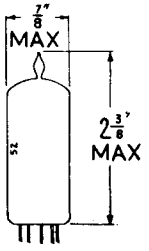
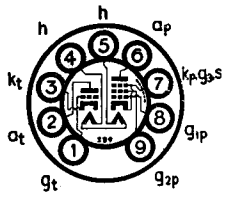
Current Equipment Type



TYPE **PCL84**
VIDEO
TRIODE PENTODE



The BRIMAR PCL84 consists of a medium-high-μ triode and a high slope pentode in a miniature envelope on a noval base. The pentode section is intended for use as a video amplifier and will provide a larger current swing than high slope R.F. pentodes which have been used hitherto. The other section is a general purpose triode for use as a cathode follower, oscillator, etc.

RATINGS

	Pentode		*Triode*	
Heater Voltage	15		15	volts max.
Heater Current	0.3		0.3	amps.
Anode Voltage	250		250†	volts max.
Anode Voltage ($I_a = 0$)	550		550	volts max.
Anode Dissipation	4		1	watts max.
Screen Voltage	250			volts max.
Screen Voltage ($I_{ga} = 0$)	550			volts max.
Screen Dissipation	1.7			watts max.
Control Grid Circuit Resistance, Fixed Bias	1		1	megohm
Control Grid Circuit Resistance, Auto Bias	2		3	megohms
Cathode Current	40		12	mA
Heater-Cathode Voltage, Cathode Negative	200		150	volts max.
Heater-Cathode Voltage, Cathode Positive	200	250 d.c.	†150 a.c.	volts max.
Heater-Cathode Circuit Resistance ...	20		20	kilohms

†*Peak Voltage 400 volts.*

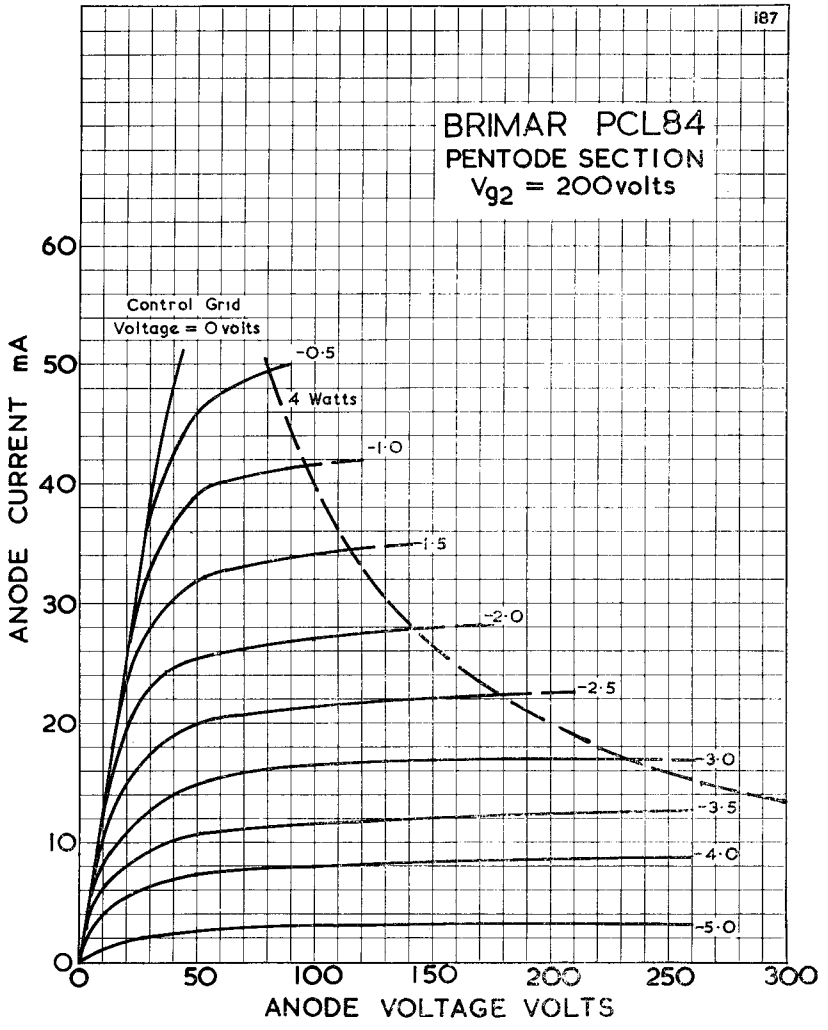
OPERATING CHARACTERISTICS

Pentode				
Anode Voltage	170	200	220	volts
Screen Voltage	170	200	220	volts
Grid Voltage	—2.1	—2.9	—3.4	volts
Anode Current	18	18	18	mA
Screen Current	3.1	3.1	3.1	mA
Mutual Conductance	11	10.4	10.0	mA/V
Anode Resistance	100	130	150	kilohms approx.
Inner-μ (μ_{g-g_2})	36	36	36	

Triode	
Anode Voltage	200 volts
Grid Voltage	—1.7 volts
Anode Current	3 mA
Mutual Conductance	4 mA/V
Amplification Factor	65

INTER-ELECTRODE CAPACITANCES

Pentode Input	9 pF
Pentode Output	4.5 pF
Pentode Grid to Anode	0.1 pF max.
Triode Anode to Pentode Grid	0.01 pF max.
Triode Input	4 pF
Triode Output	2.5 pF
Triode Grid to Anode	2.7 pF
Triode Grid to Heater	0.1 min., 0.15 max.
Triode Grid to Pentode Grid	0.01 pF max.


187
BRIMAR PCL84
PENTODE SECTION
V_{g2} = 200volts
Control Grid
Voltage = 0volts
-0·5
4 Watts
-1·0
-1·5
-2·0
-2·5
-3·0
-3·5
-4·0
-5·0
ANODE CURRENT mA
0
10
20
30
40
50
60
0
50
100
150
200
250
300
ANODE VOLTAGE VOLTS