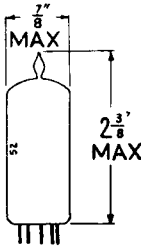
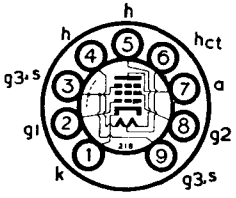
Current Equipment Type



TYPE 6870 TRUSTWORTHY R.F. AND VIDEO PENTODE



The BRIMAR 6870 is a Trustworthy high slope pentode for use as a small transmitting valve or as a video valve giving a larger output with low anode loads than an ordinary R.F. amplifying pentode.

RATINGS

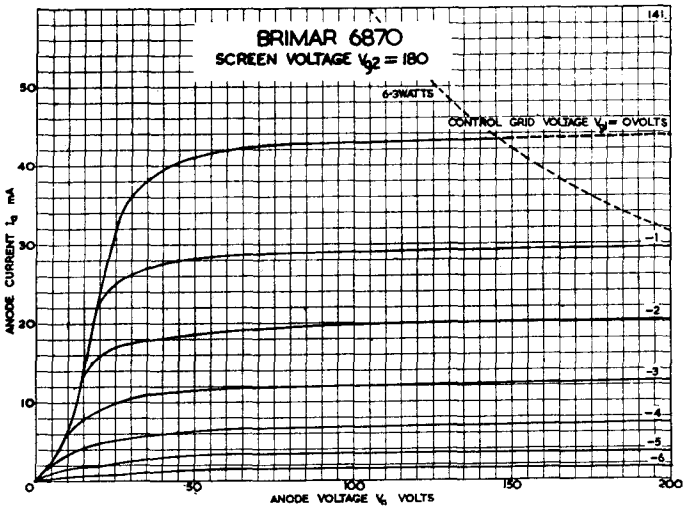
Heater Voltage	6.3 or 12.6 volts
Heater Current	0.6 or 0.3 amp.
Anode Voltage	300 volts max.
Anode Voltage ($I_a = 0$)	500 volts max.
Anode Dissipation	6.3 watts max.
Screen Voltage	250 volts max.
Screen Voltage ($I_{g_2} = 0$)	500 volts max.
Screen Dissipation	2.0 watts max.
Control Grid Current (D.C.)	3 mA max.
Control Grid Circuit Resistance—Fixed bias	0.1 MΩ max.
Auto bias	0.5 MΩ max.
Cathode Current	50 mA max.
Frequency of Operation	150 Mc/s. max.
Shock (Intermittent Service)	550 g
Vibration (Continuous Service)	2.5 g

OPERATING CHARACTERISTICS (CLASS A)

Anode Voltage	180	250 volts
Screen Voltage	180	250 volts
Autobias Resistor	56	120 Ω
Anode Current	25	25 mA
Screen Current	3.5	3.5 mA
Mutual Conductance	9.0	8.5 mA/V
Anode Impedance	170	230 kΩ
Inner Amplification Factor (μg_1—g_2)	35	35
Control Grid Voltage for $I_a = 100\mu A$	—9	—13.5V

INTER-ELECTRODE CAPACITANCES

Input	8.5 pF
Output	7.0 pF
Control Grid to Anode	0.025 pF max.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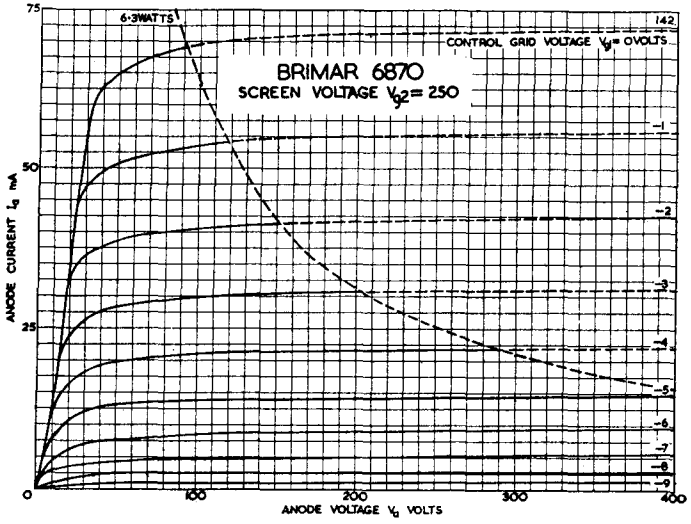
BRIMAR 6870
SCREEN VOLTAGE V_{g2} = 180
6·3WATTS
CONTROL GRID VOLTAGE V_g = 0VOLTS
-1
-2
-3
-4
-5
-6
ANODE CURRENT I_a mA
0
10
20
30
40
50
50
100
150
200
ANODE VOLTAGE V_a VOLTS


142
6·3WATTS
CONTROL GRID VOLTAGE V_g = 0VOLTS
BRIMAR 6870
SCREEN VOLTAGE V_{g2} = 250
-1
-2
-3
-4
-5
-6
-7
-8
-9
ANODE CURRENT I_a mA
0
25
50
75
100
200
300
400
ANODE VOLTAGE V_a VOLTS