

# 6KY8

## High-Mu Triode-Beam Power Tube

### NOVAR TYPE

For Combined Vertical-Deflection Oscillator  
and Amplifier Service in TV Receivers

#### Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC). . . . . 6.3 ± 0.6 volts

Current at heater volts = 6.3 . . . . . 1.100 amp

Peak heater-cathode voltage (Each unit):

Heater negative with respect to cathode 200 max. volts

Heater positive with respect to cathode 200<sup>a</sup> max. volts

Direct Interelectrode Capacitances (Approx.):<sup>b</sup>

Triode Unit:

Grid to plate . . . . . 0.44 pf

G<sub>T</sub> to (K<sub>T</sub>, H) . . . . . 15.0 pf

P<sub>T</sub> to (K<sub>T</sub>, H) . . . . . 7.0 pf

Beam Power Unit:

Grid No.1 to plate. . . . . 0.048 pf

G<sub>1P</sub> to (K<sub>B</sub>+G<sub>3B</sub>, G<sub>2B</sub>, H) . . . . . 2.6 pf

P<sub>P</sub> to (K<sub>B</sub>+G<sub>3B</sub>, G<sub>2B</sub>, H) . . . . . 0.28 pf

#### Mechanical:

Operating Position. . . . . Any

Type of Cathodes. . . . . Coated Unipotential

Maximum Overall Length. . . . . 3.110"

Maximum Seated Length . . . . . 2.730"

Length, Base Seat to Bulb Top (Excluding tip) . 2.210" to 2.390"

Diameter. . . . . 1.062" to 1.188"

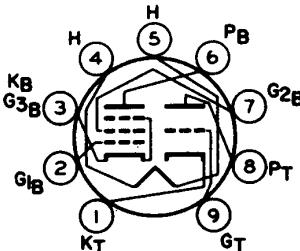
Bulb. . . . . T9

Socket. . . Cinch Mfg. Co. No.149 19 00 033, Industrial Electronics Hardware Corp. No.S0-0968-SL1, or equivalent

Base. . . . . Small Button Novar 9-Pin (JEDEC No.E9-75)

Basing Designation for BOTTOM VIEW. . . . . 9QT

- Pin 1-Triode Cathode
- Pin 2-Beam Power Grid No.1
- Pin 3-Beam Power Cathode & Grid No.3
- Pin 4-Heater
- Pin 5-Heater
- Pin 6-Beam Power Plate
- Pin 7-Beam Power Grid No.2
- Pin 8-Triode Plate
- Pin 9-Triode Grid



#### Characteristics, Class A<sub>1</sub> Amplifier:

##### Triode Unit      Beam Power Unit

Plate Voltage. . . . . 250 50 135 120 volts

Grid-No.2 Voltage. . . . . - 120 120 Connected volts  
to plate  
at socket

Grid-No.1 Voltage. . . . . -3 0 -10 -10 volts

Amplification Factor . . . . . 64 - - 7



RADIO CORPORATION OF AMERICA  
Electronic Components and Devices

Harrison, N. J.

DATA  
4-64

# 6KY8

	<i>Triode Unit</i>	<i>Beam Power Unit</i>		
Plate Resistance (Approx.)	40000	-	18000	- ohms
Transconductance . . . . .	1600	-	8400	- $\mu$ hos
Plate Current . . . . .	1.4	170 <sup>c</sup>	39	- ma
Grid-No.2 Current . . . . .	-	20 <sup>c</sup>	3	- ma
Grid-No.1 Voltage (Approx.) for plate ma = 1. . . . .	-	-	- 24	- volts

## VERTICAL-DEFLECTION OSCILLATOR (*Triode Unit*)

### Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>d</sup>

DC Plate Voltage . . . . .	330	max.	volts
Peak Negative-Pulse Grid Voltage . . . . .	400	max.	volts
Peak Cathode Current . . . . .	77	max.	ma
Average Cathode Current . . . . .	22	max.	ma
Plate Dissipation . . . . .	1.5	max.	watts

### Maximum Circuit Values:

Grid-Circuit Resistance:

For grid-resistor-bias operation . . . . . 2.2 max. megohms

## VERTICAL-DEFLECTION AMPLIFIER (*Beam Power Unit*)

### Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>d</sup>

DC Plate Voltage . . . . .	300	max.	volts
Peak Positive-Pulse Plate Voltage <sup>e</sup> . . . . .	2000	abs.max.	volts
DC Grid-No.2 (Screen-Grid) Voltage . . . . .	150	max.	volts
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage . . . . .	250	max.	volts
Peak Cathode Current . . . . .	200	max.	ma
Average Cathode Current . . . . .	70	max.	ma
Plate Dissipation . . . . .	12	max.	watts
Grid-No.2 Input . . . . .	1.9	max.	watts

### Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For grid-resistor-bias operation . . . . . 2.2 max. megohms

<sup>a</sup> The dc component must not exceed 100 volts.

<sup>b</sup> Without external shield.

<sup>c</sup> This value can be measured by a method involving a recurrent wave form such that the plate dissipation and grid-No.2 input will be kept within ratings in order to prevent damage to the tube.

<sup>d</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

<sup>e</sup> This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

DIMENSIONAL OUTLINE & CURVES  
shown under Type 15KY8 also apply to the 6KY8

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