

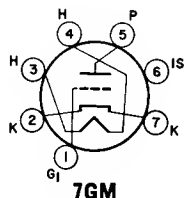
Cathode-Bias Resistor	56	ohms
Plate Resistance (Approx.)	0.2	megohm
Transconductance	9300	μ mhos
Plate Current	11.5	mA
Grid-No.2 Current	3.6	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μ A	-6	volts
Grid-No.1 Voltage (Approx.) for plate current of 2 mA	-3	volts

Diode Unit

MAXIMUM RATINGS (Design-Maximum Values)		
DC Plate Current	5	mA
CHARACTERISTICS , Instantaneous Value		
Tube Voltage Drop for plate current of 50 mA	10	volts

6HK5**HIGH-MU TRIODE**

Miniature type with frame grid used in vhf tuners of television receivers. Outlines section, 5C; requires miniature 7-contact socket.



Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.19	ampere
Peak Heater-Cathode Voltage	± 100 max	volts
Direct Interelectrode Capacitances:*		
Grid to Plate	0.29	pF
Grid to Cathode, Heater, and Internal Shield	4.4	pF
Plate to Cathode, Heater, and Internal Shield	2.6	pF
Heater to Cathode	2.5	pF

* With external shield.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)		
Plate Voltage	200	volts
Grid Voltage, Negative-bias value	50	volts
Cathode Current	22	mA
Plate Dissipation	2.3	watts

CHARACTERISTICS

Plate Voltage	135	volts
Grid Voltage	-1	volt
Amplification Factor	75	
Plate Resistance (Approx.)	5000	ohms
Transconductance	15000	μ mhos
Plate Current	12.5	mA
Input Resistance**	600	ohms
Input Capacitance**	9	pF
Noise Figure#	4.2	dB
Grid Voltage (Approx.) for transconductance of 150 μ mhos	-5	volts
Grid Voltage (Approx.) for transconductance of 1500 μ mhos	-2.6	volts

MAXIMUM CIRCUIT VALUE

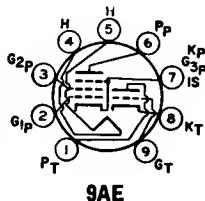
Grid-Circuit Resistance, for cathode-bias operation	1	megohm
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** Measured at 200 MHz with plate effectively grounded for rf voltages.

For a neutralized triode amplifier at a frequency of 200 MHz with signal source impedance adjusted for minimum noise output.

6HL8**MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE**

Miniature type used in color and black-and-white television receiver applications. The triode unit is used as a sync-separator or voltage-amplifier tube, and the pentode unit is used as a video if-amplifier, agc-amplifier, or reactance tube. Outlines section, 6B; requires miniature 9-contact socket. Heater: volts (ac/dc), 6.3; amperes, 0.6; warm-up time (average), 11 seconds; maximum heater-cathode volts, ± 200 peak, 100 average.



Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

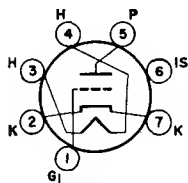
	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	330	volts
Grid-No.2 Voltage	See curve page 98		
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.5	2.5	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	0.55	watt
For grid-No.2 voltages between 165 and 330 volts	—	See curve page 98	

CHARACTERISTICS

Plate Voltage	125	125	volts
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	—1	—1	volt
Amplification Factor	40	—	
Plate Resistance (Approx.)	5000	150000	ohms
Transconductance	7000	10000	μmhos
Plate Current	12.5	12	mA
Grid-No.2 Current	—	4.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—	—7	volts

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	1	—	megohm
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7GM

HIGH-MU TRIODE

**6HM5/
6HA5**

3HM5/3HA5

Miniature type used as rf-amplifier tube in vhf color and black-and-white television tuners. Outlines section, 5C; requires miniature 7-contact socket. Type 3HM5/3HA5 is identical with type 6HM5/6HA5 except for heater ratings.

	3HM5/3HA5	6HM5/6HA5	
Heater Voltage (ac/dc)	2.7	6.3	volts
Heater Current	0.45	0.18	ampere
Peak Heater-Cathode Voltage	±110 max	±110 max	volts
Direct Interelectrode Capacitances:			
Grid to Plate		0.36	pF
Grid to Cathode, Heater, Internal Shield, and External Shield		4.3	pF
Plate to Cathode, Heater, Internal Shield, and External Shield		0.080	pF
Cathode to Plate		2.9	pF
Cathode to Heater, Grid, Internal Shield, and External Shield		3.1	pF
Heater to Cathode		2.3	pF
Heater to Grid		0.070 max	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Voltage	220	volts
DC Plate Supply Voltage	600	volts
Grid Voltage	—50	volts
Cathode Current	22	mA
Plate Dissipation	2.6	watts

CHARACTERISTICS AND TYPICAL OPERATION

	Fixed Bias		Cathode Bias		
DC Plate Supply Voltage	135	135	135	135	volts
Plate-Load Resistor	—	—	1000	5600	ohms
Internal-Shield Voltage	0	0	0	0	volts
DC Grid Voltage	—1	—2.7	—	—	volts
Cathode-Bias Resistor	—	—	0	87	ohms
Amplification Factor	72	—	80	72	
Transconductance	14500	1500	20000	14500	μmhos
Plate Current	11.5	—	19	11.5	mA
DC Grid Current	—	—	10	—	μA
Grid-No.1 Voltage for one-per-cent transconductance	—	—	—5.3	—8.1	volts