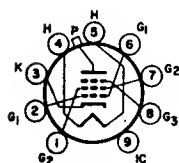


Average Plate Current	220	mA
Plate Dissipation	5	watts
Peak Negative-Pulse Plate Voltage*	6000#	volts

* Under no conditions should an absolute maximum value of 7500 volts be exceeded.

The pulse duration must not exceed 22 per cent of a cycle, or a maximum of 18 micro-seconds.

Refer to chart at end of section.	30AG11
Refer to chart at end of section.	30JZ6
Refer to type 6KD6.	30KD6
Refer to chart at end of section.	30MB6
Refer to chart at end of section.	31
Refer to chart at end of section.	31AL10
Refer to chart at end of section.	31JS6A
Refer to type 6JS6C.	31JS6C
Refer to type 6MJ6/6LQ6/6JE6C.	31LQ6
Refer to type 6LR8.	31LR8



9QL

BEAM POWER TUBE

31LZ6

Novar type used for horizontal-deflection amplifier in color television receivers. Outlines section, 32C; requires novar 9-contact socket.

Heater Voltage (ac/dc)	31	volts
Heater Current	0.45	ampere
Heater Warm-up Time	11	seconds
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Grid No.1 to Plate	0.6	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	11	pF

Class A₁ Amplifier

CHARACTERISTICS	Triode† Connection	Pentode Connection	
Plate Voltage	125	55	175 volts
Peak Positive-Pulse Plate Voltage#	—	5000	volts
Grid No.3 (Suppressor Grid)	—	30	30 volts
Grid-No.2 (Screen-Grid) Voltage	125	130	125 volts
Grid-No.1 (Control-Grid) Voltage	—25	0	—25 volts
Amplification Factor	3	—	—
Plate Resistance (Approx.)	—	—	6000 ohms
Transconductance	—	—	11000 μmhos
Plate Current	—	800††	140 mA
Grid-No.2 Current	—	56††	2 mA
Grid-No.1 Voltage for plate current of 1 mA	—	—125	—50 volts

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Supply Voltage	990	volts
Peak Positive-Pulse Plate Voltage#	7500	volts
Peak Negative-Pulse Plate Voltage	1100	volts
DC Grid-No.3 Voltage	75	volts

DC Grid-No.2 Voltage	220	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Peak Cathode Current	1200	mA
Average Cathode Current	350	mA
Grid-No.2 Input	5	watts
Plate Dissipation	30	watts
Bulb Temperature (At hottest point)	240	°C

MAXIMUM CIRCUIT VALUES

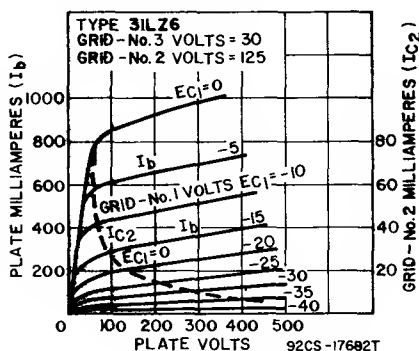
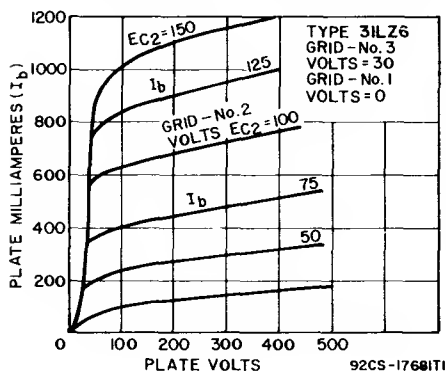
Grid-No.1-Circuit Resistance:		
For cathode-bias operation	1	megohm
For grid-leak-bias operation	10	megohms
For fixed-bias operation	0.47	megohm

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.



32
 32ET5
 32ET5A

Refer to chart at end of section.

32HQ7

Refer to chart at end of section.

32L7GT

Refer to chart at end of section.

33

Refer to chart at end of section.

33GT7

Refer to chart at end of section.

33GY7

Refer to chart at end of section.

33GY7A DIODE-BEAM POWER TUBE

50GY7A

Duodecar type used as combined damper diode and horizontal-deflection amplifier in television receivers. Socket terminals 1, 3, 6 and 7 should not be used as tie points. Outlines section, 15A; requires duodecar 12-contact socket. Type 50GY7A is identical with type 33GY7A except for heater ratings.

