Triode Unit:		
Grid to Plate	1.7	pF
Grid to Cathode, Heater, Pentode Cathode, Grid No.3, and Internal Shield	3.2	pF
Plate to Cathode, Heater, Pentode Cathode, Grid No.3, and Internal Shield	2.2	pF

⊖ With external shield connected to cathode of unit under test.

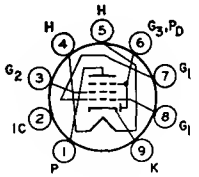
Class A_1 Amplifier

MAXIMUM RATINGS (Design-Maximum Values)	Triode Unit	Pentode Unit	
Plate Voltage	300	300	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	300	volts
Grid-No.2 Voltage	—	See curve page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.5	2.5	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 150 volts	—	0.55	watt
For grid-No.2 voltages between 150 and 300 volts	—	See curve page 98	
CHARACTERISTICS			
Plate Voltage	125	125	volts
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	—1	—1	volt
Amplification Factor	46	—	
Plate Resistance (Approx.)	5400	200000	ohms
Transconductance	8500	7500	μmhos
Plate Current	13.5	12	mA
Grid-No.2 Current	—	4	mA
Grid-No.1 Voltage (Approx.) for plate current of 10 μA	—8	—8	volts
MAXIMUM CIRCUIT VALUES			
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	2.2	2.2	megohms
For cathode-bias operation	2.2	2.2	megohms

6JQ6

12JQ6, 17JQ6, 25JQ6

BEAM POWER TUBE with integral diode



9RA

Miniature type featuring integral diode, internally connected to grid No.3, used in feedback-stabilized vertical-deflection-amplifier applications in color and black-and-white television receivers. Outlines section, 6G; requires miniature 9-contact socket. Types 12JQ6, 17JQ6, and 25JQ6 are identical with type 6JQ6 except for heater ratings.

	6JQ6	12JQ6	17JQ6	25JQ6	
Heater Voltage (ac/dc)	6.3	12.6	16.8	25.2	volts
Heater Current	1.2	0.6	0.45	0.3	amperes
Heater Warm-up Time (Average)	—	11	11	11	seconds
Heater-Cathode Voltage:					
Peak value	±200 max	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances:					
Grid No.1 to Plate				0.32	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Diode Plate				13	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Diode Plate				6	pF

Class A_1 Amplifier

CHARACTERISTICS			
Plate Voltage	40	140	volts
Grid-No.3 (Suppressor-Grid) Voltage	0	0	volts
Grid-No.2 (Screen-Grid) Voltage	120	140	volts
Grid-No.1 (Control-Grid) Voltage	0	—18	volts
Triode Amplification Factor⊖	—	6.5	
Plate Resistance (Approx.)	—	10500	ohms
Transconductance	—	4200	μmhos
Plate Current	150#	35	mA
Grid-No.2 Current	20#	2.5	mA
Grid-No.1 Voltage for plate current of 1 mA	—	—37	volts
Instantaneous Diode-Plate-to-Cathode Voltage Drop for Instantaneous Diode-Plate Current of 2 mA	—	5	volts

Vertical-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Voltage	425	volts
Peak Positive-Pulse Plate Voltage (Absolute-Maximum Value)*	2000	volts
	+10	
DC Grid-No.3 and Diode-Plate Voltage	−150	volts
DC Grid-No.2 Voltage	330	volts
Peak Negative-Pulse Grid-No.1 Voltage	150	volts
Average Cathode Current	70	mA
Peak Cathode Current	250	mA
Average Diode-Plate (and Grid-No.3) Current	1	mA
Plate Dissipation	10	watts
Grid-No.2 Input	2	watts
Bulb Temperature (At hottest point)	240	°C

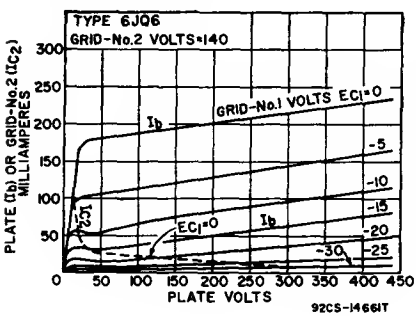
MAXIMUM CIRCUIT VALUES

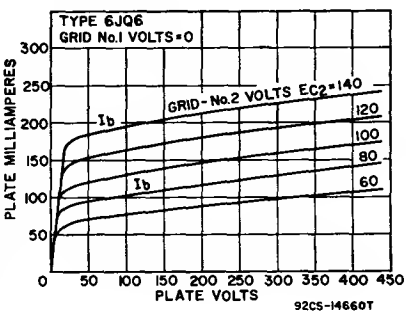
Grid-No.1—Circuit Resistance:		
For grid-No.1-resistor-bias operation	2.2	megohms
For cathode-bias operation	2.2	megohms

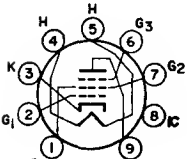
* Grid No.3 and diode plate connected to cathode, and grid-No.2 connected to plate at socket.

This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

* Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).







9QU

6JR6

BEAM POWER TUBE

17JR6, 22JR6

Novar type used for horizontal-deflection amplifier service in low B+, black-and-white television receivers. Outlines section, 31B; requires novar 9-contact socket. Types 17JR6 and 22JR6 are identical with type 6JR6 except for heater ratings.

	6JR6	17JR6	22JR6	
Heater Voltage (ac/dc)	6.3	16.8	22	volts
Heater Current	1.6	0.6	0.45	amperes
Heater Warm-up Time (Average)	—	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):				
Grid No.1 to Plate			0.7	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			22	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			9	pF