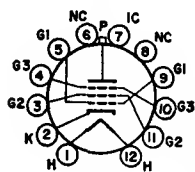
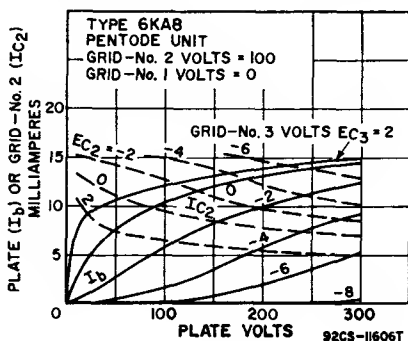
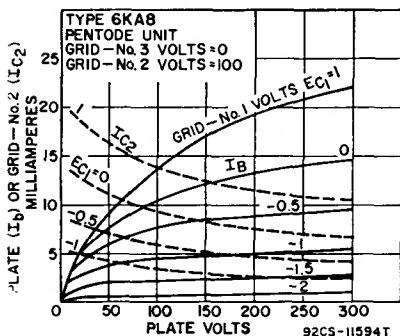


Plate Dissipation	2	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts	1.1	watts
For grid-No.2 voltages between 150 and 300 volts	See curve page 300	
MAXIMUM CIRCUIT VALUES		
Grid-No.3-Circuit Resistance	0.68	megohm
Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.5	megohm
For cathode-bias operation	1	megohm

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



12GW

BEAM POWER TUBE

6KD6

30KD6, 36KD6/40KD6

Duodec type used as horizontal-deflection amplifier in television receivers. Outlines section, 16C; requires duodec 12-contact socket. Types 30KD6 and 36KD6/40KD6 are identical with type 6KD6 except for heater ratings.

	6KD6	30KD6	36KD6/40KD6	
Heater Voltage	6.3	30	36	volts
Heater Current	2.85	0.6	0.45	amperes
Heater Warm-up Time	—	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances:				
Grid No.1 to Plate			0.8	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			40	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			16	pF

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#	7000	volts
Positive DC Grid-No.3 Voltage	20	volts
Grid-No.2 Voltage	200	volts
Peak Negative-Pulse Grid-No.1 Voltage	250	volts
Peak Cathode Current	1400	mA
Average Cathode Current	400	mA
Plate Dissipation*	33	watts
Grid-No.2 Input	5	watts
Bulb Temperature (At hottest point)	225	°C

Class A₁ Amplifier

CHARACTERISTICS

	Triode† Connection	Pentode Connection	
Plate Voltage	150	60 150	volts
Grid No.3 (Suppressor Grid)		Connected to cathode at socket	

Grid-No.2 (Screen-Grid) Voltage	150	110	110	volts
Grid-No.1 (Control-Grid) Voltage	-22.5	0	-22.5	volts
Amplification Factor	4	—	—	
Plate Resistance (Approx.)	—	—	6000	ohms
Transconductance	—	—	14000	μ mbos
Plate Current	—	750**	120	mA
Grid-No.2 Current	—	42**	1.8	mA
Grid-No.1 Voltage (Approx.) for plate current of 1.0 μ A	—	—	-40	volts

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	2.2	megohms
Grid-No.3-Circuit Resistance	0.01	megohm

* A bias resistor or other means is required to protect the tube in absence of excitation.
 # Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

† Grid-No.2 connected to plate at socket.

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

6KD8

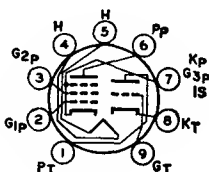
For replacement use type 6U8A/6KD8.

6KE8

4KE8, 5KE8

**MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE**

Miniature type with frame-grid pentode unit used as combined oscillator-mixer tube in television receivers using an intermediate frequency in the order of 40 MHz. Outlines section, 6B; requires miniature 9-contact socket. Types 4KE8 and 5KE8 are identical with type 6KE8 except for heater ratings.



9DC

	4KE8	5KE8	6KE8	
Heater Voltage (ac/dc)	4.5	5.6	6.3	volts
Heater Current	0.6	0.45	0.4	ampere
Heater Warm-up Time (Average)	11	11	—	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances:†				
Triode Unit:				
Grid to Plate			1.3	pF
Grid to Cathode, Heater, Pentode Cathode, Pentode Grid No.3, and Internal Shield			2.4	pF
Plate to Cathode, Heater, Pentode Cathode, Pentode Grid No.3, and Internal Shield			2	pF
Pentode Unit:				
Grid No.1 to Plate			0.015 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			3.4	pF
Heater to Triode Cathode and Pentode Cathode			5.5*	pF

† With external shield connected to cathode of unit under test, except as noted.

* With external shield connected to ground.

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

	Triode Unit	Pentode Unit	
Plate Voltage	280	280	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	280	volts
Grid-No.2 Voltage	—	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Cathode Current	20	20	mA
Plate Dissipation	2	2	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 140 volts	—	0.5	watt
For grid-No.2 voltages between 140 and 280 volts	—	See curve page 300	

CHARACTERISTICS

Plate Supply Voltage	125	125	volts
Grid-No.2 Supply Voltage	—	125	volts
Grid-No.1 Supply Voltage	0	0	volts
Cathode-Bias Resistor	68	33	ohms
Amplification Factor	40	—	
Plate Resistance (Approx.)	5000	125000	ohms
Transconductance	8000	12000	μ mbos