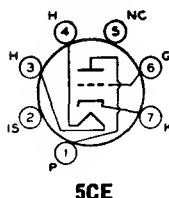


6AB4**HIGH-MU TRIODE**

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 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.

6AC10**HIGH-MU TRIPLE TRIODE**

Duodecar type used in matrixing (color-difference) circuits of color television receivers. Outlines section, 8C; requires duodecar 12-contact socket. Heater: volts (ac/dc), 6.3; amperes, 0.6; average warm-up time, 11 seconds; maximum heater-cathode volts, ± 200 peak, 100 average.

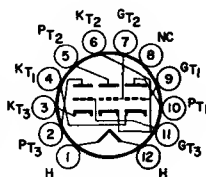
**12FE****Class A₁ Amplifier****MAXIMUM RATINGS (Design-Maximum Values)**

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	μ mhos
Plate Current	9	mA
Grid Voltage (approx.) for plate current of 100 μ A	-5	volts

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance	0.5	megohm
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6AD6G

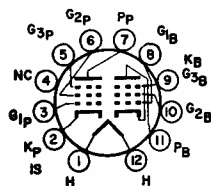
Refer to chart at end of section.

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 A₁ 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 A₁ 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:	See curve page 98	
Negative-bias value	—50	volts
Positive-bias value	0	volts
Plate Dissipation	1.7	watts
Grid-No.3 Input	0.1	watt
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 98	

MAXIMUM CIRCUIT VALUES

Grid-No.3-Circuit Resistance	0.68	megohm
Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.22	megohm
For cathode-bias operation	0.47	megohm