

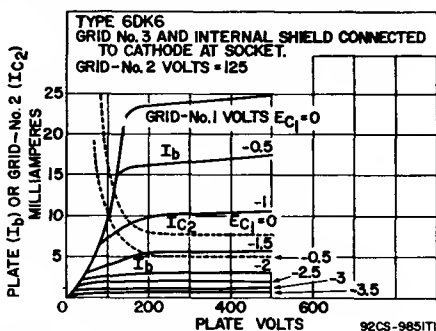
Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	330	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	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	2.3	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts	0.55	watt
For grid-No.2 voltages between 165 and 330 volts	See curve page 98	

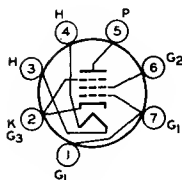
CHARACTERISTICS

Plate Supply Voltage	125	volts
Grid No.3	Connected to cathode at socket	
Grid-No.2 Supply Voltage	125	volts
Cathode-Bias Resistor	56	ohms
Plate Resistance (Approx.)	0.35	megohm
Transconductance	9800	μ mhos
Plate Current	12	mA
Grid-No.2 Current	3.8	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μ A	-6.5	volts



Refer to chart at end of section.

6DL5



7DQ

POWER PENTODE

6DL5/EL95

Miniature type used in audio output applications in automobile radios. Outlines section, 5E; requires miniature 7-contact socket. Heater: volts, 6.3; amperes, 0.2; maximum heater-cathode volts, ± 100 .

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Supply Voltage	550	volts
Plate Voltage	300	volts
Grid-No.2 (Screen-Grid) Supply Voltage	550	volts
Grid-No.2 Voltage	300	volts
Cathode Current	35	mA
Plate Dissipation	2.5	watts
Grid-No.2 Input	6	watts

TYPICAL OPERATION

Plate Voltage	200	250	volts
Grid-No.2 Voltage	200	250	volts
RMS AF Grid-No.1 (Control-Grid) Voltage	4.5	5	volts
Cathode-Bias Resistor	230	320	ohms
Plate Current	23	24	mA
Grid-No.2 Current	4.2	4.5	mA
Load Resistance	8000	10000	ohms
Total Harmonic Distortion	12	12	per cent
Power Output	2.3	3	watts

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance, for cathode-bias operation	2	megohms
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6DM4

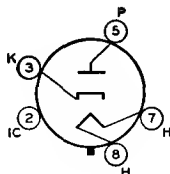
Refer to chart at end of section.

6DM4A

17DM4A

**HALF-WAVE
VACUUM RECTIFIER**

Glass octal type used as damper tube in horizontal-deflection circuits of television receivers. Outlines section, 13G; requires octal socket. Socket terminals 1, 2, 4, and 6 should not be used as tie points. This tube, like other power-handling tubes, should be adequately ventilated. Type 17DM4A is identical with type 6DM4A except for heater ratings.

**4CG**

	6DM4A	17DM4A	
Heater Voltage (ac/dc)	6.3	16.8	volts
Heater Current	1.2	0.45	amperes
Heater Warm-up Time (Average)	—	11	seconds

Damper Service

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

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage#	5000	volts	
Peak Plate Current	1200	mA	
Average Plate Current	200	mA	
Plate Dissipation	6.5	watts	
Heater-Cathode Voltage:			
Peak value	+300	—5000	volts
Average value	+100	—900	volts

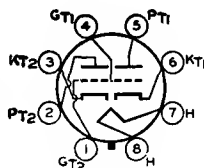
Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

6DN6

Refer to chart at end of section.

6DN7**MEDIUM-MU DUAL TRIODE**

Glass octal type used as combined vertical-deflection-oscillator and vertical-deflection-amplifier tube in television receivers. Outlines section, 13B; requires octal socket. Heater: volts (ac/dc), 6.3; amperes, 0.9; maximum heater-cathode volts, ± 200 peak, 100 average.

**8BD****Class A₁ Amplifier**

CHARACTERISTICS	Unit No.1	Unit No.2	
Plate Voltage	250	250	volts
Grid Voltage	—8	—9.5	volts
Amplification Factor	22.5	15.4	
Plate Resistance (Approx.)	9000	2000	ohms
Transconductance	2500	7700	μ mhos
Plate Current	8	41	mA
Grid Voltage (Approx.) for plate current of 10 μ A ..	—18	—	volts
Grid Voltage (Approx.) for plate current of 50 μ A ..	—	—23	volts

Vertical-Deflection Oscillator and Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

	Unit No.1 Oscillator	Unit No.2 Amplifier	
DC Plate Voltage	350	550	volts
Peak Positive-Pulse Plate Voltage#	—	2500	volts
Peak Negative-Pulse Grid Voltage	400	250	mA
Peak Cathode Current	—	150	mA
Average Cathode Current	—	50	mA
Plate Dissipation	1	10	watts

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:			
For fixed-bias operation	2.2	2.2	megohms
For cathode-bias operation	2.2	—	megohms

Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).