

Sharp-Cutoff Pentode

FRAME-GRID CONSTRUCTION

T9 ENVELOPE

9-PIN LARGE-BUTTON NEONVAL BASE

For Video Output Amplifier Service
in Color TV Receivers

Electrical:

Heater Characteristics and Ratings:

Heater-section arrangement	Series	Parallel	
Voltage (AC or DC)	12.6 ± 1.3^a	6.3 ± 0.6	volts
Current	0.260	0.520 ^b	amp
Maximum heater-cathode voltage:			
Heater negative with respect to cathode		200	volts
Heater positive with respect to cathode:			
Peak		200	volts
DC component		100	volts

Direct Interelectrode Capacitances:^c

Grid No.1 to plate	0.15 max.	pf
Input: G1 to (K,G3 + IS,G2,H)	14.0	pf
Output: P to (K,G3 + IS,G2,H)	4.4	pf

Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2.930"
Maximum Seated Length	2.620"
Length, Base Seat to Bulb Top (Excluding tip)	2.070" to 2.310"
Diameter	1.062" to 1.188"
Dimensional Outline	(JEDEC No.9-70)
Bulb	T9
Base	Large-Button Neonval 9-Pin (JEDEC No.E9-68)
Basing Designation for BOTTOM VIEW	9BF

- Pin 1 - Cathode
Pin 2 - Grid No.1
Pin 3 - Grid No.3,
Internal Shield
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Heater Tap
Pin 7 - Plate
Pin 8 - Grid No.2
Pin 9 - Grid No.3,
Internal Shield

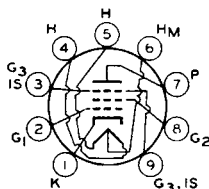
Characteristics, Class A₁ Amplifier:

Plate Supply Voltage	300	volts
Grid No.3	Connected to cathode at socket	
Grid-No.2 Supply Voltage	135	volts
Grid No.1	Connected to negative end of cathode resistor	
Cathode Resistor	47	ohms
Plate Resistance (Approx.)	60000	ohms
Transconductance	32000	μ mhos
Plate Current	31	ma



Grid-No.2 Current	4.8	ma
Grid-No.1 Voltage (Approx.) for plate $\mu a = 100$	-4.5	volts

CLASS A₁ AMPLIFIER

Maximum Ratings, Design-Maximum Values:

Plate Voltage	400	volts
Grid-No.2 (Screen-Grid) Supply Voltage.	330	volts
Grid-No.2 Voltage	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section	
Grid-No.1 (Control-Grid) Voltage:		
Positive-bias value	0	volts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts.	1	watt
For grid-No.2 voltages between 165 and 330 volts	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section	
Plate Dissipation	10	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:		
For fixed-bias operation.	0.1	megohm
For cathode-bias operation.	0.25	megohm

^a At heater amperes = 0.260.

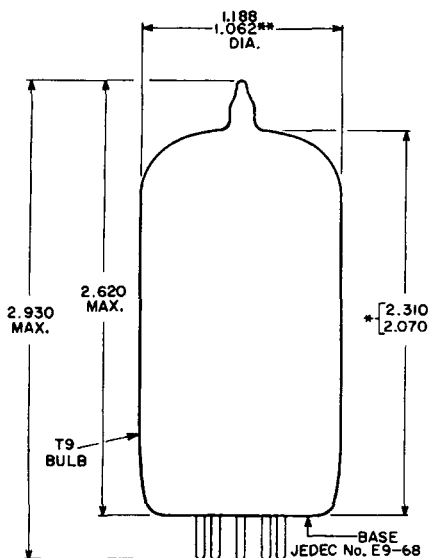
^b At heater volts = 6.3.

^c Without external shield.



DIMENSIONAL OUTLINE

JEDEC No. 9-70



92CS-III15R2

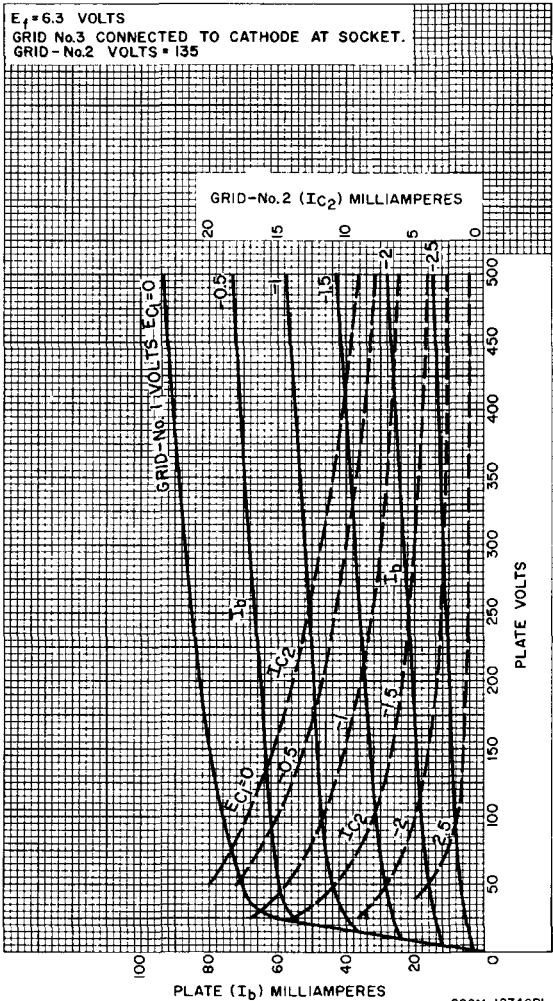
DIMENSIONS IN INCHES

** Applies in zone starting 0.375" from base seat.

* Measured from base seat to bulb-top line as determined by a ring gauge of 0.600" inside diameter.



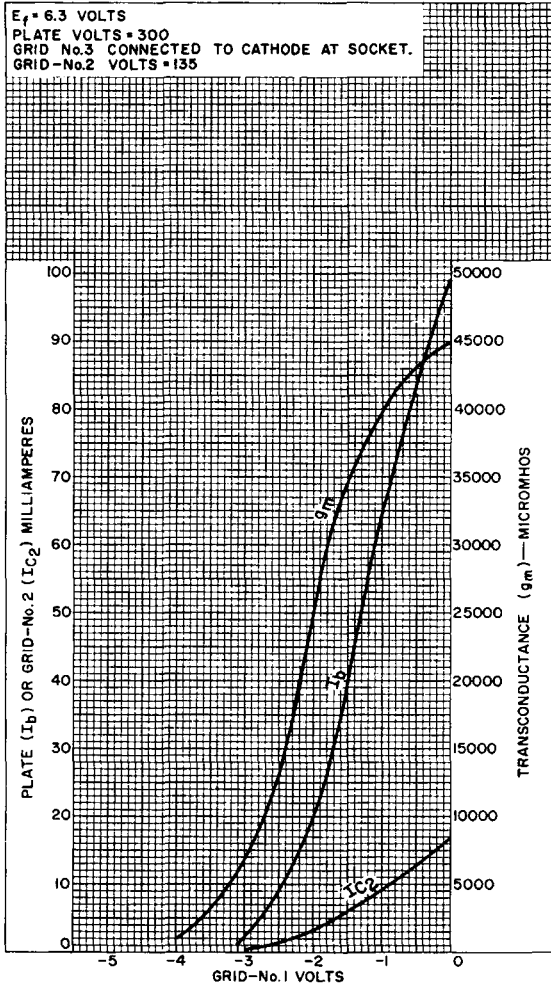
AVERAGE CHARACTERISTICS



92CM-12746RI



AVERAGE CHARACTERISTICS



92CM-12747R1



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