

	Triode Unit	Pentode Unit	
Transconductance	2700	—	20000 μ hos
Plate Current	1.5	55*	17 mA
Grid-No.2 Current	—	18*	3.5 mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	—	—	—5 volts
Grid-No.1 Voltage (Approx.) for plate current of 20 μ A	—5.3	—	— volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.5	0.25	megohm
For cathode-bias operation	1	1	megohm

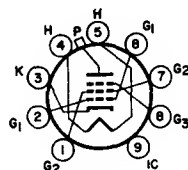
* This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

6JU6

22JU6

BEAM POWER TUBE

Novar type used as horizontal-deflection amplifier in color television receivers. Outlines section, 18A; requires novar 9-contact socket. Type 22JU6 is identical with type 6JU6 except for heater ratings.

**9QL**

Heater Voltage (ac/dc)	6JU6 6.3	22JU6 20	volts
Heater Current	1.6	0.45	amperes
Heater Warm-up Time	—	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Grid No.1 to Plate	—	1.2	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

Class A₁ Amplifier

	Triode† Connection		Pentode Connection		
Plate Voltage	125	—	50	130	volts
Peak Positive-Pulse Plate Voltage*	—	6500	—	—	volts
Grid No.3 (Suppressor Grid)	—	Connected to cathode at socket	—	—	
Grid-No.2 (Screen-Grid) Voltage	125	125	125	125	volts
Grid-No.1 (Control-Grid) Voltage	—20	—	0	—20	volts
Amplification Factor	4.7	—	—	—	
Plate Resistance (Approx.)	—	—	—	18000	ohms
Transconductance	—	—	—	7000	μ hos
Plate Current	—	—	470††	45	mA
Grid-No.2 Current	—	—	32††	1.5	mA
Grid-No.1 Voltage for plate current of 1 mA	—	—75	—	—32	volts

Horizontal-Deflection Amplifier

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

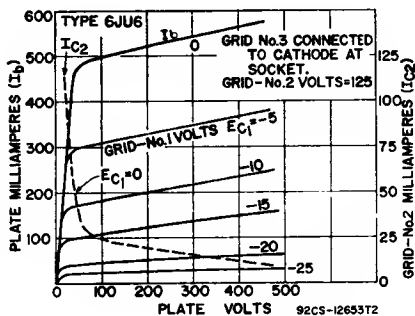
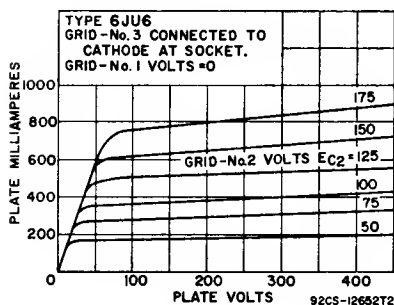
MAXIMUM RATINGS (Design-Maximum Values)

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*	75	volts
DC Grid-No.2 Voltage	220	volts
DC Grid-No.1 Voltage, Negative-bias value	55	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Peak Cathode Current	950	mA
Average Cathode Current	275	mA
Grid-No.2 Input	3.5	watts
Plate Dissipation**	17	watts
Bulb Temperature (At hottest point)	240	°C

MAXIMUM CIRCUIT VALUES

MAXIMUM DESIGN VALUES		
Grid-No.1-Circuit Resistance:		
For grid-resistor-bias operation	0.47	megohm
For plate-pulsed operation	10	megohms

- # Pulse duration must not exceed 15% of one horizontal scanning cycle (10 microseconds).
 † Grid No.2 connected to plate.
 †† This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.
 ■ In this service, a positive value may be applied to grid No.3 to minimize "snivets" interference; 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.



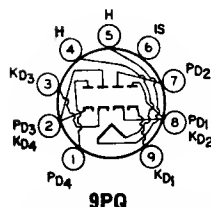
Refer to chart at end of section.

6JU8

QUADRUPLE DIODE

6JU8A

8JU8A



Miniature type used in phase-detector and noise-immune color-killer circuits of color television receivers, and in bridge-matrixing circuits in FM stereo multiplex equipment. Outlines section, 6B; requires miniature 9-contact socket. Units 1 and 2 are shielded from units 3 and 4 to minimize coupling between the series-connected pairs of diodes. Type 8JU8A is identical with type 6JU6A except for heater ratings.

	6JU8A	8JU8A	
Heater Voltage (ac/dc)	6.3	8.4	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time	—	11	seconds
Peak Heater-Cathode Voltage	±300 max	±300 max	volts
Direct Interelectrode Capacitances (Approx.):			
Plate of Unit No.1 and Cathode of Unit No.2 to Cathode of Unit No.1		1.8	pF
Plate of Unit No.1 and Cathode of Unit No.2 to Plate of Unit No.2		2.2	pF
Plate of Unit No.2 to Heater and Internal Shield		0.62	pF
Plate of Unit No.3 and Cathode of Unit No.4 to Cathode of Unit No.3		1.9	pF
Plate of Unit No.3 and Cathode of Unit No.4 to Plate of Unit No.4		2.2	pF
Plate of Unit No.4 to Heater and Internal Shield		0.94	pF
Cathode of Unit No.1 to Heater and Internal Shield		1.8	pF
Cathode of Unit No.3 to Heater and Internal Shield		1.9	pF
MAXIMUM RATINGS (Design-Center Values, Each Diode Unit)			
Peak Inverse Plate Voltage		300	volts
Peak Plate Current		54	mA
Average Output Current		9	mA
CHARACTERISTICS, Instantaneous Value (Each Unit)			
Plate Current for plate voltage of 10 volts		60	mA