



6AH6

Description and Rating

RADIO-FREQUENCY AMPLIFIER PENTODE

GENERAL DESCRIPTION

Principal Application: The 6AH6 is a miniature sharp-cutoff pentode. Its high transconductance and

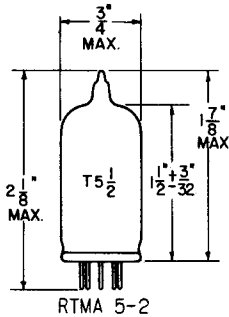
Cathode: Coated Unipotential
 Heater Voltage (A-C or D-C) 6.3 Volts
 Heater Current 0.45 Ampere
 Envelope: T-5½, Glass
 Base: E7-1, Miniature Button 7-Pin
 Mounting Position: Any

low input and output capacitances adapt it to use as a wide-band amplifier or as a reactance tube.

Direct Interelectrode Capacitances:

	Without Shield	With Shield*	
Grid 1 to Plate (Max)	0.030	0.020	μμf
Input	10	10	μμf
Output	2.0	3.6	μμf

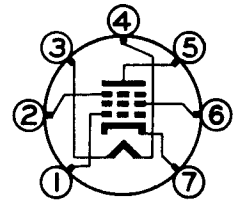
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

- Pin 1 - Grid Number 1
- Pin 2 - Grid Number 3 (Suppressor)
- Pin 3 - Heater
- Pin 4 - Heater
- Pin 5 - Plate
- Pin 6 - Grid Number 2 (Screen)
- Pin 7 - Cathode

BASING DIAGRAM



RTMA 7CC
BOTTOM VIEW

DESIGN CENTER VALUES:

Plate Voltage	300	Volts
Screen Supply Voltage	300	Volts
Screen Voltage	150	Volts
Plate Dissipation	3.2	Watts
Screen Dissipation	0.4	Watt
Cathode Current	13	Milliamperes
Heater-Cathode Voltage	90	Volts

MAXIMUM RATINGS

CHARACTERISTICS AND TYPICAL OPERATION

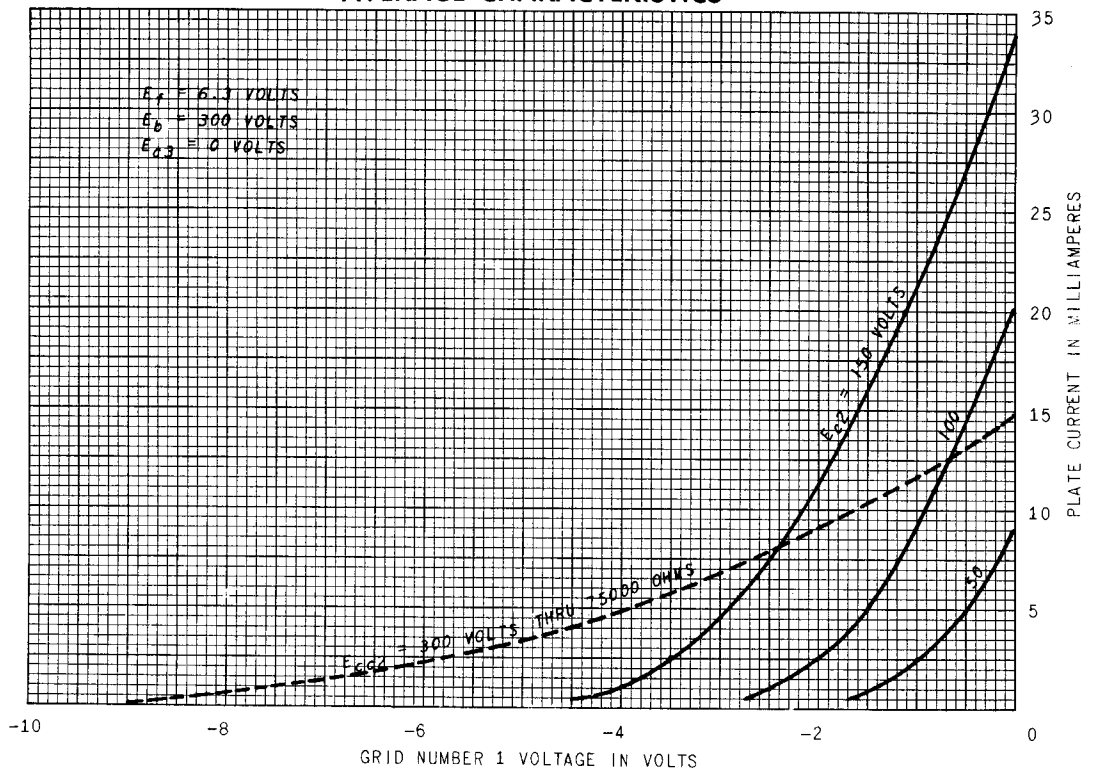
CLASS A₁ AMPLIFIER

	Pentode Connection	Triode Connection**	
Plate Voltage	300	150	Volts
Suppressor Voltage*	0	---	Volts
Screen Voltage	150	---	Volts
Cathode Bias Resistor	160	160	Ohms
Amplification Factor	---	40	
Plate Resistance (Approx)	0.5	0.0036	Megohm
Transconductance	9000	11000	Micromhos
Plate Current	10	12.5	Milliamperes
Screen Current	2.5	---	Milliamperes
Grid Number 1 Voltage (Approx) for I _b = 10 Microamperes	-7	-7	Volts

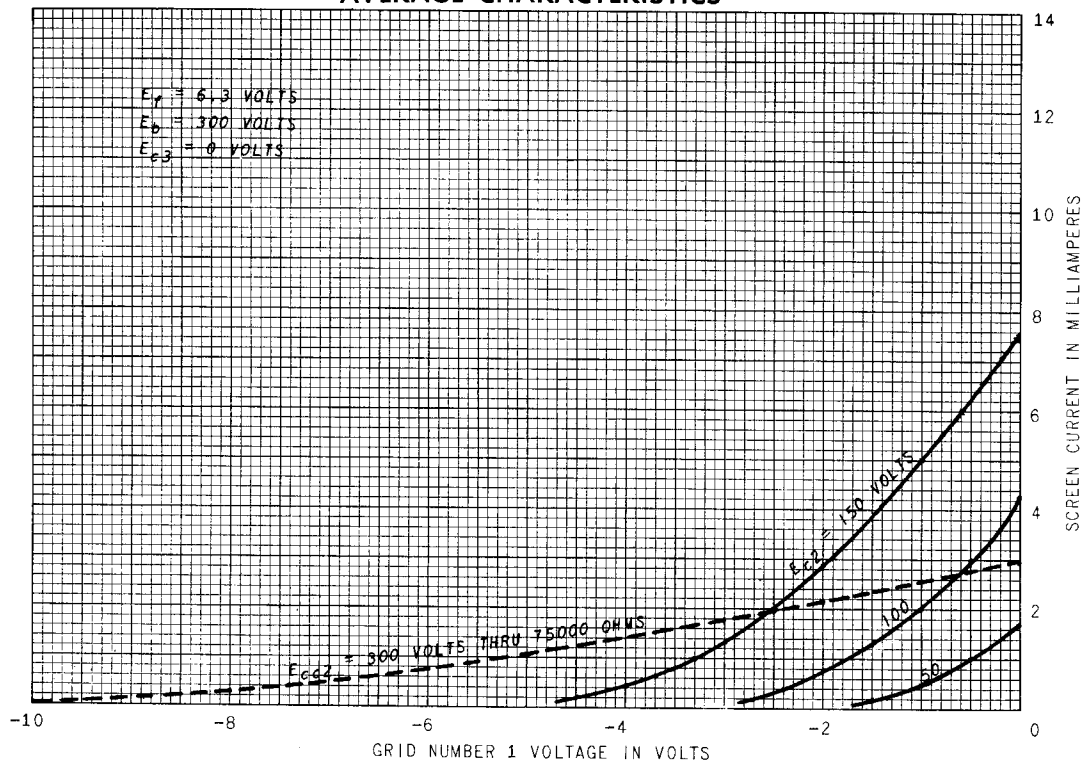
With external shield #316 connected to pin 7
 * Pin 2 connected to pin 7 at socket
 ** For triode connection, connect grids 2 and 3 to plate.

Note: Grid number 3 has practically no control characteristics, and it is not intended to be used as a control electrode. Its transconductance to the plate approximates 2 micromhos and the mu is 0.7 to 1.0.

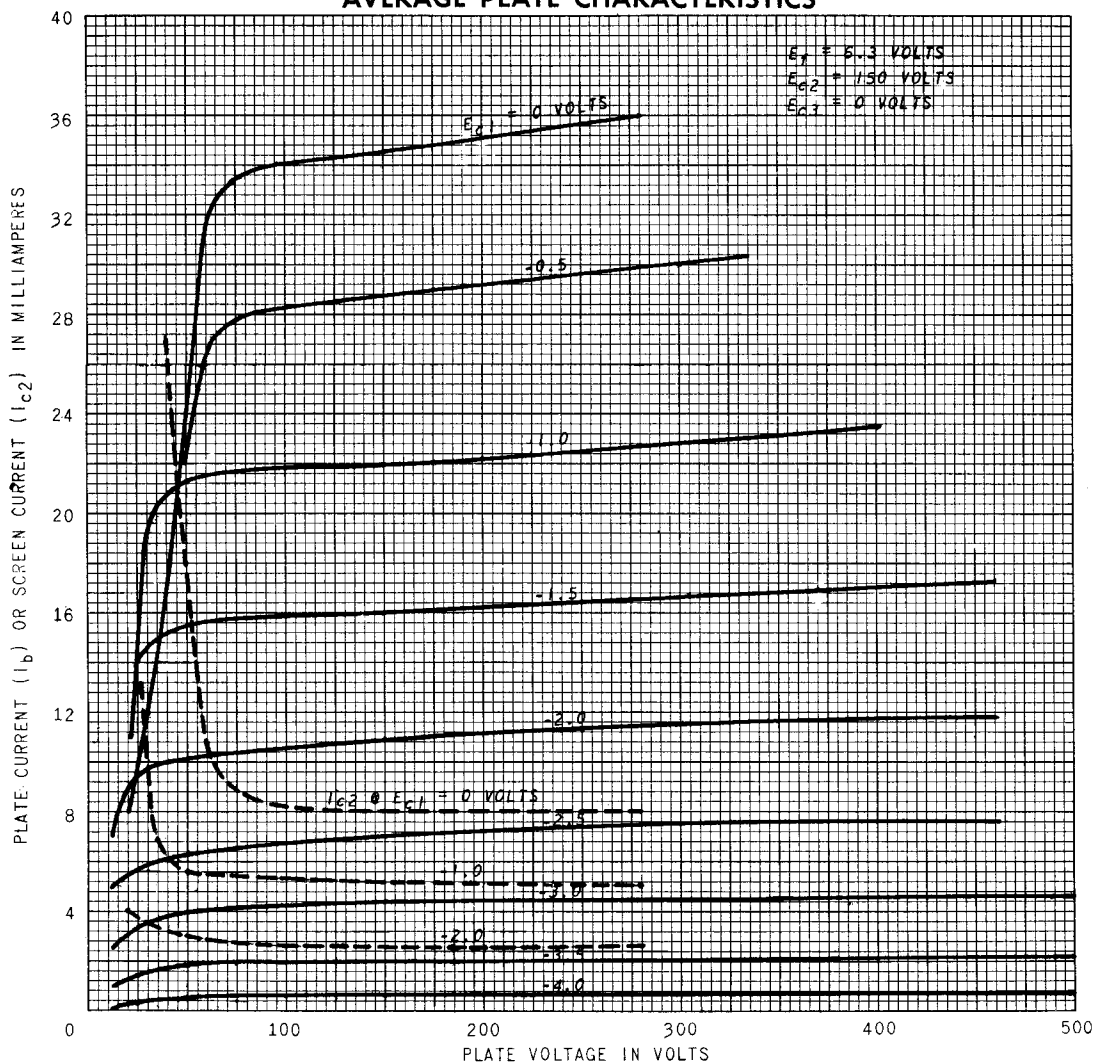
AVERAGE CHARACTERISTICS



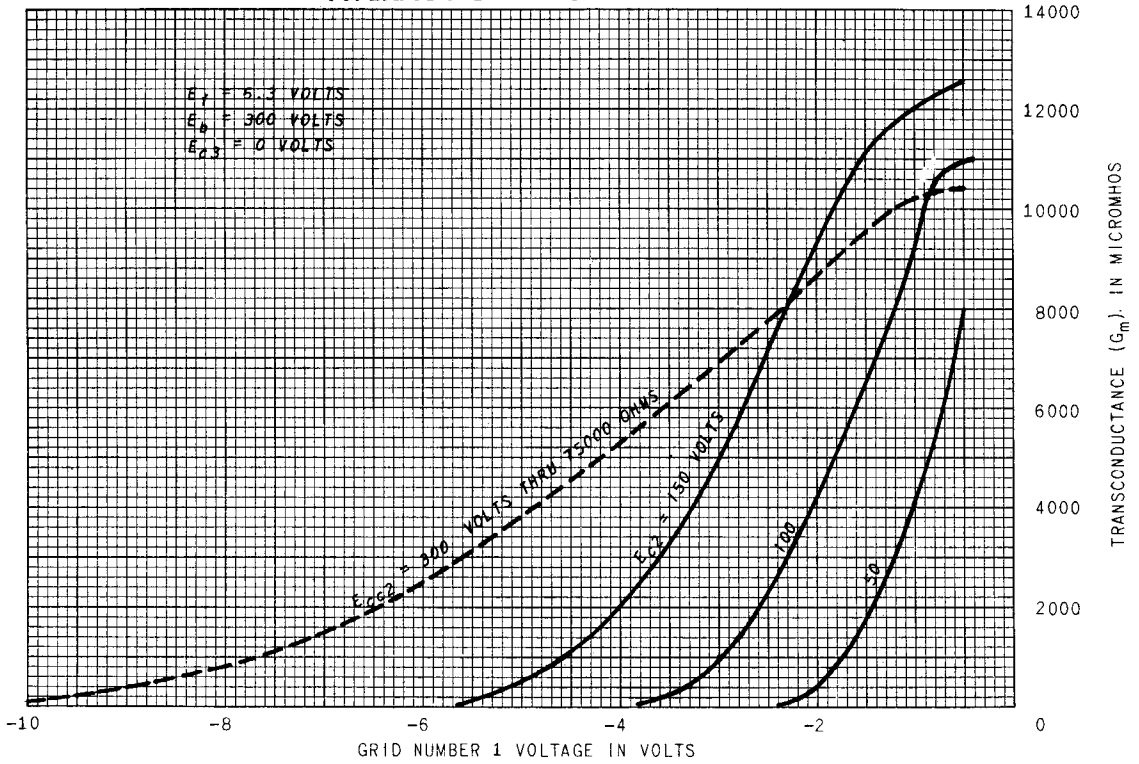
AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Tube Divisions, Electronics Department



Schenectady, N. Y.