

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^a max. volts

Direct Interelectrode Capacitances (Approx.):^b

Triode Unit:

Grid to plate 0.44 pf

G_T to (K_T, H) 15.0 pf

P_T to (K_T, H) 7.0 pf

Beam Power Unit:

Grid No.1 to plate 0.048 pf

G_{1p} to (K_B+G_{3B}, G_{2B}, H) 2.6 pf

P_p to (K_B+G_{3B}, G_{2B}, 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

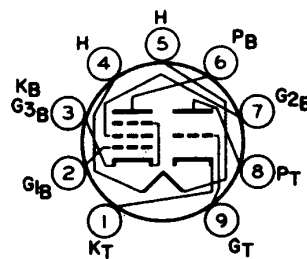
Pin 5—Heater

Pin 6—Beam Power Plate

Pin 7—Beam Power Grid No.2

Pin 8—Triode Plate

Pin 9—Triode Grid



Characteristics, Class A₁ Amplifier:

	Triode Unit		Beam Power Unit		
Plate Voltage.	250	50	135	120	volts
Grid-No.2 Voltage. . . .	—	120	120	Connected to plate at socket	volts
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

	Triode Unit	Beam Power Unit	
Plate Resistance (Approx.)	40000	— 18000 —	ohms
Transconductance.	1600	— 8400 —	μmhos
Plate Current	1.4	170 ^c 39	ma
Grid-No.2 Current	—	20 ^c 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^d

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^d

DC Plate Voltage.	300 max.	volts
Peak Positive-Pulse Plate Voltage ^e	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

^a The dc component must not exceed 100 volts.

^b Without external shield.

^c 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.

^d As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

^e 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

RADIO CORPORATION OF AMERICA
Electronic Components and Devices

Harrison, N. J.

