

6HM5/6HA5

High-Mu Triode

7-PIN MINIATURE TYPE

Useful as Grounded-Cathode RF-Amplifier Tube in VHF Tuners

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.180	amp

Peak heater-cathode voltage:

Heater negative with respect to cathode.	110 max.	volts
Heater positive with respect to cathode.	110 max.	volts

Direct Interelectrode Capacitances:^a

Grid to plate	0.36	pf
Grid to cathode, internal shield, external shield, and heater	4.3	pf
Plate to cathode, internal shield, external shield, and heater	2.9	pf
Cathode to plate.	0.080	pf
Cathode to grid, internal shield, external shield, and heater	3.1	pf
Heater to cathode	2.3	pf
Heater to grid.	0.070 max.	pf

Characteristics, Class A₁ Amplifier:

Plate Voltage	135	volts
Grid Voltage.	-1	volt
Amplification Factor.	72	
Plate Resistance (Approx.).	5000	ohms
Transconductance.	14500	μmhos
Plate Current	11.5	ma
Grid Voltage (Approx.) for Transconductance (μmhos) = 150	-5.7	volts

Mechanical:

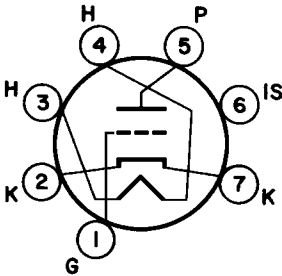
Operating Position.	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length.	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter.	0.650" to 0.750"
Dimensional Outline	See <i>General Section</i>
Bulb.	T5-1/2
Base.	Small-Button Miniature 7-Pin (JEDEC No.E7-1)



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Basing Designation for BOTTOM VIEW. 7GM

- Pin 1 –Grid
- Pin 2 –Cathode
- Pin 3 –Heater
- Pin 4 –Heater



- Pin 5 –Plate
- Pin 6 –Internal Shield
- Pin 7 –Cathode

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

Plate Supply Voltage.	600 max.	volts
Plate Voltage	220 max.	volts
Grid Voltage:		
Negative-bias value	50 max.	volts
Positive-bias value	0 max.	volts
Cathode Current	22 max.	ma
Plate Dissipation	2.6 max.	watts

Typical Operation:

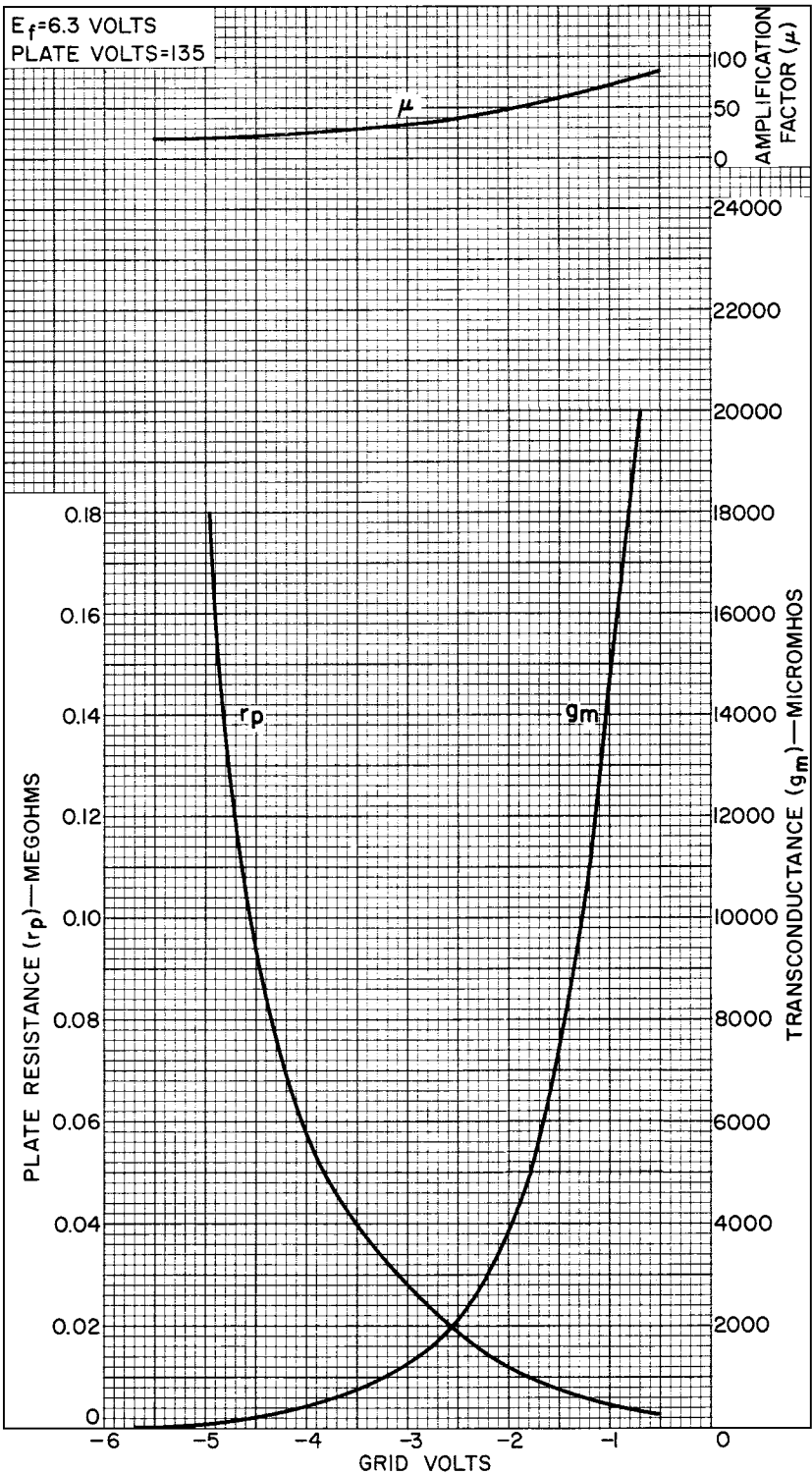
Plate Voltage	135	volts
Grid Voltage.Adjusted for grid $\mu a = 10$		
Plate Load Resistance	1000	ohms
Amplification Factor.	80	
Plate Resistance (Approx.).	4000	ohms
Transconductance.	20000	$\mu mhos$
Plate Current	19	ma

Maximum Circuit Values:

Grid-Circuit Resistance:		
For fixed-bias operation.	1 max.	megohm
For cathode-bias operation.	1 max.	megohm

^a With external shield JEDEC No.316 connected to cathode.

AVERAGE CHARACTERISTICS

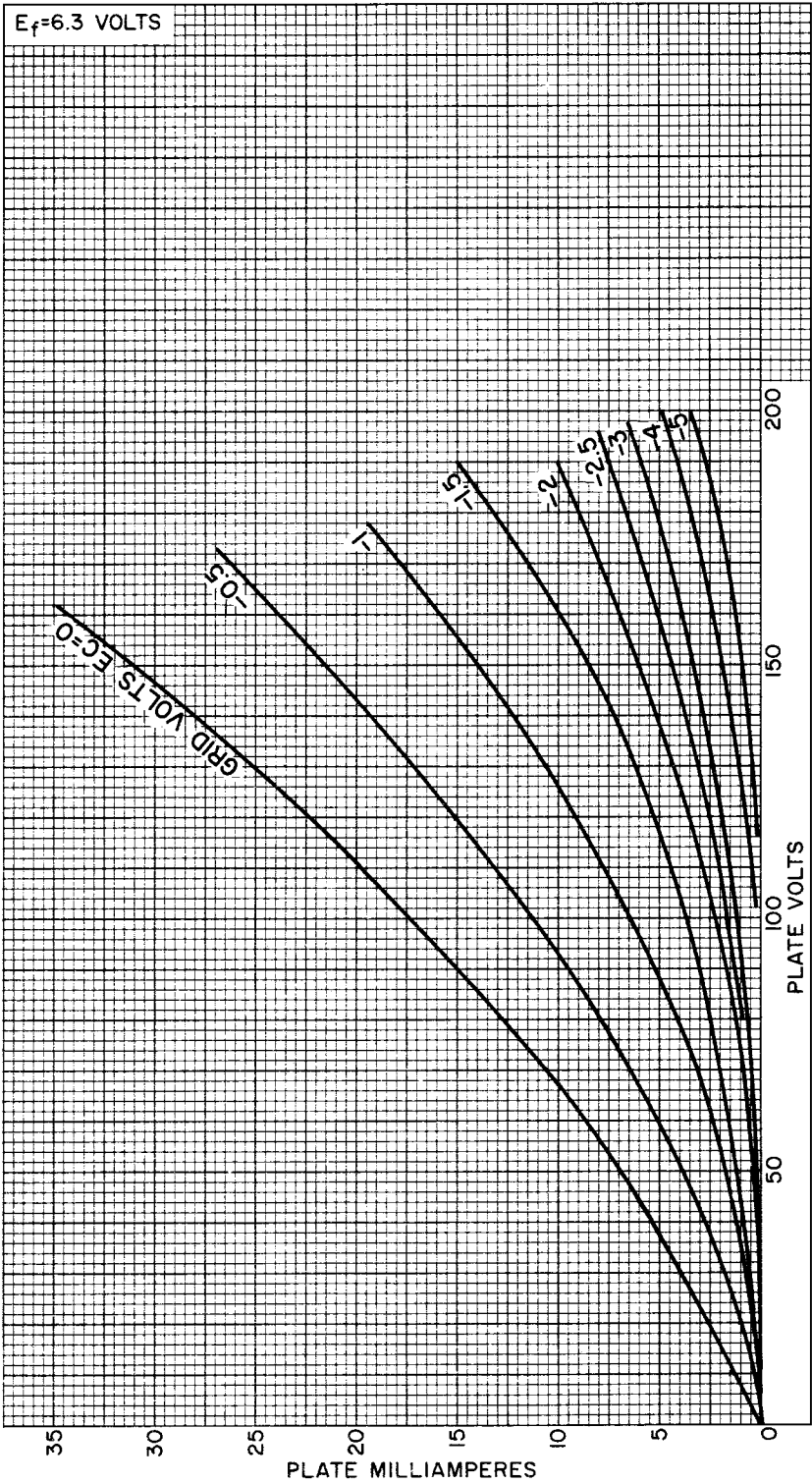


92CM-12224



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AVERAGE PLATE CHARACTERISTICS



92CM-12223

