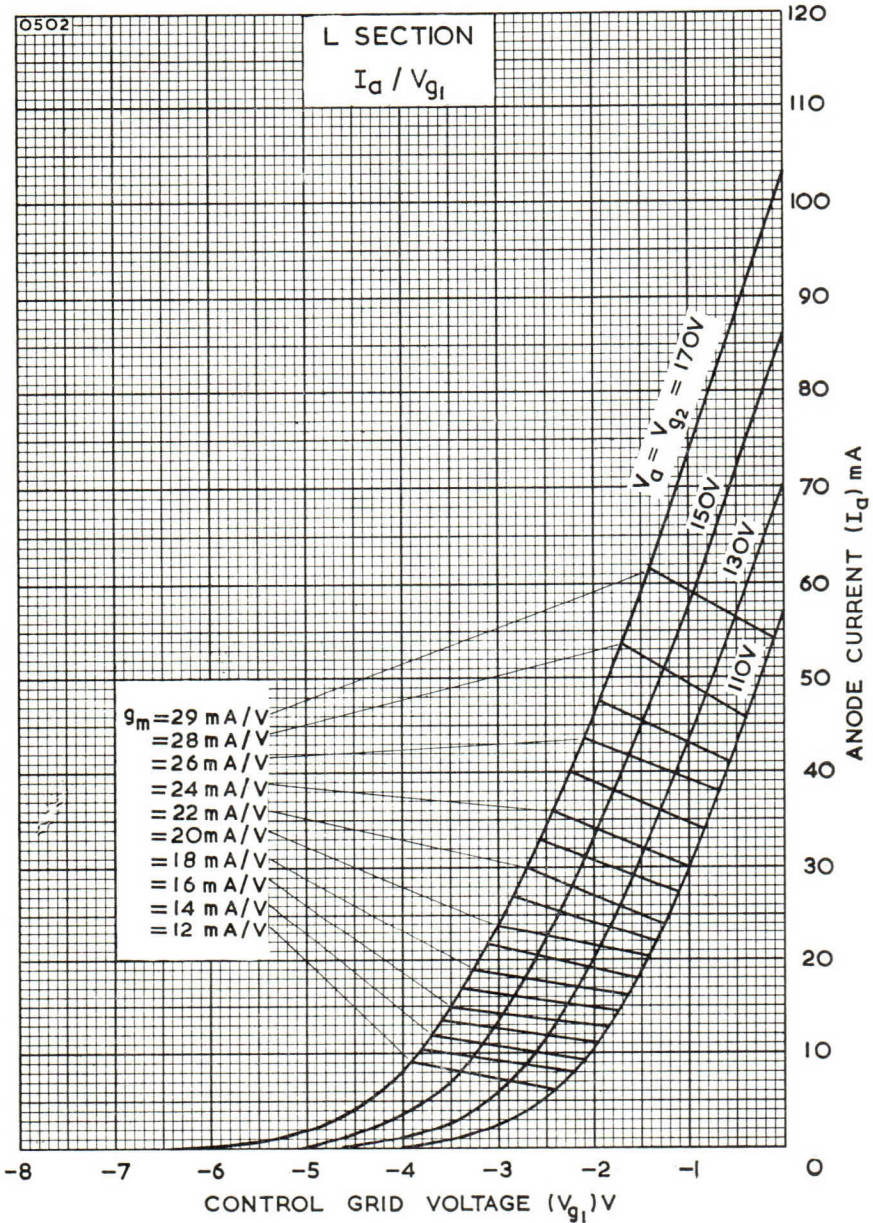
### INTER-ELECTRODE CAPACITANCES\*

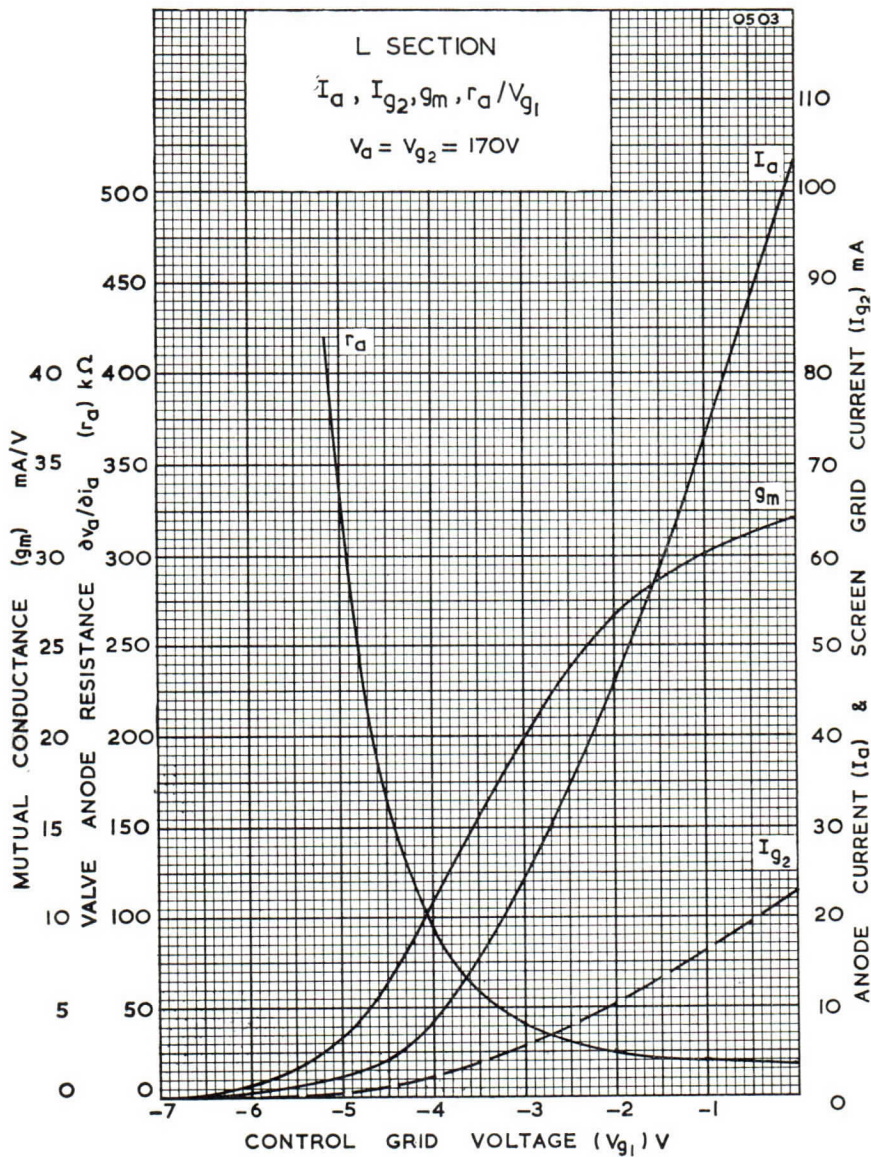
		Output 'L' Section'	Amplifier 'F' Section''	
Input	$C_{in}$	12.5	10.5	pF
Output	$C_{out}$	6.5	10.5	pF
Anode to Grid 1	$C_{a-g1}$	0.1	0.15	pF
Anode' to Anode''	$C_{a'-a''}$		<0.15	pF
Grid'1 to Grid''1	$C_{g'1-g''1}$		<0.01	pF
Anode' to Grid''1	$C_{a'-g''1}$		<0.10	pF
Grid'1 to Anode''	$C_{g'1-a''}$		<0.005	pF
Grid''1 to Heater	$C_{g''1-h}$		<0.15	pF

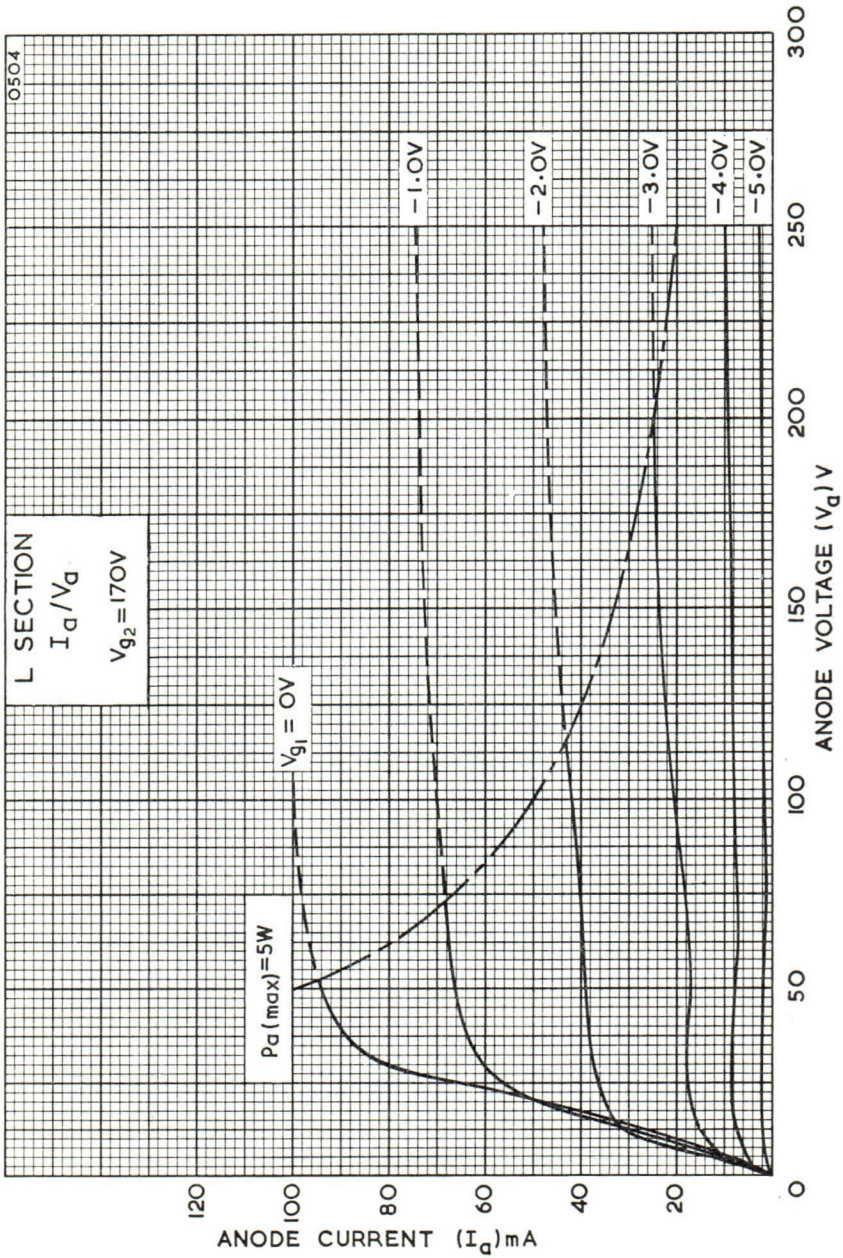
\* Measured without an external shield.

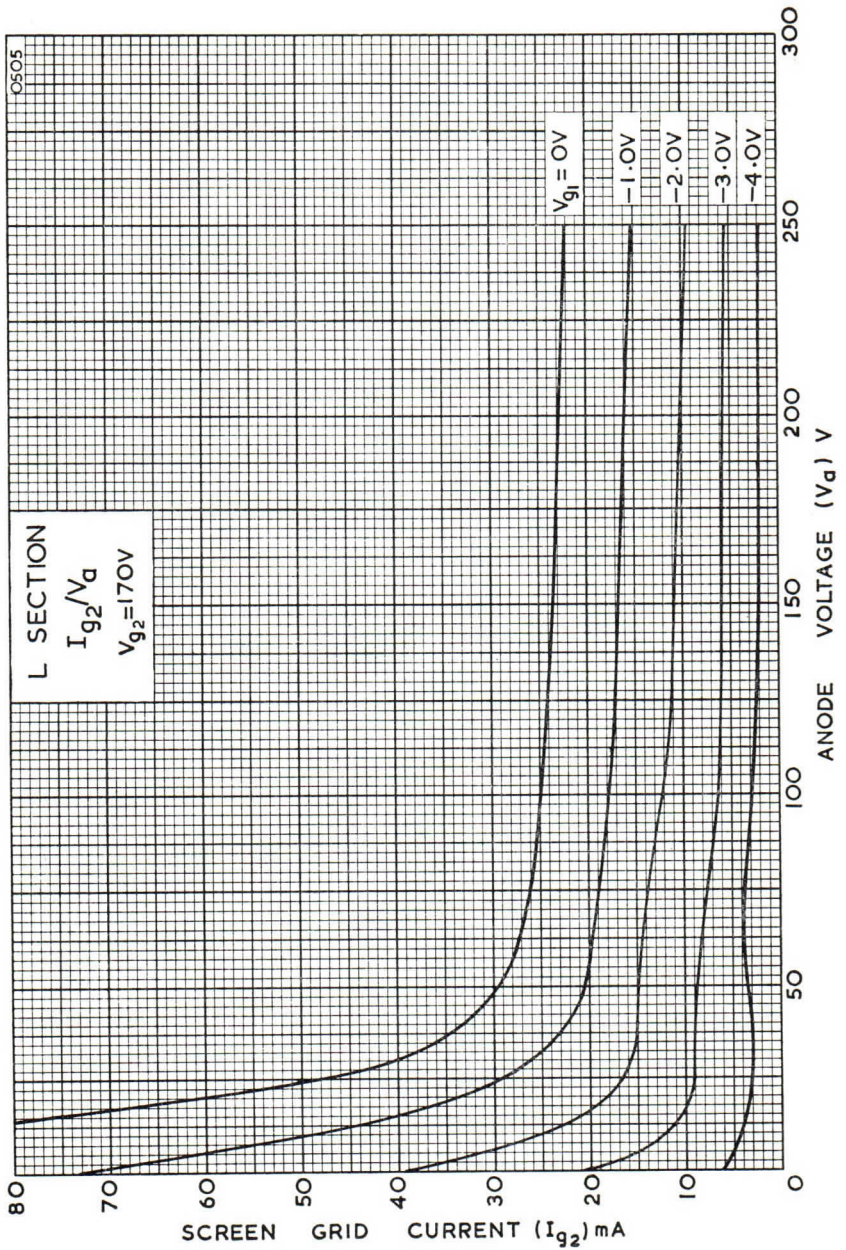
### CHARACTERISTICS

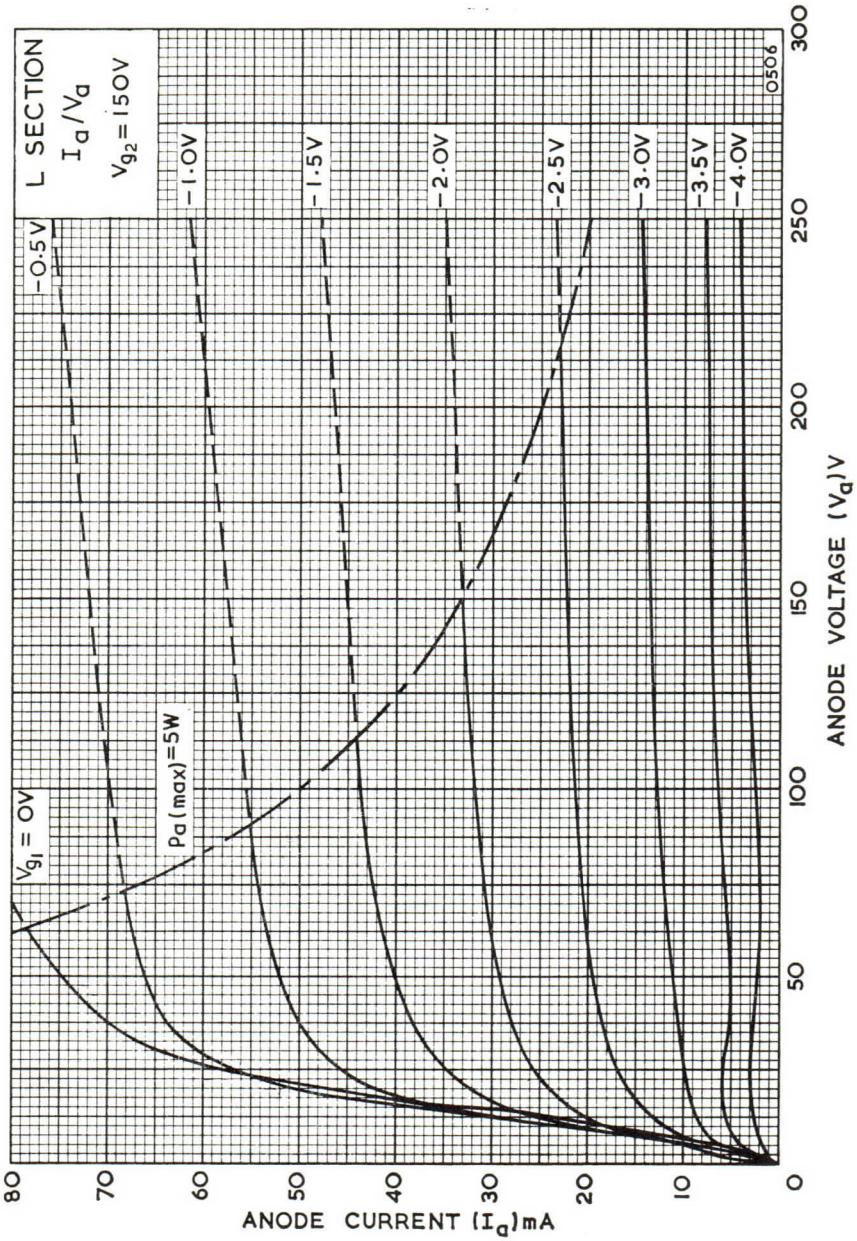
		Output 'L' Section'	Amplifier 'F' Section''	
Anode Voltage	$V_a$	170	150 50	V
Screen Grid Voltage	$V_{g2}$	170	150 75	V
Control Grid Voltage	$V_{g1}$	-2.7	-2.1 -0.65	V
Anode Current	$I_a$	30	10 5.0	mA
Screen Grid Current	$I_{g2}$	7.0	3.0	1.6 mA
Mutual Conductance	$g_m$	22	8.5 6.8	mA/V
Inner Amplification Factor	$\mu_{g1-g2}$	38	38 34	
Valve Anode Resistance ( $\delta V_a / \delta i_a$ )	$r_a$	33	150 110	kΩ

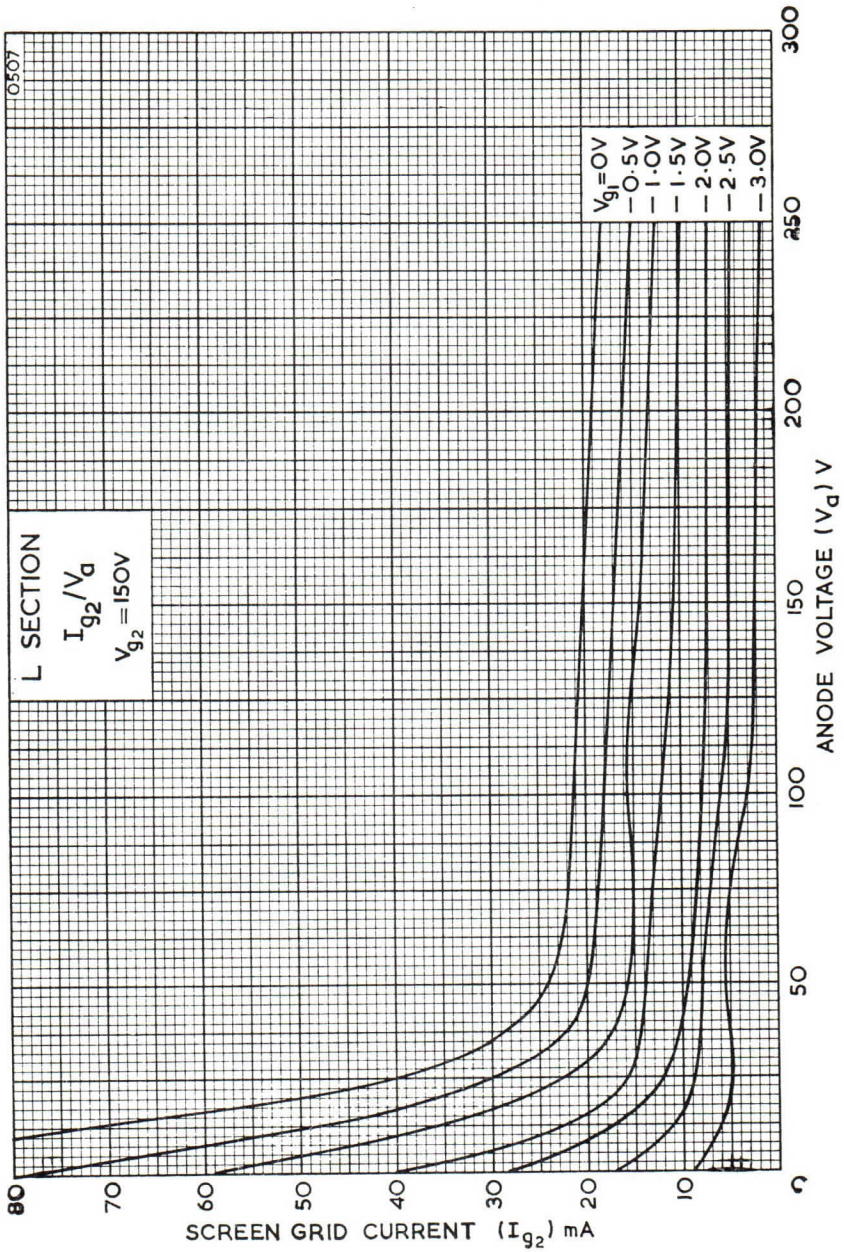


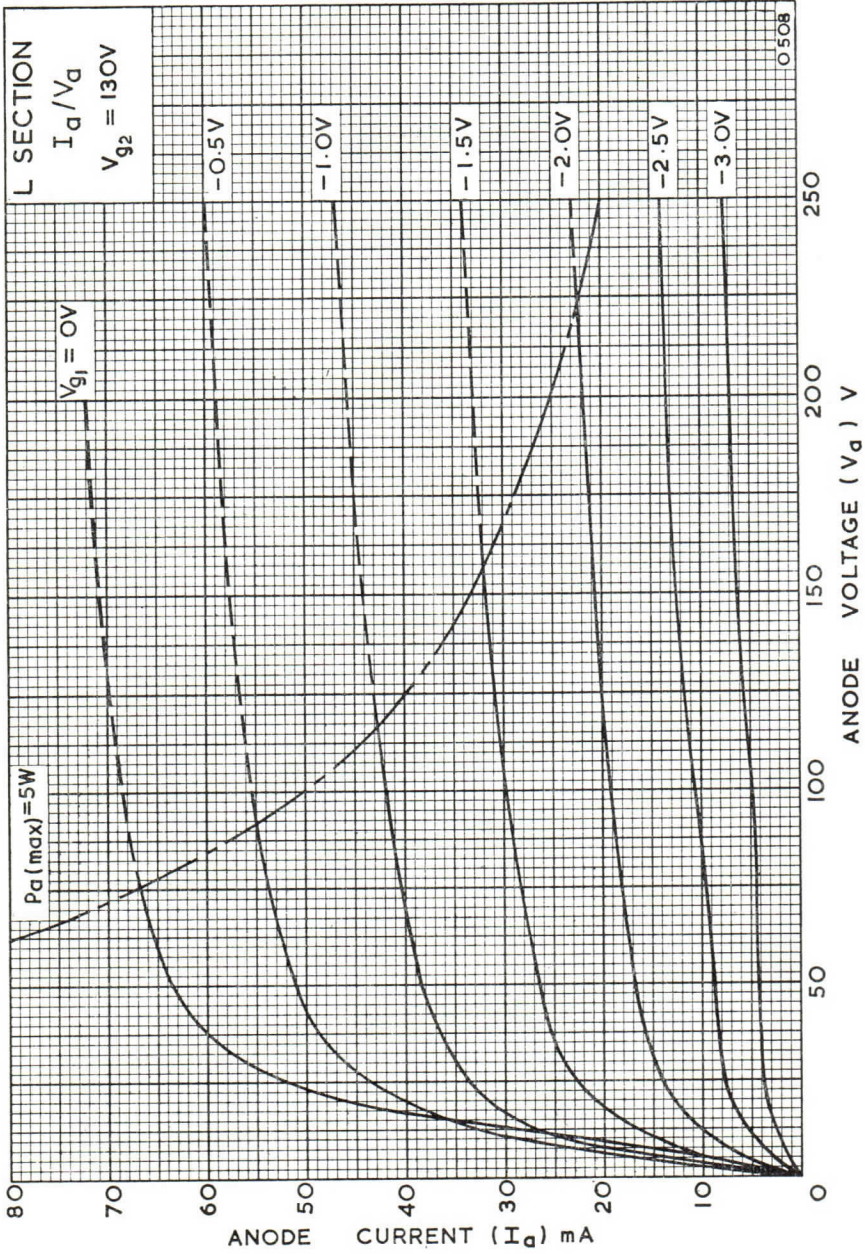




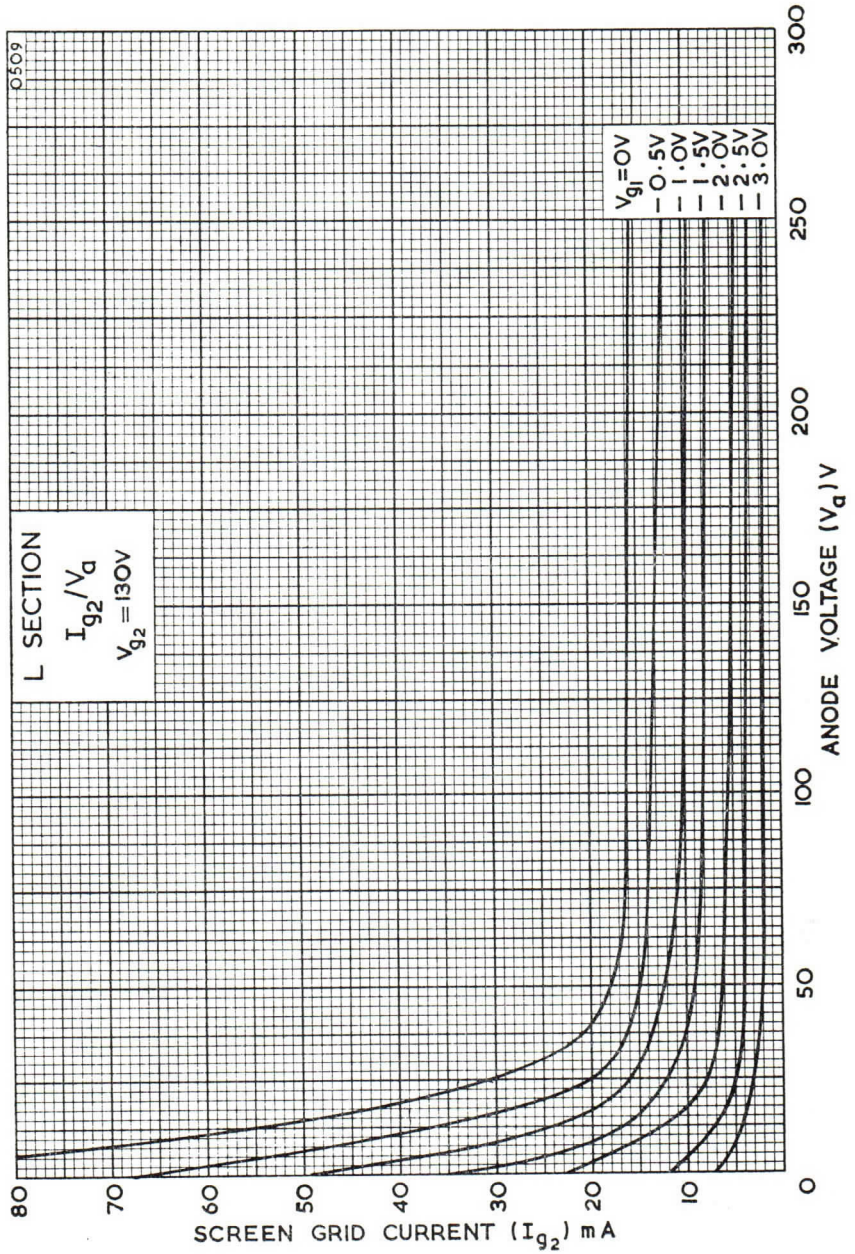


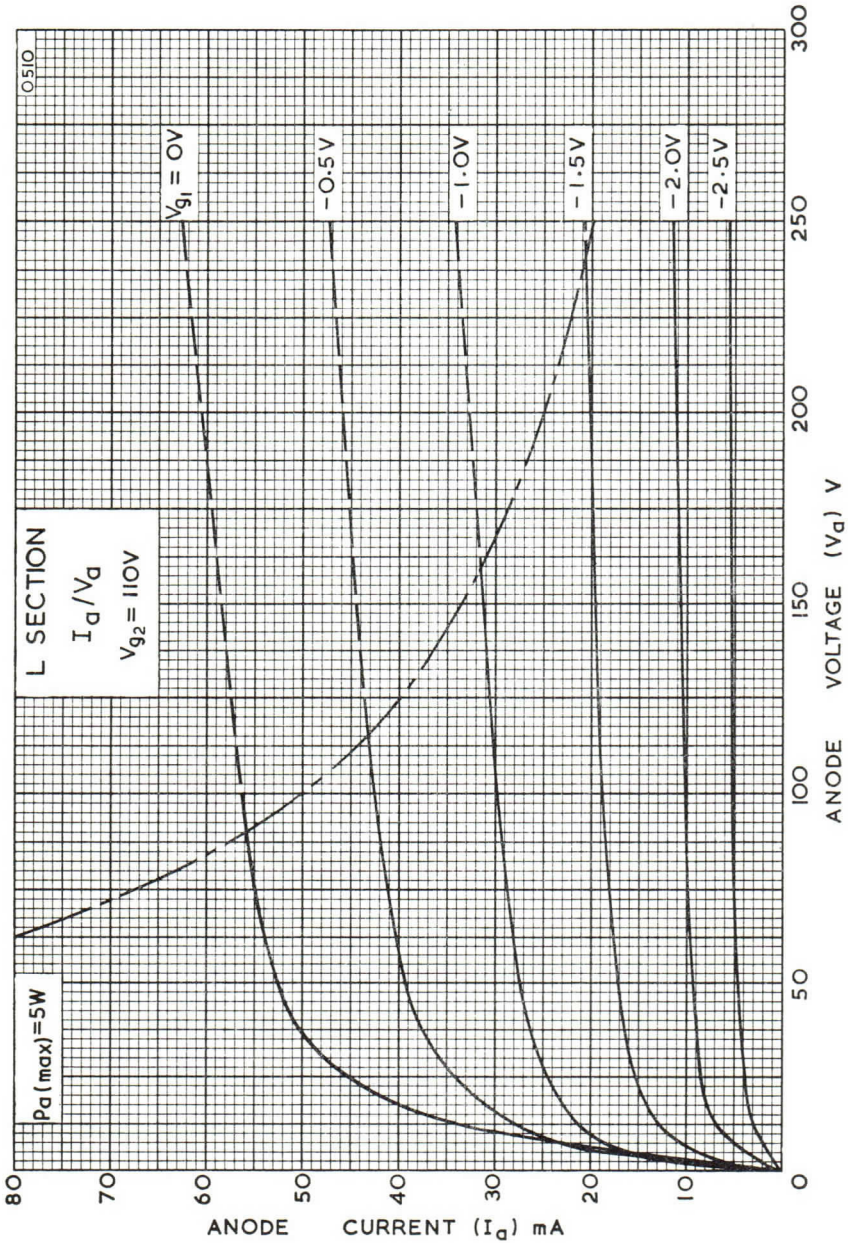


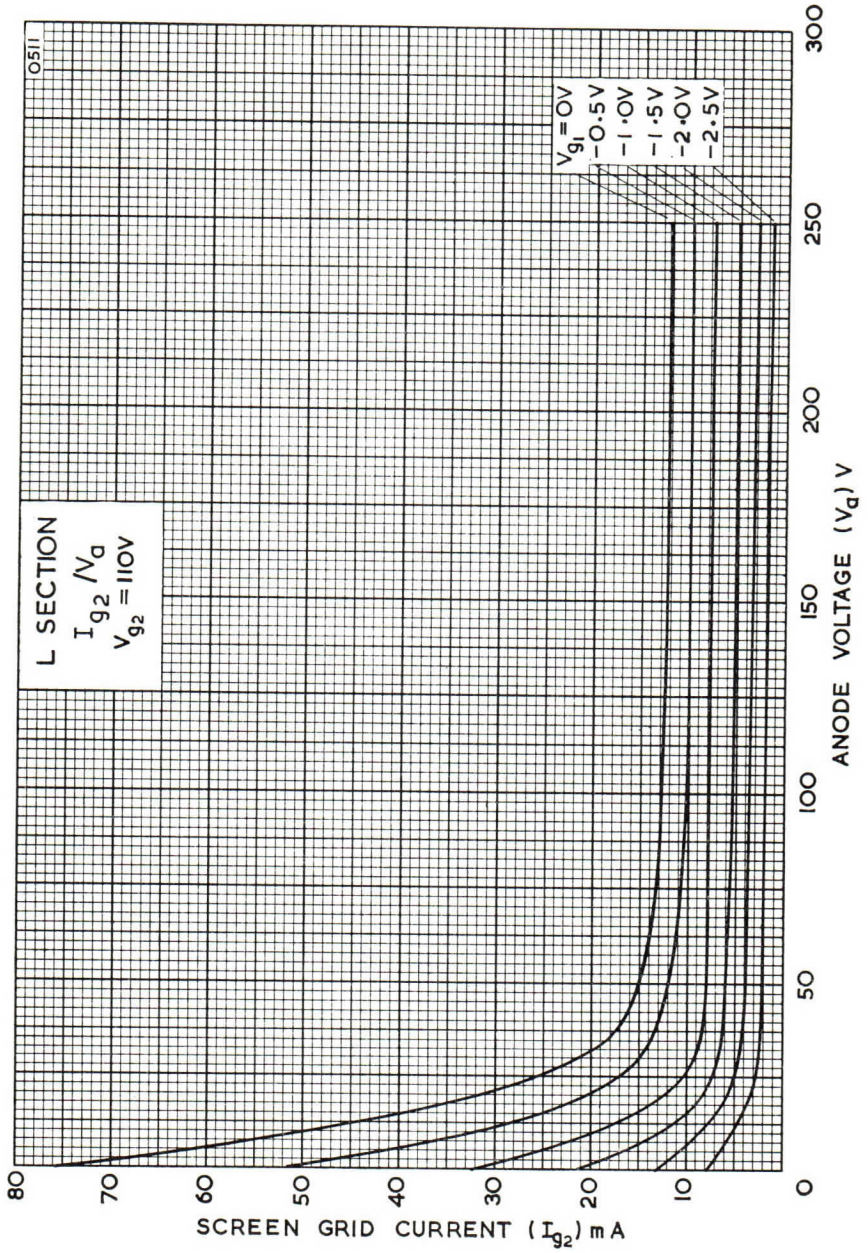




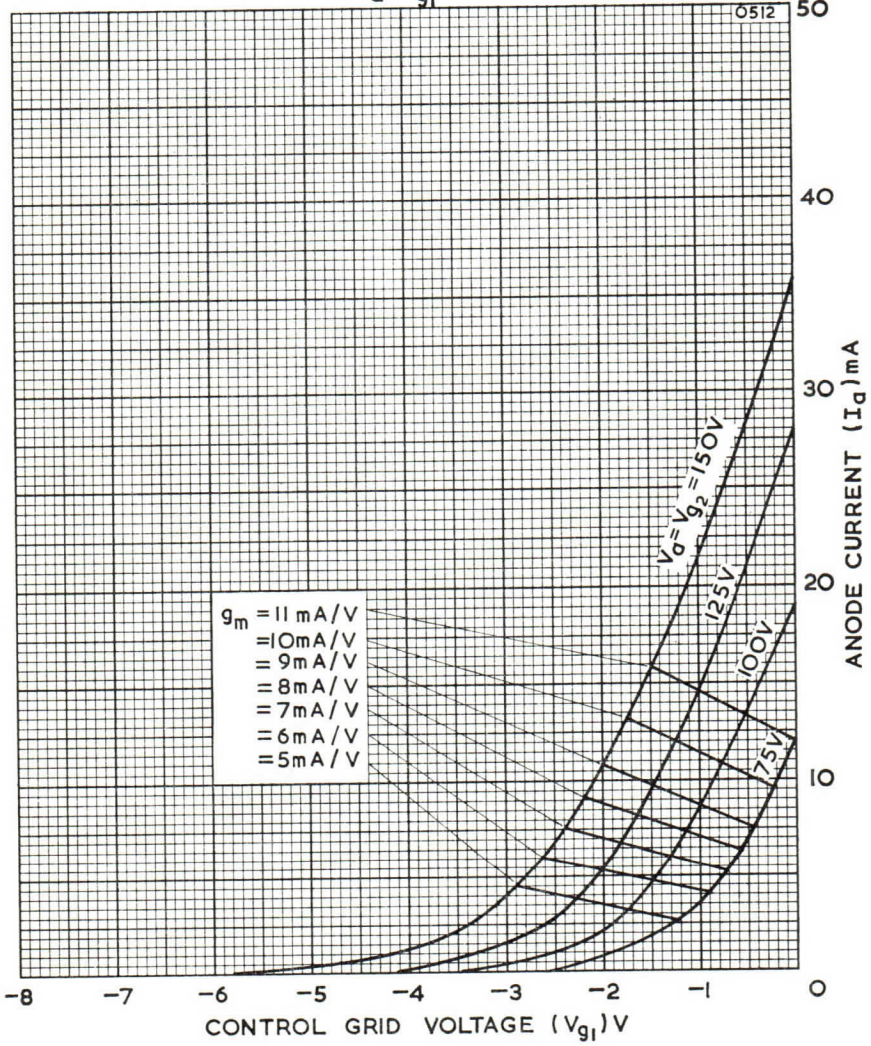








F SECTION  
 $I_a/V_{g_1}$



### F SECTION

$$I_a, I_{g_2}, r_a, g_m / V_{g_1}$$

$$V_a = V_{g_2} = 150V$$

