TELEVISION AMPLIFIER PENTODE
SINGLE-ENDED METAL TYPE

Heater: Coated Unipotential Cathode
  Voltage: 6.3 V, a-c or d-c volts
  Current: 0.45 A, amp.

Direct Inter electrode Capacitances:
  Grid to Plate: 0.015 μf, max.
  Input: 8 μf
  Output: 5 μf

Maximum Overall Length: 2-5/8"
Maximum Seated Height: 2-1/16"
Maximum Diameter: 1-5/16"
Bulb: Metal Shell, MT-8
Base: Small Wafer Octal 8-Pin
Pin 1 - Shell
Pin 2 - Heater
Pin 3 - Suppressor
Pin 5 - Cathode
Pin 6 - Screen
Pin 7 - Heater
Pin 8 - Plate
Mounting Position: BOTTOM VIEW (8N) Any

AMPLIFIER

Plate Voltage: 300 max. volts
Screen Voltage: 200 max. volts
Screen-Supply Voltage: 300 max. volts
Plate Dissipation: 3.75 max. watts
Screen Dissipation: 0.65 max. watt

Typical Operation and Characteristics - Class A, Amplifier:
Condition I*: 6.3 volts
Condition II**: 6.3 volts
Heater:
Plate:
Suppressor:
Screen-Supply #:
Series Screen Resistor - 30000 ohms
Grid ##:
Plate Res.:
Transcond.:
Grid Bias for:
  transcond. = 50 μmhos
Plate Cur.:
Screen Cur.:

* With shell connected to cathode.
** Condition II is with fixed screen supply.
# Screen-supply voltages in excess of 200 volts require the use of a series-dropping resistor to limit the voltage at the screen to 200 volts when the plate current is at its normal value of 12.5 milliamperes.
* May be obtained with cathode-bias resistor having a minimum value of 190 ohms.
## # The d-c resistance in the grid circuit should not exceed 0.25 megohm with fixed bias, or 0.5 megohm with full cathode bias and a series screen resistor.
* Precautions should be taken to insure that dissipation rating is not exceeded with expected line-voltage fluctuations, especially in the case of fixed-bias operation.
## The suppressor should be connected in r-f and i-f stages directly to ground to minimize feedback.
* The potential difference between heater and cathode should be kept as low as possible.
Note: It is characteristic of a high gm tube to show appreciable changes of input capacitance and input conductance with plate current. In high-frequency circuits, it is necessary to take precautions to minimize this effect.

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Indicates a change.

Dec. 1, 1941
RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.
AVERAGE PLATE CHARACTERISTICS

$E_f = 6.3$ VOLTS  SCREEN VOLTS = 200
SUPPRESSOR VOLTS = 0

PLATE ($I_b$) OR SCREEN ($I_{C2}$) MILLIAMPERES

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