

Beam Power Tube

NEONVAL TYPE

GENERAL DATA

Electrical:

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

Current. 0.150 ± 0.010 amp

Voltage at heater amperes = 0.150. . . 50 volts

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 0.75 μ f

Grid No.1 to cathode & grid No.3, grid No.2, and heater. 14 μ f

Plate to cathode & grid No.3, grid No.2, and heater. 9 μ f

Mechanical:

Operating Position Any

Type of Cathode. Coated Unipotential

Maximum Overall Length 3.230"

Maximum Seated Length 2.920"

Length, Base Seat to Bulb Top (Excluding tip) . 2.370" to 2.610"

Diameter 1.062" to 1.188"

Bulb T9

Base Large-Button Neonval 9-Pin (JEDEC No.E9-68)

Basing Designation for BOTTOM VIEW 9PX

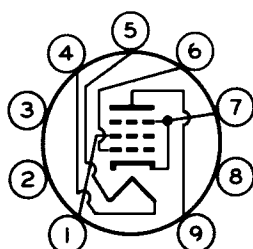
Pin 1—Grid No.2

Pin 2—No Internal Connection

Pin 3—Do Not Use

Pin 4—Heater

Pin 5—Heater



Pin 6—Grid No.1

Pin 7—Cathode, Grid No.3

Pin 8—Do Not Use

Pin 9—Plate

AF POWER AMPLIFIER — Class A₁

Maximum Ratings, *Design-Maximum Values*:

PLATE VOLTAGE. 150 max. volts

GRID-No.2 (SCREEN-GRID) VOLTAGE. 150 max. volts

GRID-No.2 INPUT. 2.5 max. watts

PLATE DISSIPATION. 16 max. watts

Typical Operation and Characteristics:

	Fixed Bias	Cathode Bias	
Plate Supply Voltage	130	140	volts
Grid-No.2 Supply Voltage	130	140	volts



	<i>Fixed Bias</i>	<i>Cathode Bias</i>	
Grid-No.1 (Control-Grid) Voltage. . . .	-11	-	volts
Cathode Resistor.	-	100	ohms
Peak AF Grid-No.1 Voltage	11	11.3	volts
Zero-Signal Plate Current	100	100	ma
Max.-Signal Plate Current	108	100	ma
Zero-Signal Grid-No.2 Current	5	5	ma
Max.-Signal Grid-No.2 Current	15	14	ma
Plate Resistance (Approx.).	7000	-	ohms
Transconductance.	11000	-	μ mhos
Load Resistance	1100	1100	ohms
Total Harmonic Distortion	11	11	%
Max.-Signal Power Output.	4.5	4.5	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation.	0.1 max.	megohm
For cathode-bias operation.	0.5 max.	megohm

PUSH-PULL AF POWER AMPLIFIER — Class AB₁**Maximum Ratings, Design-Maximum Values:***Same as for AF POWER AMPLIFIER — Class A₁***Typical Operation:***Values are for 2 tubes*

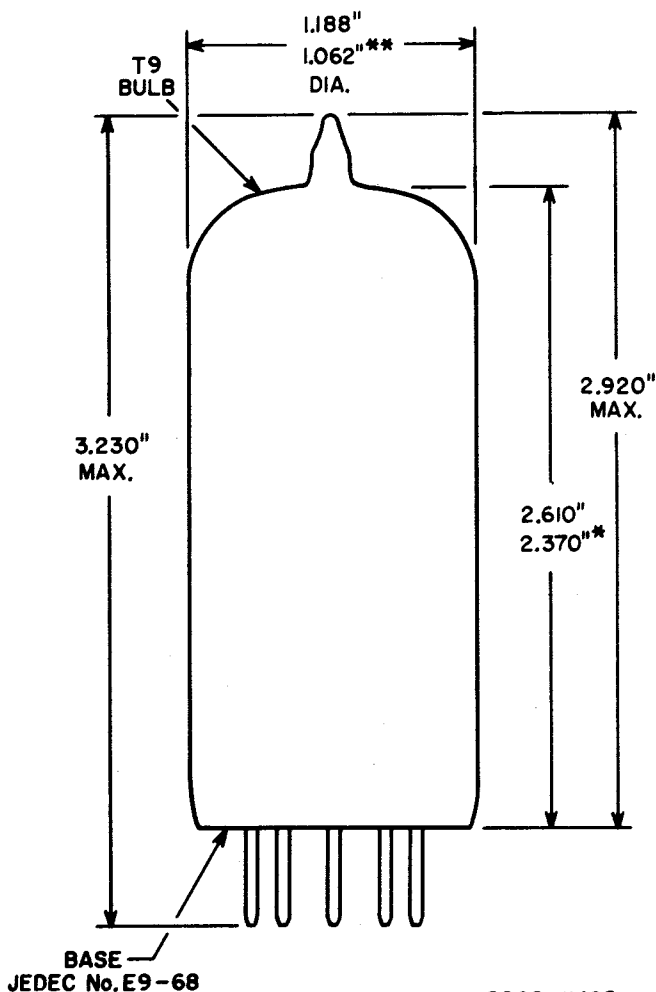
	<i>Fixed Bias</i>	<i>Cathode Bias</i>	
Plate Supply Voltage.	130	140	volts
Grid-No.2 Supply Voltage.	130	140	volts
Grid-No.1 (Control-Grid) Voltage. . . .	-12	-	volts
Cathode Resistor.	-	50	ohms
Peak AF Grid-No.1-to-Grid-No.1 Voltage.	22.6	22.6	volts
Zero-Signal Plate Current	195	210	ma
Max.-Signal Plate Current	220	220	ma
Zero-Signal Grid-No.2 Current	9	9	ma
Max.-Signal Grid-No.2 Current	24	20	ma
Effective Load Resistance			
(Plate to plate).	1800	1500	ohms
Total Harmonic Distortion	6	4	%
Max.-Signal Power Output.	10	10	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation.	0.1 max.	megohm
For cathode-bias operation.	0.5 max.	megohm

^a The dc component must not exceed 100 volts.^b Without external shield.



** 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.

