



12JF

BEAM POWER TUBE

6LB6

Duodecar type used as horizontal-deflection amplifier in color and black-and-white television receivers. Outlines section, 16E; requires duodecar 12-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	2.25	amperes
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Grid No.1 to Plate	0.44	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	33	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	18	pF

Class A₁ Amplifier

CHARACTERISTICS	Triode*		Pentode Connection		
	Connection				
Peak Positive-Pulse Plate Voltage	—	5000	—	—	volts
Plate Voltage	125	—	50	150	volts
Grid-No.3 (Suppressor Grid)	—	—	Connected to cathode at socket		
Grid-No.2 Voltage	125	110	110	110	volts
Grid-No.1 Voltage	—25	—	—	—20	volts
Plate Resistance (Approx.)	—	—	—	6600	ohms
Transconductance	—	—	—	13400	μmhos
Plate Current	—	—	560‡	105	mA
Grid-No.2 Current	—	—	46‡	2	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	—125	—	—40	volts
Amplification Factor	4	—	—	—	

* Grid No.2 tied to plate.

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

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# (Absolute Maximum Value)	7000	volts
Peak Negative-Pulse Plate Voltage	100	volts
Grid-No.3 Voltage, Positive-bias value	0	volts
Grid-No.2 Voltage	200	volts
Peak Negative Grid-No.1 Voltage	300	volts
Peak Cathode Current	1100	mA
Average Cathode Current	315	mA
Plate Dissipation* (Absolute Maximum Value)	30	watts
Grid-No.2 Input	5	watts
Bulb Temperature (At hottest point)	200	°C

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
With feedback-type high voltage regulation	1.2	megohms
With shunt-type high voltage regulation (switching mode)	10	megohms
Grid-No.3-Circuit Resistance	0	ohms

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

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

Refer to chart at end of section.

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