

Beam Power Tube

NOVAR TYPE

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

Electrical:

Heater Characteristics and Ratings:

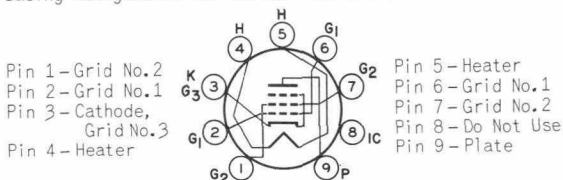
Voltage (AC or DC)	6.3 $\pm$ 0.6	volts
Current at heater volts = 6.3	1.200	amp
Peak heater-cathode voltage:		
Heater negative with respect to cathode.	200 max.	volts
Heater positive with respect to cathode.	200 ^a max.	volts

Direct Interelectrode Capacitances (Approx):^b

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 <i>General Section</i>
Bulb	T12
Base	Large-Button Novar 9-Pin with Exhaust Tip (JEDEC No. E9-88)
Basing Designation for BOTTOM VIEW	9NZ



Characteristics, Class A₁ Amplifier:

	Triode Connection ^c	Pentode Connection	
Plate Voltage.	150	60 250	volts
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 mhos
Plate Current.	-	390 ^d 70	ma
Grid-No.2 Current.	-	32 ^d 2.1	ma
Grid-No.1 Voltage (Approx.) for plate ma = 0.1	-	-42	volts



6GT5A

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

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

DC Plate-Supply Voltage.	770 max.	volts
Peak Positive-Pulse Plate Voltage ^f	6500 max.	volts
Peak Negative-Pulse Plate Voltage.	1500 max.	volts
DC Grid-No.2 (Screen-Grid) Voltage	220 max.	volts
DC Grid-No.1 (Control-Grid) Voltage.	-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 ^g	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 The dc component must not exceed 100 volts.

^b Without external shield.

^c With grid No.2 connected to plate.

^d 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.

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

^f 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.

^g An adequate bias resistor or other means is required to protect the tube in the absence of excitation.



AVERAGE CHARACTERISTICS

