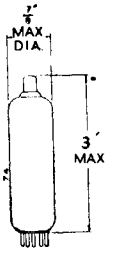
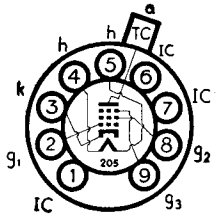



Replacement Type

# 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.*

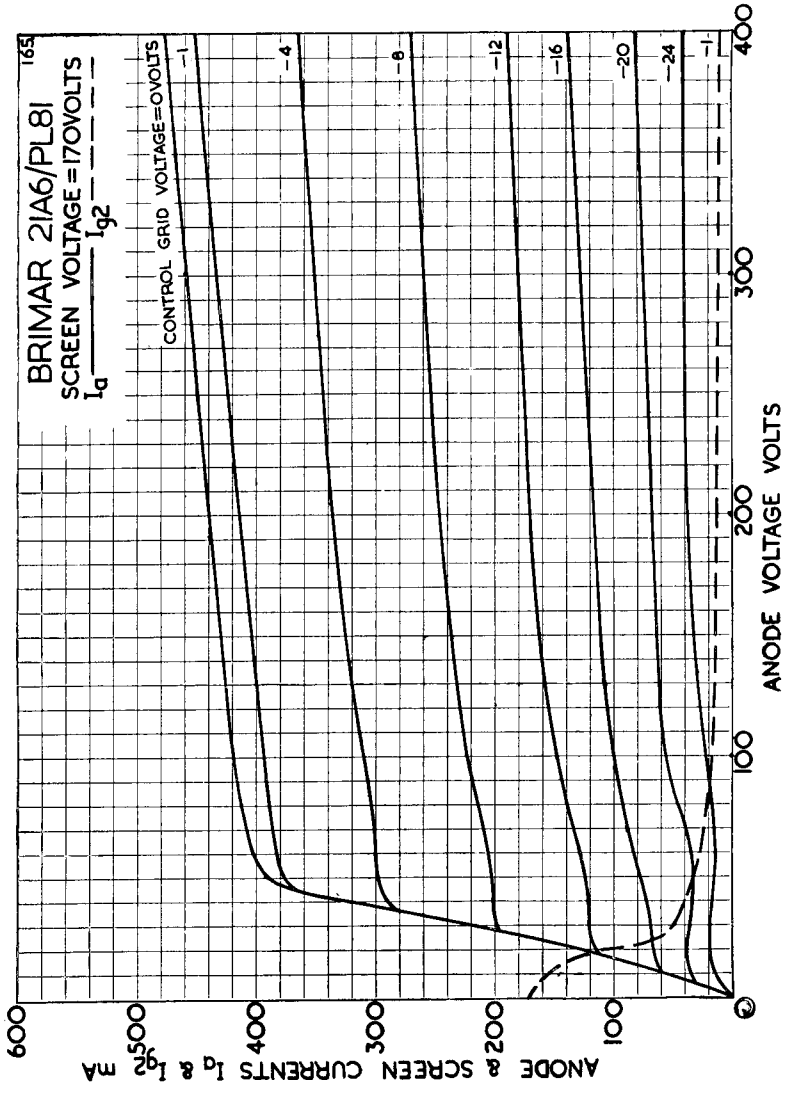
## CHARACTERISTICS

| | | |
|---|---|---|
| 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
165
ANODE & SCREEN CURRENTS $I_a$ & $I_{g2}$ mA
600
500
400
300
200
100
0
100
200
300
400
ANODE VOLTAGE VOLTS