



6S4

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MEDIUM-MU TRIODE

9-PIN MINIATURE TYPE

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathode:

Voltage. 6.3 ac or dc volts

Current. 0.6 amp

Characteristics, Class A₁ Amplifier:

Plate Voltage. 250 . . . volts

Grid Voltage. -8 . . . volts

Amplification Factor 16

Plate Resistance (Approx.) 3600 . . . ohms

Transconductance 4500 . . . μ hos

Plate Current. 26 . . . ma

Mechanical:

Mounting Position Any

Maximum Overall Length 2-5/8"

Maximum Seated Length. 2-3/8"

Length, Base Seat to Bulb Top (Excluding tip). 2" $\pm$ 3/32"

Maximum Diameter 7/8"

Bulb T-6-1/2

Base Small-Button Noval 9-Pin

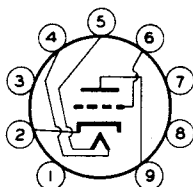
Basing Designation for BOTTOM VIEW 9AC

Pin 1 - Internal
Connection-
Do Not Use

Pin 2 - Cathode

Pin 3 - Same as Pin 1

Pin 4 - Heater



Pin 5 - Heater

Pin 6 - Grid

Pin 7 - Same as Pin 1

Pin 8 - Same as Pin 1

Pin 9 - Plate

VERTICAL DEFLECTION AMPLIFIER**Maximum Ratings, Design-Center Values:***For operation in a 525-line, 30-frame system**

DC PLATE VOLTAGE 500 max. volts

PEAK POSITIVE-PULSE PLATE VOLTAGE^o 2000 max. volts

DC GRID VOLTAGE. -50 max. volts

PEAK NEGATIVE-PULSE GRID VOLTAGE -200 max. volts

DC CATHODE CURRENT 30 max. ma

PLATE DISSIPATION. 7.5 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. 200 max. volts

Heater positive with respect to cathode. 200 max. volts

* As described in "Standards of Good Engineering Practice for Television Broadcast Stations", Federal Communications Commission.

^o The duration of the voltage pulse must not exceed 15 per cent of one scanning cycle. In a 525-line, 30-frame system, 15 per cent of one scanning cycle is 2.5 milliseconds.

FEB. 1, 1950

TUBE DEPARTMENT

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



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Typical Operation in a Vertical Deflection Circuit:

Based on operation with a vertical deflection-output transformer of the autotransformer type having a turns ratio (input to output) of 11.4 to 1, and with the vertical coils of a deflecting yoke having an impedance of about 50 ohms at 1000 cycles.

DC Plate Voltage	450	volts
Cathode-Bias Resistor.	820	ohms
Grid-Input Voltage, Approx. (See Fig. 1):		
Peak-to-peak sawtooth component.	60	volts
Negative peaking component	48	volts
DC Plate Current	18	ma
Plate-Output Voltage, Approx. (See Fig. 2):		
Peak positive pulse component.	800	volts
Peak-to-peak sawtooth component.	350	volts

Circuit Values:

Grid-Circuit Resistance.	2.2 max.	megohms
Cathode-Bias Resistor.	220 min.	ohms

Components:

Vertical Deflection-Output Transformer	RCA-222T1
Deflecting Yoke.	RCA-206D1

Indicated minimum value of this resistor is required to protect the tube in the event of temporary failure of excitation and resultant loss in developed bias.

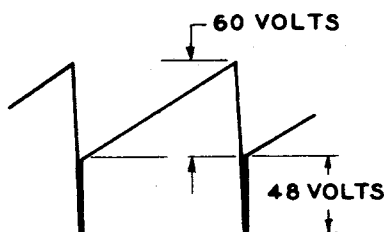


Fig. 1 - Waveform at Grid of 6S4.

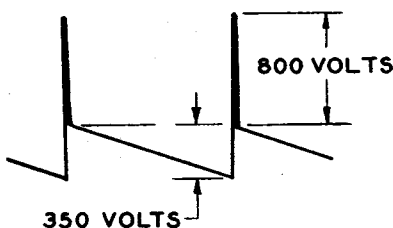


Fig. 2 - Waveform at Plate of 6S4.

92CS-7398



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AVERAGE PLATE CHARACTERISTICS

