

6AG5

Description and Rating

RADIO-FREQUENCY AMPLIFIER PENTODE

GENERAL DESCRIPTION

Principal Application: The 6AG5 is a miniature sharp-cutoff pentode designed for use as an intermediate-frequency amplifier or radio-frequency amplifier up to frequencies of approximately 400 mega-

Cathode: Coated Unipotential
Heater Voltage (A-C or D-C) 6.3 Volts
Heater Current 0.3 Ampere
Envelope: T-5½ Glass
Base: E7-1, Miniature Button 7-Pin
Mounting Position: Any

cycles. The tube features high transconductance and low input and output capacitances. The use of two cathode leads facilitates isolation of the input and output circuits and thus minimizes degeneration.

Direct Interelectrode Capacitances:

With Shield* Without Shield

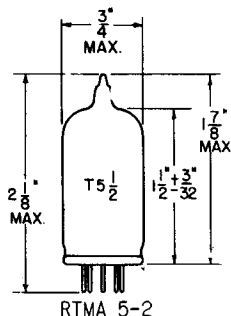
Pentode Connection

Grid 1 to Plate (Max)	0.020	0.030	μμf
Input	6.6	6.5	μμf
Output	3.1	1.8	μμf

Triode Connection*

Grid to Plate	2.5	2.5	μμf
Input	3.6	3.6	μμf
Output	4.3	3.0	μμf

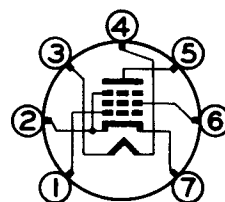
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

- Pin 1 - Grid Number 1
- Pin 2 - Cathode, Internal Shield, and Grid Number 3
- Pin 3 - Heater
- Pin 4 - Heater
- Pin 5 - Plate
- Pin 6 - Grid Number 2 (Screen)
- Pin 7 - Cathode, Internal Shield, and Grid Number 3

BASING DIAGRAM



RTMA 7BD
BOTTOM VIEW

DESIGN CENTER VALUES:

	Triode Connection*	Pentode Connection	
Plate Voltage	300	300	Volts
Screen Supply Voltage	---	300	Volts
Screen Voltage	---	150	Volts
Positive D-C Grid Number 1 Voltage	0	0	Volts
Plate Dissipation	2.5	2.0	Watts
Screen Dissipation	---	0.5	Watt
Heater-Cathode Voltage	90	90	Volts

MAXIMUM RATINGS

CLASS A₁ AMPLIFIER

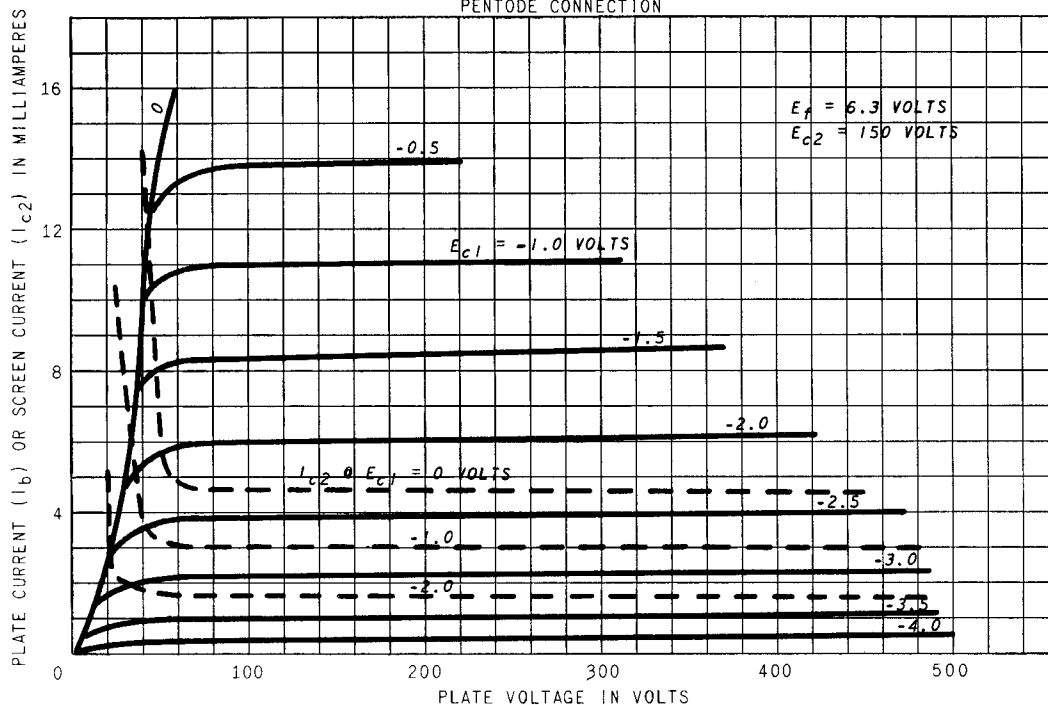
	Triode Connection*	Pentode Connection	
Plate Voltage	250	125	Volts
Screen Voltage	---	125	Volts
Cathode Bias Resistor	820	100	Ohms
Amplification Factor	42	---	---
Plate Resistance (Approx)	0.01	0.5	Megohm
Transconductance	3800	5100	Micromhos
Plate Current	5.5	7.2	Milliamperes
Screen Current	---	2.1	Milliamperes
Grid Number 1 Voltage (Approx)	---	---	---
for I _b = 10 Microamperes	---	-5	-8 Volts

With external shield #316 connected to pin 7

* For triode connection, connect grid 2 to plate.

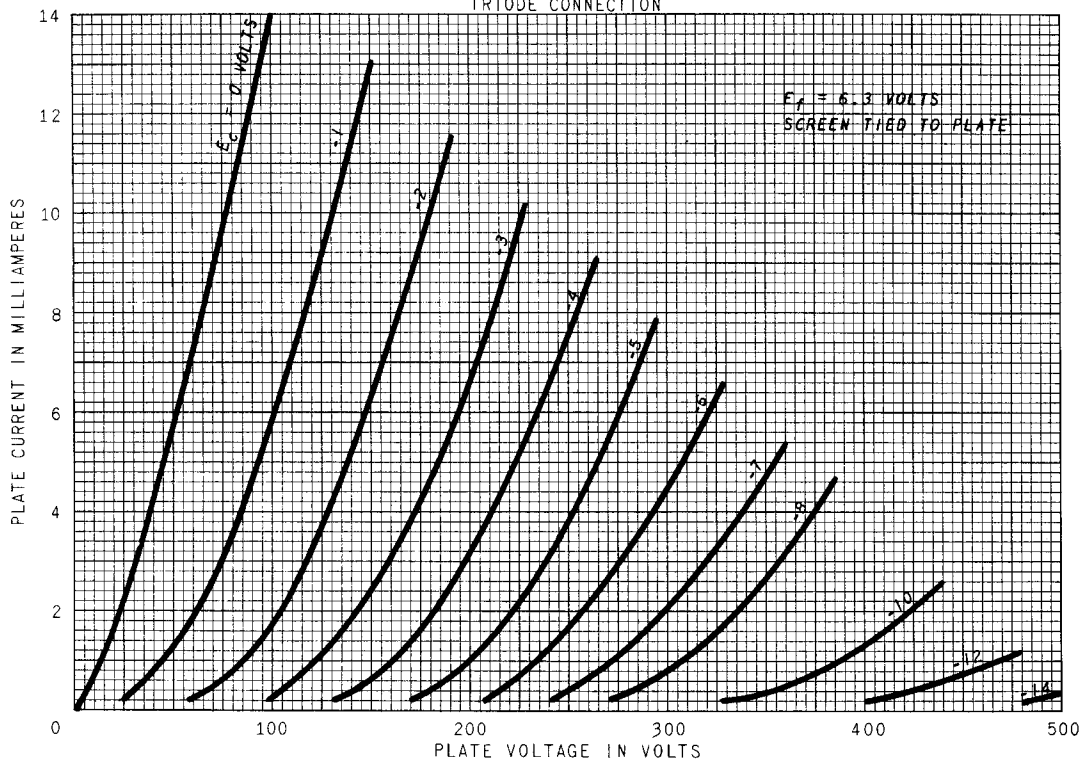
AVERAGE PLATE CHARACTERISTICS

PENTODE CONNECTION



AVERAGE PLATE CHARACTERISTICS

TRIODE CONNECTION



Tube Divisions, Electronics Department

GENERAL  **ELECTRIC**

Schenectady, N. Y.