DC Grid-No.3 Voltage	70	volts
DC Grid-No.2 Voltage	190	volts
Peak Negative-Pulse Grid-No.1 Voltage	250	volts
Average Cathode Current	315	mA
Peak Cathode Current	1100	mA
Plate Dissipation**	28	watts
Grid-No.2 Input	5.5	watts
Bulh Temperature (At hottest point)	225	°C
MAXIMUM CIRCUIT VALUE		
Grid-No.1-Circuit Resistance	1	megohm

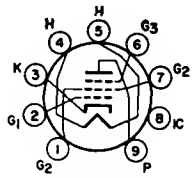
Pulse duration must not exceed 15% of one horizontal scanning cycle (10 microseconds).
** A hias resistor or other means is required to protect the tuhe in ahsence of excitation.

6JT6 Refer to chart at end of section.

6JT6A

12JT6A, 17JT6A

BEAM POWER TUBE



9QU

Novar types used as horizontal-deflection amplifiers in high-efficiency deflection circuits of black-and-white television receivers employing wide-angle or high-voltage picture tubes. Outlines section, 31A; requires novar 9-contact socket. Types 12JT6A and 17JT6A are identical with type 6JT6A except for heater ratings.

	6JT6A	12JT6A	17JT6A	
Heater Voltage (ac/dc)	6.3	12.6	16.8	volts
Heater Current	1.2	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:				
Grid No.1 to Plate			0.26	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			15	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			6.5	pF

Class A_1 Amplifier

CHARACTERISTICS	Pentode Connection		Triode* Connection	
Plate Voltage	60	250	150	volts
Grid No.3 (Suppressor Grid)	Connected to cathode at socket			
Grid-No.2 (Screen-Grid) Voltage	150	150	150	volts
Grid-No.1 (Control-Grid) Voltage	0	—22.5	—22.5	volts
Triode Amplification Factor	—	—	4.4	
Plate Resistance (Approx.)	—	15000	—	ohms
Transconductance	—	7100	—	μmhos
Plate Current	390▪	70	—	mA
Grid-No.2 Current	32▪	2.1	—	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	—42	—	volts

* Grid No.2 connected to plate.

▪ This value can be measured hy a method involving a recurrent waveform such that the maximum ratings of the tuhe will not he exceeded.

Horizontal-Deflection Amplifier

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

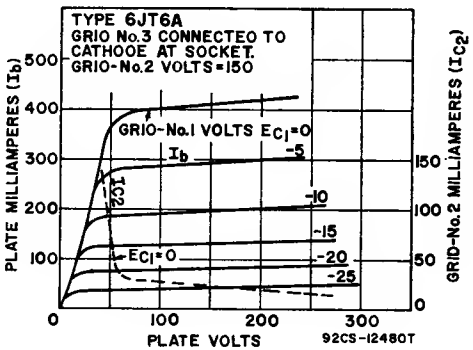
MAXIMUM RATINGS (Design-Maximum Values)		
DC Plate Supply Voltage	770	volts
Peak Positive-Pulse Plate Voltage#	6500	volts
Peak Negative-Pulse Plate Voltage	1500	volts
DC Grid-No.3 Voltage▲	70	volts
DC Grid-No.2 Voltage	220	volts
DC Grid-No.1 Voltage, Negative-hias value	55	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Peak Cathode Current	550	mA

Average Cathode Current	175	mA
Plate Dissipation†	17.5	watts
Grid-No.2 Input	3.5	watts
Bulb Temperature (At hottest point)	240	°C
MAXIMUM CIRCUIT VALUE		
Grid-No.1-Circuit Resistance, for grid-resistor-bias operation	1	megohm

Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

▲ A positive voltage may be applied to grid No.3 to reduce interference from "snivets" which may occur in television receivers. A typical value for this voltage is 30 volts.

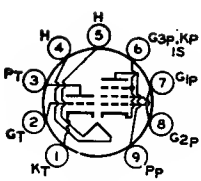
† A bias resistor or other means is required to protect the tube in absence of excitation.



HIGH-MU TRIODE—SHARP-CUTOFF PENTODE

6JT8

10JT8



9DX

Neonoval type with frame-grid pentode unit used in color and black-and-white television receivers. The triode unit is used as a voltage-amplifier or sync-separator tube, and the pentode unit is used as a video-amplified tube. Outlines section, 10A, except base is small-button miniature 9-pin; requires miniature 9-contact socket. Type 10JT8 is identical with type 6JT8 except for heater ratings.

	6JT8	10JT8	
Heater Voltage (ac/dc)	6.3	10.2	volts
Heater Current	0.725	0.45	ampere
Heater Warm-up Time (Average	—	11	seconds
Heater-Cathode Voltage:	±200 max	±200 max	volts
Peak value	100 max	100 max	volts
Average value			

Class A_1 Amplifier

MAXIMUM RATINGS (Design-Maximum Values)	Triode Unit	Pentode Unit		
Plate Voltage	330	330		volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	330		volts
Grid-No.2 Voltage	—	See curve page 98		
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0		volts
Plate Dissipation	1	4		watts
Grid-No.2 Input:				
For grid-No.2 voltages up to 165 volts	—	1.1		watts
For grid-No.2 voltages between 165 and 330 volts	—	See curve page 98		
CHARACTERISTICS				
Plate Supply Voltage	250	50	200	volts
Grid-No.2 Supply Voltage	—	100	100	volts
Grid-No.1 Voltage	—2	0	—	volts
Cathode-Bias Resistor	—	—	82	ohms
Amplification Factor	100	—	—	
Plate Resistance (Approx.)	37000	—	50000	ohms