

Beam Power Tube

NOVAR TYPE

SEPARATE GRID-No. 3 BASE-PIN TERMINAL FOR "SNIVETS" CONTROL^a

For Horizontal-Deflection-Amplifier
Service in Black-and-White TV Receivers

Electrical:

Heater Ratings and Characteristics:

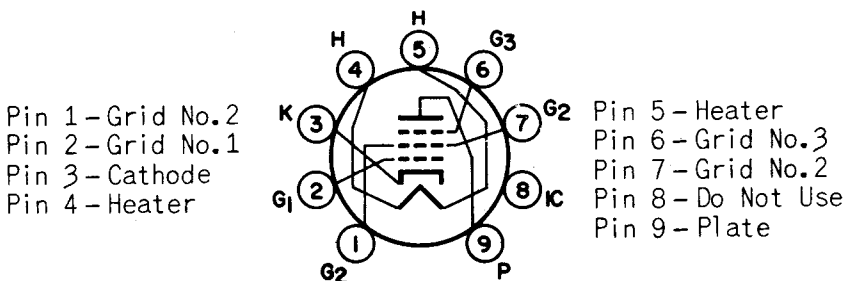
Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	1.200	amp
Peak heater-cathode voltage:		
Heater negative with respect to cathode.	200 max.	volts
Heater positive with respect to cathode.	200 ^b max.	volts

Direct Interelectrode Capacitances (Approx.):^c

Grid No.1 to plate	0.26	pf
Input: G1 to (K,G3,G2,H)	15.0	pf
Output: P to (K,G3,G2,H)	6.5	pf

Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2.880"
Seated Length	2.250" to 2.500"
Diameter	1.438" to 1.562"
Dimensional Outline	See General Section
Bulb	T12
Base	Large-Button Novar 9-Pin with Exhaust Tip (JEDEC No.E9-88)
Basing Designation for BOTTOM VIEW	9QU



Characteristics, Class A₁ Amplifier:

	Triode Connection ^d	Pentode Connection
Plate Voltage.	150	60 250 volts
Grid No.3	-	Connected to Cathode at socket
Grid-No.2 Voltage.	150	150 150 volts
Grid-No.1 Voltage.	-22.5	0 -22.5 volts
Amplification Factor	4.4	- -
Plate Resistance (Approx.)	-	- 15000 ohms
Transconductance	-	- 7100 μ mos



6JT6A

	Triode Connection ^d	Pentode Connection	
Plate Current.	—	390 ^e 70	ma
Grid-No.2 Current.	—	32 ^e 2.1	ma
Grid-No.1 Voltage (Approx.) for plate ma = 1	—	— -42	volts

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system^f

DC Plate Supply Voltage.	770 max.	volts
Peak Positive-Pulse Plate Voltage ^g	6500 max.	volts
Peak Negative-Pulse Plate Voltage.	1500 max.	volts
DC Grid-No.3 (Suppressor-Grid) Voltage ^a .	70 max.	volts
DC Grid-No.2 (Screen-Grid) Voltage	220 max.	volts
DC Grid-No.1 (Control-Grid) Voltage:		
Negative-bias value.	55 max.	volts
Peak Negative-Pulse Grid-No.1 Voltage. . .	330 max.	volts
Cathode Current:		
Peak	550 max.	ma
Average.	175 max.	ma
Grid-No.2 Input.	3.5 max.	watts
Plate Dissipation ^h	17.5 max.	watts
Bulb Temperature (At hottest point on bulb surface)	240 max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:	
For grid-resistor-bias operation	1 max. megohm

- ^a A positive voltage may be applied to grid No.3 to reduce interference from "snivets" which may occur in television receivers. A typical value for this voltage is 30 volts.
- ^b The dc component must not exceed 100 volts.
- ^c Without external shield.
- ^d With grid No.2 connected to plate at socket.
- ^e This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.
- ^f As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.
- ^g This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.
- ^h An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

AVERAGE CHARACTERISTICS

