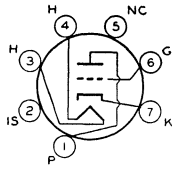


# 6AB4

## HIGH-MU TRIODE

Miniature type used as cathode-drive amplifier, frequency converter, or oscillator at frequencies up to 300 MHz in television and FM receivers. **Outlines section, 5C**; requires miniature 7-contact socket. **Heater:** volts (ac/dc), 6.3; amperes, 0.15. For operation as resistance-coupled amplifier, refer to **Resistance-Coupled Amplifier section**. For maximum ratings, characteristics, and curves refer to type 12AT7.



5CE

### 6AB5/6N5

Refer to chart at end of section.

### 6AB7

Refer to chart at end of section.

### 6AC5GT

Refer to chart at end of section.

### 6AC7

Refer to chart at end of section.

### 6AC7W

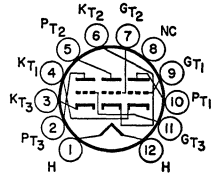
Refer to chart at end of section.

# 6AC10

8AC10, 12AC10A

## HIGH-MU TRIPLE TRIODE

Duodecar type used in matrixing (color-difference) circuits of color television receivers. **Outlines section, 8B**; requires duodecar 12-contact socket. Types 8AC10 and 12AC10A are identical with type 6AC10 except for heater ratings.



12FE

	6AC10	8AC10	12AC10A	
Heater Voltage (ac/dc)	6.3	8.4	12.5	volts
Heater Current	0.6	0.45	0.3	ampere
Heater Warm-up Time (Average)	11	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts

### Class A<sub>1</sub> Amplifier

MAXIMUM RATINGS (Design-Maximum Values)		
Plate Voltage	330	volts
Plate Dissipation	2	watts

CHARACTERISTICS		
Plate Voltage	200	volts
Cathode-Bias Resistor	150	ohms
Amplification Factor	62	
Plate Resistance (Approx.)	10700	ohms
Transconductance	5800	μmhos
Plate Current	9	mA
Grid Voltage (approx.) for plate current of 100 μA	-5	volts

### MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance	0.5	megohm
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### 6AD6G

Refer to chart at end of section.

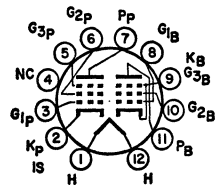
### 6AD7G

Refer to chart at end of section.

# 6AD10

## BEAM POWER TUBE—SHARP-CUTOFF PENTODE

Duodecar type used as FM detector and audio-frequency output amplifier in color and black-and-white television receivers. **Outlines section, 8B**; requires duodecar 12-contact socket.



12EZ

Heater Voltage (ac/dc) .....	6.3	volts
Heater Current .....	1.05	amperes
Heater-Cathode Voltage:		
Peak value .....	±200 max	volts
Average value .....	100 max	volts
Direct Interelectrode Capacitances:		
Beam Power Unit:		
Grid No.1 to Plate .....	0.26	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield .....	11	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield .....	11	pF
Pentode Unit:		
Grid No.1 to Plate .....	0.024	pF
Grid No.3 to Plate .....	3.4	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield .....	8	pF
Grid No.3 to Cathode, Heater, Grid No.1, Grid No.2, Plate, and Internal Shield .....	9.5	pF
Grid No.1 to Grid No.3 .....	0.12	pF
Plate of Beam Power Unit to Plate of Pentode Unit .....	0.34	pF

**Beam Power Unit as Class A<sub>1</sub> Amplifier**

**MAXIMUM RATINGS (Design-Maximum Values)**

Plate Voltage .....	275	volts
Grid-No.2 (Screen-Grid) Voltage .....	275	volts
Plate Dissipation .....	10	watts
Grid-No.2 Input .....	2	watts

**TYPICAL OPERATION**

Plate Voltage .....	250	volts
Grid-No.2 Voltage .....	250	volts
Grid-No.1 (Control-Grid) Voltage .....	—8	volts
Peak AF Grid-No.1 Voltage .....	8	volts
Zero-Signal Plate Current .....	35	mA
Maximum-Signal Plate Current .....	39	mA
Zero-Signal Grid-No.2 Current .....	2.5	mA
Maximum-Signal Grid-No.2 Current .....	7	mA
Plate Resistance (Approx.) .....	0.1	megohm
Transconductance .....	6500	μmhos
Load Resistance .....	5000	ohms
Total Harmonic Distortion .....	10	per cent
Maximum-Signal Power Output .....	4.2	watts

**MAXIMUM CIRCUIT VALUES**

Grid-No.1-Circuit Resistance:		
For fixed-bias operation .....	0.25	megohm
For cathode-bias operation .....	0.5	megohm

**Pentode Unit as Class A<sub>1</sub> Amplifier**

**CHARACTERISTICS**

Plate Supply Voltage .....	150	volts
Grid No.3 (Control Grid) .....	Connected to negative end of cathode resistor	
Grid-No.2 (Screen-Grid) Voltage .....	100	volts
Grid No.1 (Control Grid) .....	Connected to negative end of cathode resistor	
Cathode-Bias Resistor .....	180	ohms
Plate Resistance (Approx.) .....	0.11	megohm
Transconductance, Grid No.1 to Plate .....	3400	μmhos
Transconductance, Grid No.3 to Plate .....	600	μmhos
Plate Current .....	3.2	mA
Grid-No.2 Current .....	3.2	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA .....	—4.5	volts
Grid-No.3 Voltage (Approx.) for plate current of 20 μA .....	—7	volts

**Pentode Unit as FM Sound Detector**

**MAXIMUM RATINGS (Design-Maximum Values)**

Plate Voltage .....	300	volts
Grid-No.3 Voltage:		
Negative-bias value .....	100	volts
Positive-bias value .....	25	volts
Grid-No.2 Supply Voltage .....	300	volts
Grid-No.2 Voltage .....		
Grid-No.1 Voltage:		
Negative-bias value .....	See curve page 300	
Positive-bias value .....	—50	volts
Plate Dissipation .....	0	volts
Grid-No.3 Input .....	1.7	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts .....	1	watt
For grid-No.2 voltages between 150 and 300 volts .....	See curve page 300	