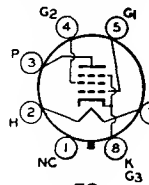
Average Cathode Current	22	50	mA
Plate Dissipation	1.5	7	watts
MAXIMUM CIRCUIT VALUES			
Grid-Circuit Resistance:			
For grid-resistor bias or cathode-bias operation	2.2	2.2	megohms

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



7S

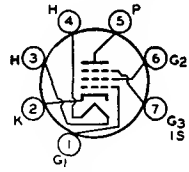
6DG6GT — BEAM POWER TUBE

Glass octal type used as output tube in audio-amplifier applications **Outlines section, 13D**; requires octal socket. This type may be supplied with pin 1 omitted.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	1.2	amperes
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances (Approx.):		
Grid No.1 to Plate	0.6	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	15	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	10	pF

Class A_1 Audio-Frequency Power Amplifier

MAXIMUM RATINGS (Design-Center Values)			
Plate Voltage		200	volts
Grid-No.2 (Screen-Grid) Voltage		125	volts
Plate Dissipation		10	watts
Grid-No.2 Input		1.25	watts
TYPICAL OPERATION			
Plate Supply Voltage	110	200	volts
Grid-No.2 Supply Voltage	110	125	volts
Grid-No.1 (Control-Grid) Supply Voltage	—7.5	—	volts
Peak AF Grid-No.1 Voltage	7.5	8.5	volts
Cathode-Bias Resistor	—	180	ohms
Zero-Signal Plate Current	49	46	mA
Maximum-Signal Plate Current	50	47	mA
Zero-Signal Grid-No.2 Current	4	2.2	mA
Maximum-Signal Grid-No.2 Current	10	8.5	mA
Plate Resistance (Approx.)	13000	28000	ohms
Transconductance	8000	8000	μmhos
Load Resistance	2000	4000	ohms
Total Harmonic Distortion	10	10	per cent
Maximum-Signal Power Output	2.1	3.8	watts
MAXIMUM CIRCUIT VALUES			
Grid-No.1-Circuit Resistance:			
For fixed-bias operation		0.1	megohm
For cathode-bias operation		0.5	megohm



7CM

6DK6

3DK6, 4DK6, 12DK6 — **SHARP-CUTOFF PENTODE**

Miniature type used as if-amplifier tube in color and black-and-white television receivers. **Outlines section, 5C**; requires miniature 7-contact socket. Types 3DK6, 4DK6, and 12DK6 are identical with type 6DK6 except for heater ratings.

	3DK6	4DK6	6DK6	12DK6	
Heater Voltage (ac/dc)	3.15	4.2	6.3	12.6	volts
Heater Current	0.6	0.45	0.3	0.15	ampere
Heater Warm-up Time (Average)	11	11	—	—	seconds
Heater-Cathode Voltage:					
Peak value	+200 max —300 max	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances:					
Grid No.1 to Plate			0.025 max		pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3 and Internal Shield			6.3		pF
Plate to Cathode, Heater, Grid No.2, Grid No.3 ,and Internal Shield			1.9		pF

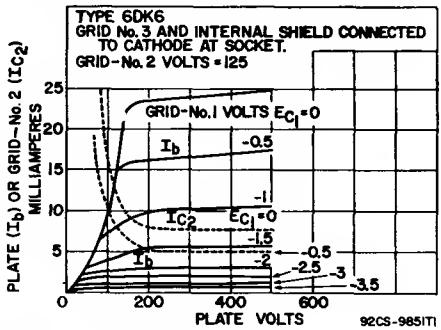
Class A_1 Amplifier

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	

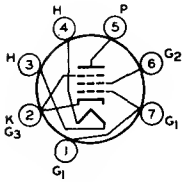
CHARACTERISTICS

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	μmhos
Plate Current	12	mA
Grid-No.2 Current	3.8	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—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 A_1 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