

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

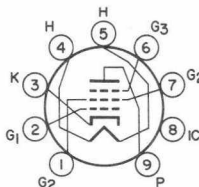
Direct Interelectrode Capacitances (Approx.):^c

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

Pin 1-Grid No.2
Pin 2-Grid No.1
Pin 3-Cathode
Pin 4-Heater



Pin 5-Heater
Pin 6-Grid No.3
Pin 7-Grid No.2
Pin 8-Do Not Use
Pin 9-Plate

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	μmhos



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
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^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

