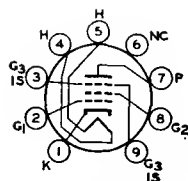


Refer to chart at end of section.	7B7
Refer to chart at end of section.	7B8
Refer to chart at end of section.	7C5
Refer to chart at end of section.	7C6
Refer to chart at end of section.	7C7
Refer to chart at end of section.	7E6
Refer to chart at end of section.	7E7
Refer to chart at end of section.	7EY6
Refer to chart at end of section.	7F7
Refer to chart at end of section.	7F8
Refer to chart at end of section.	7G7
Refer to chart at end of section.	7H7
Refer to chart at end of section.	7HG8
Refer to type 6HG8/ECF86.	7HG8/PCF86
Refer to chart at end of section.	7J7
Refer to chart at end of section.	7K7
Refer to type 6KY6.	7KY6

**9GK****SHARP-CUTOFF PENTODE****7KZ6**

Miniature type with frame grid used for video-output-amplifier service in color and black-and-white television receivers. Outlines section, 6E; requires miniature 9-contact socket.

Heater Voltage (ac/dc)	7.3	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	0.16 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	13	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	6	pF

Class A₁ Amplifier**MAXIMUM RATINGS (Design-Maximum Values)**

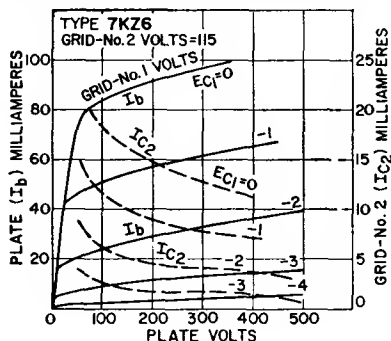
Plate Voltage	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	volts
Grid-No.2 Voltage	See curve page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	9	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts	1	watt
For grid-No.2 voltages between 165 and 330 volts	See curve page 98	

CHARACTERISTICS

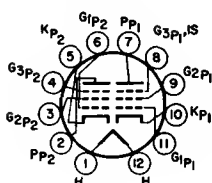
Plate Supply Voltage	250	volts
Grid No.3 (Suppressor Grid)	Connected to cathode at socket	
Grid-No.2 Supply Voltage	115	volts
Grid-No.1 Supply Voltage	0	volts
Cathode-Bias Resistor	75	ohms
Plate Resistance (Approx.)	45000	ohms
Transconductance	24000	μ mhos
Average Plate Current	25	mA
Grid-No.2 Current	3.6	mA
Grid-No.1 Voltage for plate current of 100 μ A	-5.2	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.1	megohm
For cathode-bias operation	0.25	megohm



7L7	Refer to chart at end of section.
7N7	Refer to chart at end of section.
7Q7	Refer to chart at end of section.
7R7	Refer to chart at end of section.
7S7	Refer to chart at end of section.
7V7	Refer to chart at end of section.
7W7	Refer to chart at end of section.
7X7	Refer to chart at end of section.
7Y4	Refer to chart at end of section.
7Z4	Refer to chart at end of section.
8AR11	Refer to type 6AR11.
8AU8	Refer to type 6AU8A.
8AW8A	Refer to type 6AW8A.
8B10	Refer to type 6B10.
8BA8A	Refer to type 6BA8A.
8BA11	Refer to type 6BA11.
8BH8	Refer to type 6BH8.



12FU

DUAL PENTODE

8BM11

Duodecar type used as if amplifier in television receivers. Unit No.1 is a semiremote-cutoff pentode, and unit No. 2 is a sharp-cutoff pentode. Outlines section, 8B; requires duodecar 12-contact socket. Heater: volts (ac/dc), 8.4; amperes, 0.45; maximum heater-cathode volts, ± 200 peak, 100 average.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Unit No.1	Unit No.2	
Plate Voltage	160	160	volts
Grid-No.3 (Suppressor-Grid) Voltage	0	0	volts
Grid-No.2 (Screen-Grid) Voltage	160	160	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.2	2.2	watts
Grid-No.2 Input	0.55	0.55	watt

CHARACTERISTICS

Plate Supply Voltage	125	125	volts
Grid No.3	Connected to cathode at socket		
Grid-No.2 Voltage	125	125	volts
Cathode-Bias Resistor	56	120	ohms
Plate Resistance (Approx.)	220000	300000	ohms
Transconductance	8300	8500	μ mhos
Plate Current	14	9	mA
Grid-No.2 Current	3.6	2.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μ A	—	—5.5	volts
Grid-No.1 Voltage (Approx.) for transconductance of 50 μ mho	—16.5	—	volts

MAXIMUM CIRCUIT VALUES

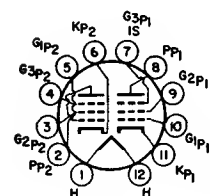
Grid-No.1-Circuit Resistance, for cathode-bias operation	1	0.25	megohm
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Refer to type 6BN8.

8BN8

Refer to type 6BQ5.

8BQ5



12DM

SEMIREMOTE-CUTOFF
DUAL PENTODE

8BQ11

11BQ11

Duodecar type used as intermediate-frequency amplifier in television receivers. Outlines section, 8B; requires duodecar 12-contact socket. Type 11BQ11 is identical with type 8BQ11 except for heater ratings.

	8BQ11	11BQ11	
Heater Voltage (ac/dc)	8.4	11.2	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time (Average)	11	11	seconds
Heater-Cathode Voltage:			
Peak value	± 200 max	± 200 max	volts
Average value	100 max	100 max	volts

Direct Interelectrode Capacitances:

	Unit No.1	Unit No.2	
Grid No.1 to Plate	0.022	0.024	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	10	—	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	2.8	—	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, Grid No.3 of Unit No.1, and Internal Shield	—	11	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, Grid No.3 of Unit No.1, and Internal Shield	—	2.8	pF