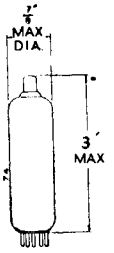
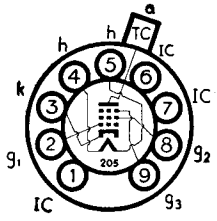


Replacement Type

TYPE **PL81/21A6**
MINIATURE
LINE TIME BASE
OUTPUT VALVE



The BRIMAR PL81/21A6 is designed for operation as the line time-base output valve in A.C./D.C. television receivers. Used in conjunction with a booster diode it is suitable for the scanning of wide angle (70°) cathode ray tubes from low H.T. rail voltages.

RATINGS

Heater Current	0.3 amp.
Heater Voltage	21.5 volts (nom.)
Anode Voltage (I_a=0 mA)	550 volts max.
Anode Voltage	250 volts max.
Peak Positive Anode Pulse Voltage *	7,000 volts max.
Screen Supply Voltage	550 volts max.
Screen Voltage	250 volts max.
Anode Dissipation	8.0 watts max.
Screen Dissipation †	4.5 watts max.
Anode + Screen Dissipation	10.0 watts max.
Cathode Current	180 mA max.
Grid Resistor **	500 k ohms max.
Heater-Cathode potential	200 volts max.
Heater-Cathode resistor	20 k ohms max.

** Maximum pulse duration 15% of one cycle, with maximum of 18 μsecs.*

† The screen dissipation may rise to a maximum of 6 watts during the period between the commencement of screen current flow and the instant when the anode current attains one half of its normal value.

*** In line output service this may be increased to 3.3 MΩ max.*

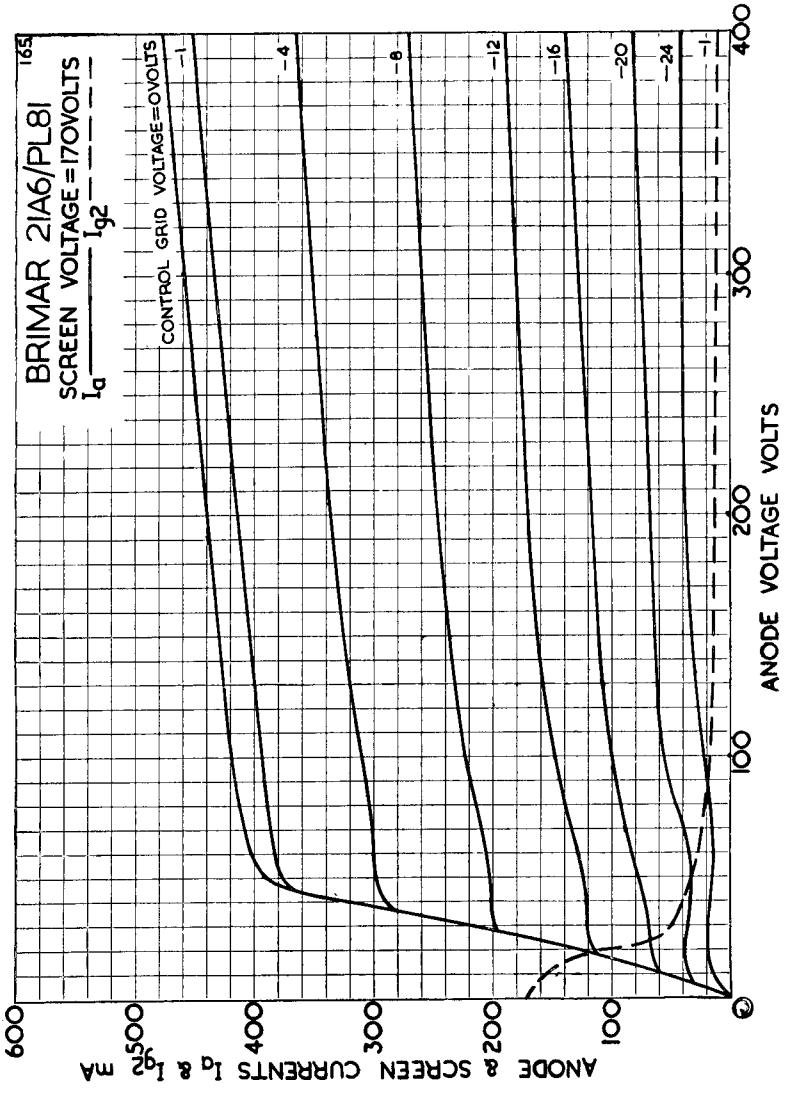
CHARACTERISTICS

Anode Voltage	170	200 volts
Suppressor (g_3) Voltage	0	0 volts
Screen (g_2) Voltage	170	200 volts
Anode Current	45	40 mA
Screen Current	3.0	2.8 mA
Control Grid Voltage	—22	—28 volts
Mutual Conductance	6.2	6.0 mA/V
Anode Impedance	10,000	11,000 ohms
Inner Amplification Factor	5.5	5.5

INTER-ELECTRODE CAPACITANCES *

Input	14.7 pF
Output	6.0 pF
Anode to Grid 1	0.8 pF max.
Grid 1 to Heater	0.2 pF max.
Anode to Cathode	0.1 pF max.

** Measured with no external shield.*


BRIMAR 21A6/PL81
SCREEN VOLTAGE = 170VOLTS
I_a ——— I_{g2} – – – –
CONTROL GRID VOLTAGE = 0VOLTS
-1
-4
-8
-12
-16
-20
-24
-1
ANODE & SCREEN CURRENTS I_a & I_{g2} mA
600
500
400
300
200
100
0
100
200
300
400
ANODE VOLTAGE VOLTS