

6JT6A

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

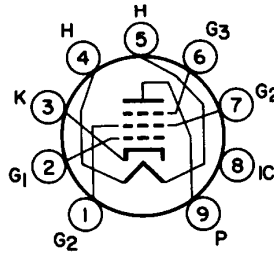
Direct Interelectrode Capacitances (Approx.):^c

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 <i>General Section</i>
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:

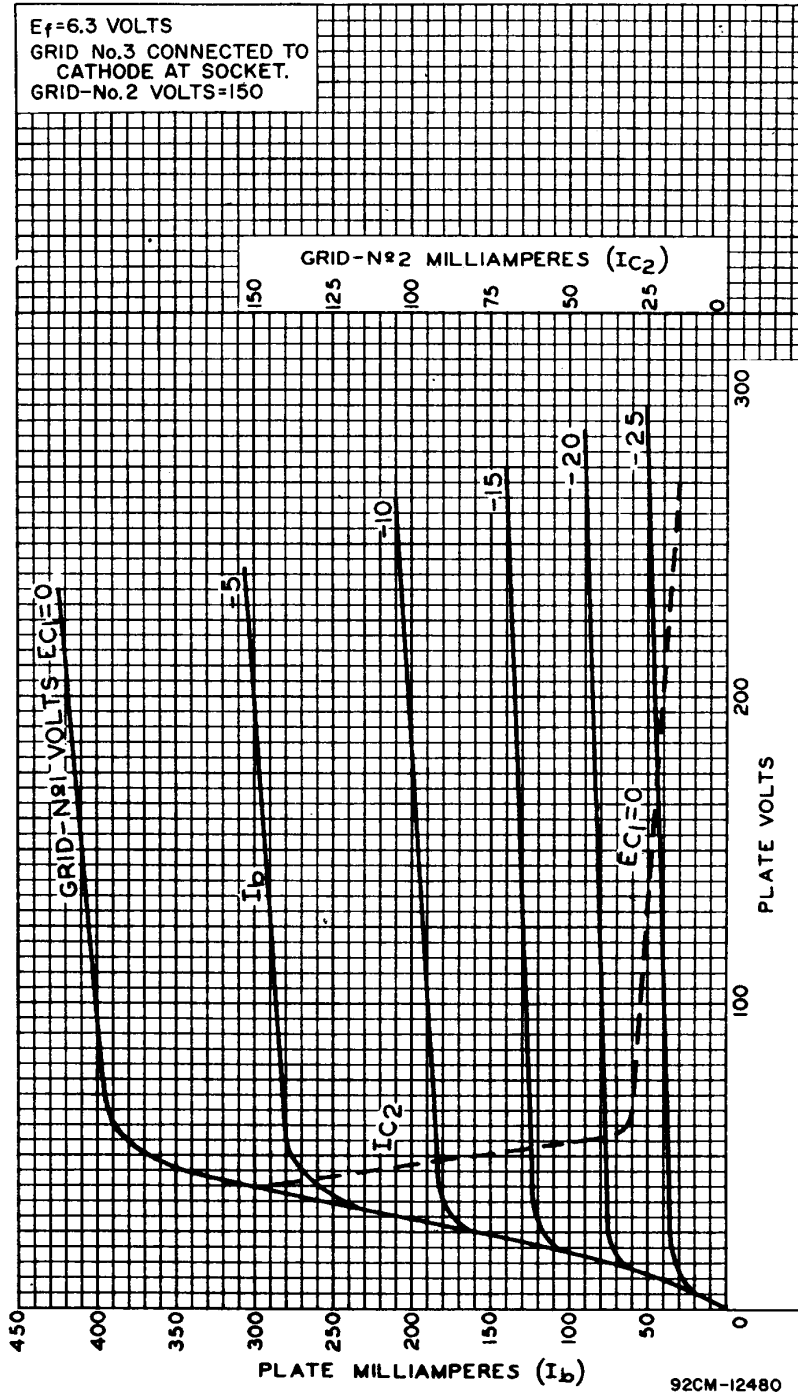
For grid-resistor-bias operation 1 max. megohm

- ^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.



6JT6A

AVERAGE CHARACTERISTICS



RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA 2
10-64