

Dual Triode

With High-Mu Unit and Low-Mu Unit

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC) 6.3 ± 0.6 volts

Current at heater volts = 6.3. 0.925 amp

Peak heater-cathode voltage (Each unit):

Heater negative with respect to cathode 200 max. volts

Heater positive with respect to cathode 200^a max. volts

Direct Interelectrode Capacitances (Approx.):^b

	Unit No. 1	Unit No. 2	
Grid to plate.	4.5	10	μμf
Grid to cathode and heater . .	2.2	6.5	μμf
Plate to cathode and heater. .	0.4	1.2	μμf

Characteristics, Class A₁ Amplifier:

	Unit No. 1	Unit No. 2	
Plate Voltage.	250	60 150	volts
Grid Voltage	-3	0 -17.5	volts
Amplification Factor	64	- 6	
Plate Resistance (Approx.) . .	40000	- 800	ohms
Transconductance	1600	- 7500	μmhos
Plate Current.	1.4	95 ^c 40	ma
Grid Voltage (Approx.) for plate μa =,			
10	-5.5	- -	volts
100.	-	- -40	volts
Transconductance for plate ma. = 1.	-	- 500	μmhos
Plate Current for grid volts = -25.	-	- 6	ma

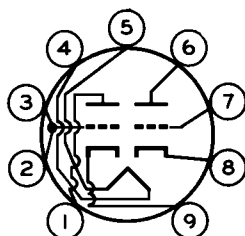
Mechanical:

Operating Position	 Any
Type of Cathodes	 Coated Unipotential
Maximum Overall Length	 2.900"
Maximum Seated Length.	 2.620"
Length, Base Seat to Bulb Top (Excluding tip).	 2.070" to 2.310"
Diameter	 1.062" to 1.188"
Bulb	 T9
Base	 JEDEC No. E9-82



Basing Designation for BOTTOM VIEW. 9HF

Pin 1 - Plate of
Unit No.2
Pin 2 - Grid of
Unit No.2
Pin 3 - Grid of
Unit No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Plate of
Unit No.1
Pin 7 - Grid of
Unit No.1
Pin 8 - Cathode of
Unit No.1
Pin 9 - Cathode of
Unit No.2

VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No.1

Maximum Ratings, Design-Maximum Values:

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

DC PLATE VOLTAGE.	330 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE.	400 max.	volts
CATHODE CURRENT:		
Peak.	70 max.	ma
Average	20 max.	ma
PLATE DISSIPATION	1.5 max.	watts

Maximum Circuit Values:

Grid-Circuit Resistance:

For grid-resistor-bias or cathode-bias operation. 2.2 max. megohms

VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No.2

Maximum Ratings, Design-Maximum Values:

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

DC PLATE VOLTAGE.	330 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE ^e	1500 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE.	250 max.	volts
CATHODE CURRENT:		
Peak.	175 max.	ma
Average	50 max.	ma
PLATE DISSIPATION	10 max.	watts

Maximum Circuit Values:

Grid-Circuit Resistance:

For grid-resistor-bias or cathode-bias operation. 2.2 max. megohms

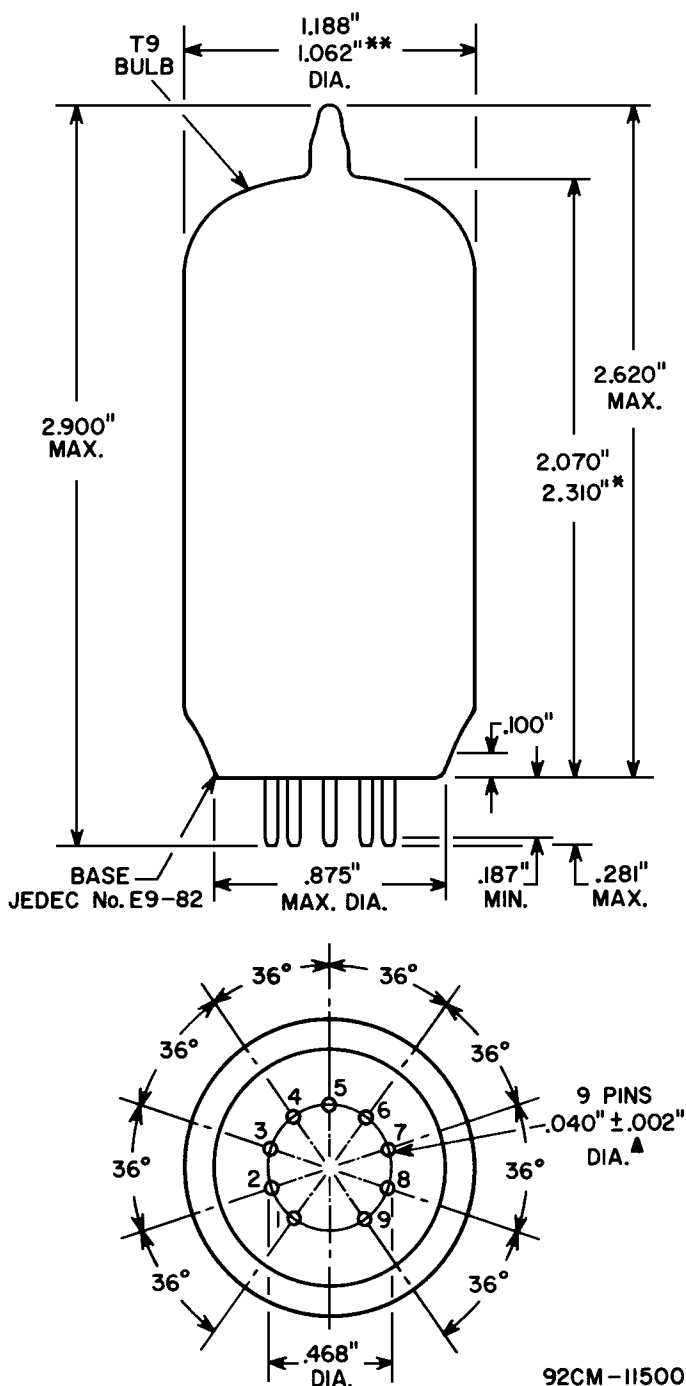
^a The dc component must not exceed 100 volts.

^b Without external shield.

^c 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

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

^e This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.



92CM-11500

** APPLIES IN ZONE STARTING 0.625" FROM BASE SEAT.

* MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY A RING GAUGE OF 0.600" INSIDE DIAMETER.

▲ BASE-PIN CONTOUR AND GAUGE (JEDEC No. GE9-4) INFORMATION FOR THIS BASE IS THE SAME AS THAT SHOWN IN GENERAL SECTION FOR BASE JEDEC No. E9-68 (LARGE-BUTTON NEONOVAL 9-PIN).

