

Beam Power Tube

NOVAR TYPE

For TV Horizontal-Deflection Amplifier Applications

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^a max. volts

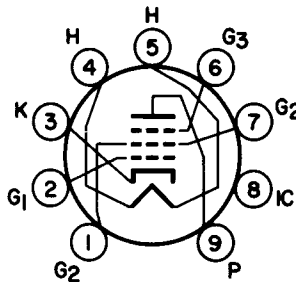
Direct Interelectrode Capacitances (Approx.):^b

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. 3.180"
Maximum Seated Length 2.800"
Diameter. 1.438" to 1.562"
Bulb. T12
Base. Large-Button Novar 9-Pin (JEDEC No.E9-76)
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^c

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
Plate Current.	-	390 ^d	70	ma
Grid-No.2 Current.	-	32 ^d	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^e

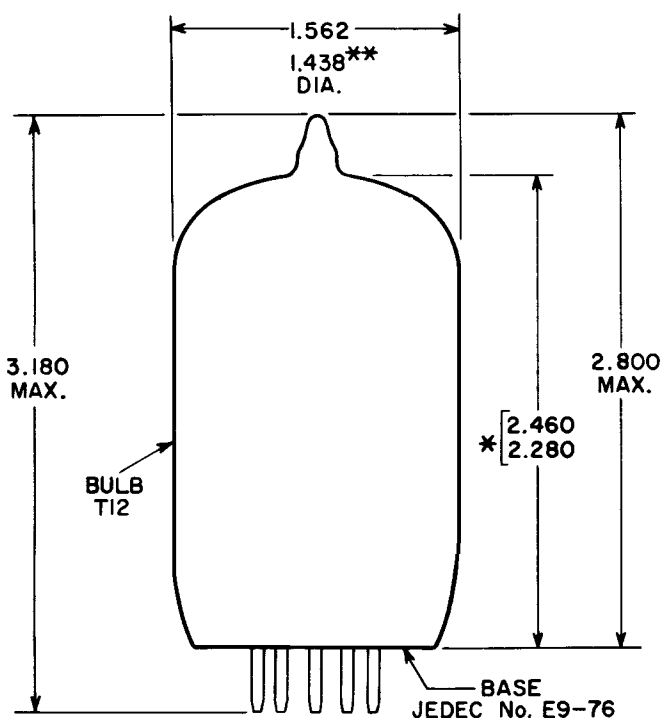
DC Plate Supply Voltage.	770 max.	volts
Peak Positive-Pulse Plate Voltage ^f	6500 max.	volts
Peak Negative-Pulse Plate Voltage.	1500 max.	volts
DC Grid-No.3 (Suppressor-Grid) Voltage ^g	70 max.	volts
DC Grid-No.2 (Screen-Grid) Voltage	220 max.	volts
DC Grid-No.1 (Control-Grid) Voltage:		
Negative-bias 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 The dc component must not exceed 100 volts.
- ^b Without external shield.
- ^c With grid No.2 connected to plate at socket.
- ^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 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.
- ^h An adequate bias resistor or other means is required to protect the tube in the absence of excitation.



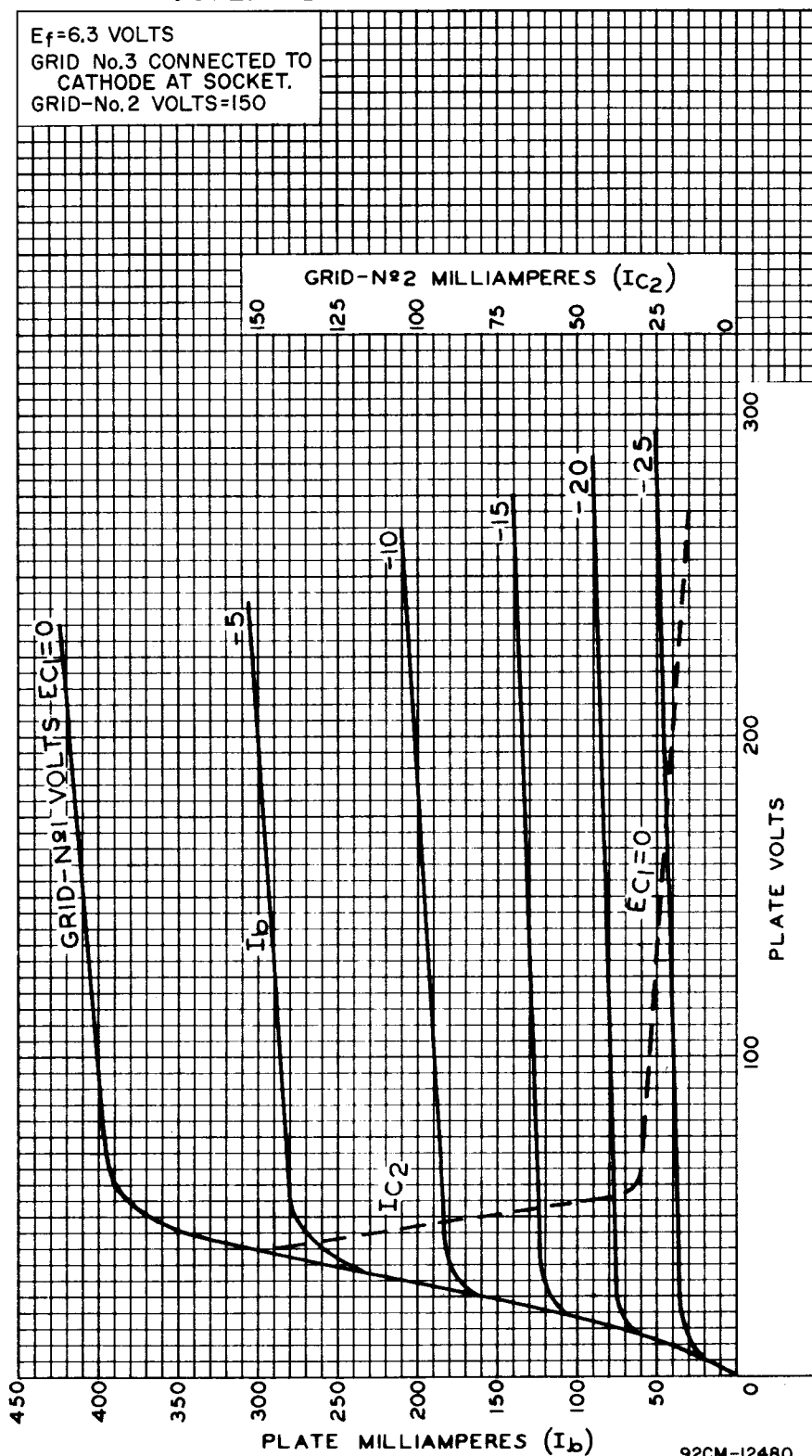
92CS-12479

- * Measured from base seat to bulb-top line as determined by a ring gauge of 0.600" inside diameter.
- ** The minimum applies in the zone starting 0.375" from the base seat.



6JT6

AVERAGE CHARACTERISTICS



92CM-12480

