

Grid No. 2 Input:

For Grid No. 2 Voltages up to 165 Volts (Max.) — 0.55 Watt

For Grid No. 2 Voltages Between 165

and 330 Volts See Rating Chart (Gen. Info. Sec.)

Plate Dissipation (Max.) 2.5 2.5 Watts

Grid No. 1 Circuit Resistance

For Fixed Bias Operation (Max.) 0.5 0.25 Megohm

For Cathode Bias Operation (Max.) 1.0 0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

	Triode Section	Pentode Section
Plate Voltage	125	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	-1	-2 Volts
Amplification Factor	46	—
Plate Resistance (Approx.)	5400	150,000 Ohms
Transconductance	8500	6000 μ mhos
Plate Current	13.5	12 Ma
Grid No. 2 Current	—	4 Ma
Grid No. 1 Voltage (Approx.) for Plate μ a = 10	-8	-14 Volts

NOTE:

(1) Shield No. 315.

6LQ8**11LQ8****SYNC SEP. or SOUND IF AMP.
VIDEO AMPLIFIER****Medium Mu Triode and
Sharp Cutoff Pentode**

Construction Miniature T-6½

Base Button 9 Pin, E9-1

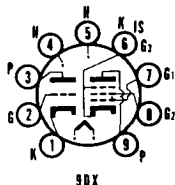
Basing 9DX

Outline 6-3

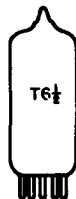
Maximum Diameter 0.875 In.

Maximum Seated Height 2.375 In.

Maximum Overall Height 2.625 In.



9DX



T6½

**ELECTRICAL DATA
HEATER OPERATION**

	11LQ8	6LQ8
Heater Voltage	10.9	6.3 Volts
Heater Current	450	775 Ma
Heater Warm-up Time	11	— Seconds
Heater Negative with Respect to Cathode		
Total DC and Peak		200 Volts
Heater Positive with Respect to Cathode		
DC		100 Volts
Total DC and Peak		200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)**Triode Section**

Grid to Plate	2.8 Pf
Input: Tg to (Tk, Pk + Pg3 + IS + H)	4.2 Pf
Output: Tp to (Tk, Pk + Pg3 + IS + H)	2.4 Pf

Pentode Section

Grid No. 1 to Plate (Max.)	0.12 Pf
Input: Pg1 to (Pk + Pg3 + IS, Pg2, H)	14 Pf
Output: Pp to (Pk + Pg3 + IS, Pg2, H)	4.8 Pf
Triode Grid to Pentode Plate (Max.)	0.015 Pf
Pentode Plate to Triode Plate (Max.)	0.17 Pf

RATINGS (Design Maximum Rating System)**Class A1 Amplifier**

	Triode Section	Pentode Section
DC Plate Voltage	300	300 Volts
DC Grid No. 2 Supply Voltage	—	300 Volts
DC Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
DC Grid No. 1 Voltage:		
Positive Bias Value	0	0 Volt

Grid No. 2 Input:

For Ec2 up to 150 V	—	1 Watt
For Ec2 from 150 V to 300 V	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation	2	5 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias	0.5	0.1 Megohm
Cathode Bias	1	0.25 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section	
DC Plate Supply Voltage	125	125	200 Volts
DC Grid No. 2 Supply Voltage	—	125	125 Volts
Grid No. 1	Connected to Negative End of Rk		
Cathode Resistor	68	82	68 Ohms
Amplification Factor	46	—	—
Plate Resistance (Approx.)	4400	55,000	75,000 Ohms
Transconductance	10,400	21,000	23,000 μ mhos
DC Plate Current	15	16.5	20 Ma
DC Grid No. 2 Current	—	3.1	3.5 Ma
Cutoff DC Grid No. 1 Voltage for Ib = 100 μ a	-6	-4.2	-4.2 Volts

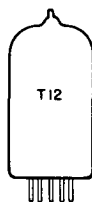
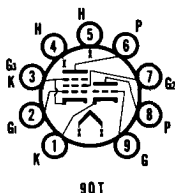
VERTICAL DEFLECTION OSCILLATOR and AMPLIFIER

6LR8

21LR8

High Mu Triode and Beam Power Pentode

Construction	Novar T-12
Base	Button 9 Pin, E9-76
Basing	.9QT
Outline	12-65
Maximum Diameter	1.562 In.
Maximum Seated Height	3.330 In.
Maximum Overall Height	3.710 In.



ELECTRICAL DATA HEATER OPERATION

	21LR8	6LR8
Heater Voltage	21	6.3 Volts
Heater Current	450	1500 Ma
Heater Warm-up Time	11	— Seconds
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
Total DC and Peak		200 Volts
Heater Positive with Respect to Cathode		
DC		100 Volts
Total DC and Peak		200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Triode Section		
Grid to Plate		6.0 Pf
Input		6.5 Pf
Output		1.6 Pf
Pentode Section		
Grid No. 1 to Plate (Max.)		0.70 Pf
Input		16.0 Pf
Output		9.0 Pf
Coupling		
Pentode Grid No. 1 to Triode Plate (Max.)		0.12 Pf
Pentode Plate to Triode Plate (Max.)		0.32 Pf

RATINGS (Design Maximum Rating System)

Vertical Deflection Oscillator and Amplifier⁽¹⁾

	Triode Osc.	Pentode Amp.
Plate Voltage (Max.)	400	400 Volts
Grid No. 2 Voltage (Max.)	—	300 Volts
Peak Positive Pulse Plate Voltage (Max.)	—	2500 Volts
Peak Negative Grid No. 1 Voltage (Max.)	400	250 Volts
Plate Dissipation (Max.) ⁽²⁾	2.5	14 Watts
Grid No. 2 Dissipation (Max.) ⁽²⁾	—	2.75 Watts
Average Cathode Current (Max.)	30	75 Ma
Peak Cathode Current (Max.)	105	260 Ma