

6SF5

Description and Rating

HIGH-MU TRIODE AMPLIFIER

GENERAL DESCRIPTION

Principal Application: The 6SF5 is a heater-cathode type high-mu triode designed for service as a high gain audio-frequency amplifier and is especially useful in resistance-coupled amplifier circuits in

a-c or battery operated equipment. Except for capacitances the electrical ratings and characteristics of the 6SF5 are the same as those of the 6F5 and 6F5-GT.

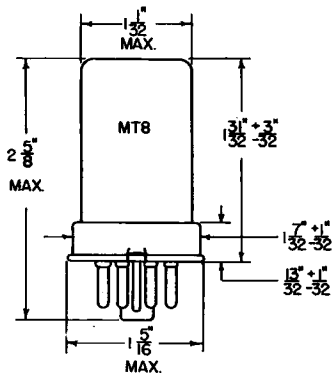
Cathode: Coated Unipotential
 Heater Voltage (A-C or D-C) 6.3 Volts
 Heater Current 0.3 Ampere
 Envelope: MT-8 Metal Shell
 Base: B6-23 Small Wafer Octal 6-Pin Phenolic

Mounting Position: Any
 Direct Interelectrode Capacitances: *
 Grid to Plate 2.4 $\mu\mu\text{f}$
 Input 4.0 $\mu\mu\text{f}$
 Output 3.6 $\mu\mu\text{f}$

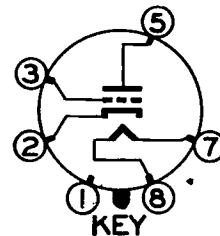
PHYSICAL DIMENSIONS

TERMINAL CONNECTIONS

BASING DIAGRAM



- Pin 1 - Metal Shell
- Pin 2 - Cathode
- Pin 3 - Grid
- Pin 5 - Plate
- Pin 7 - Heater
- Pin 8 - Heater



RMA 6AB
BOTTOM VIEW

RMA 8-1

MAXIMUM RATINGS

	Design Center	Absolute	
Plate Voltage	300	330	Volts
D-C Heater-Cathode Voltage	90	100	Volts

CHARACTERISTICS AND TYPICAL OPERATION

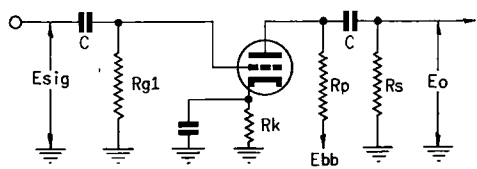
CLASS A AMPLIFIER

Heater Voltage	6.3	6.3	Volts
Plate Voltage	100	250	Volts
Grid Bias Voltage	-1	-2	Volts
Amplification Factor	100	100	
Plate Resistance	85000	66000	Ohms
Transconductance	1150	1500	Micromhos
Plate Current	0.4	0.9	Milliampere

* Approximate values with metal shell connected to cathode.

CLASS A RESISTANCE-COUPLED AMPLIFIER

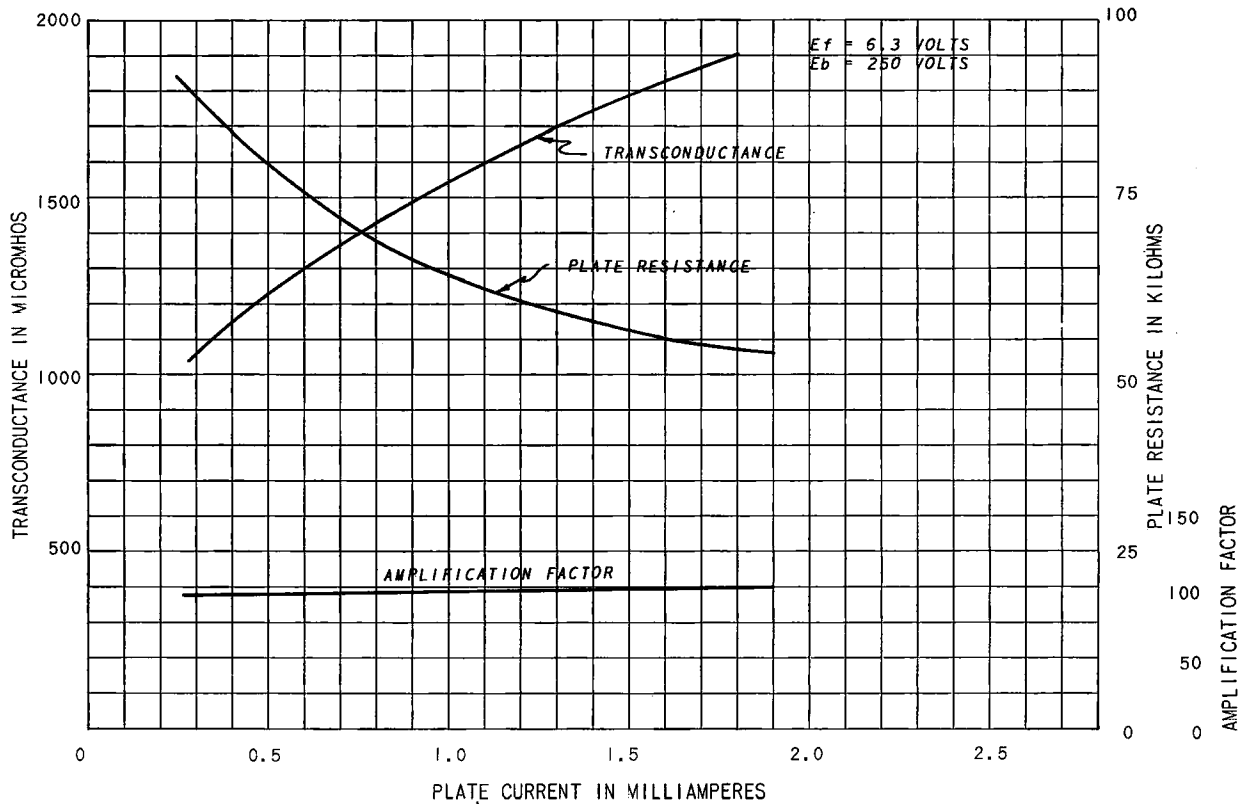
Rp Meg.	Rg1 Meg.	Rs Meg.	Ebb = 90 Volts			Ebb = 180 Volts			Ebb = 300 Volts		
			Rk	Gain	Eo	Rk	Gain	Eo	Rk	Gain	Eo
0.10	*	0.10	4300	26	5	2000	36	18	1300	40	37
0.10	*	0.24	4700	33	8	2200	43	26	1500	47	48
0.24	*	0.24	8200	37	10	3900	50	24	2400	54	45
0.24	*	0.51	9100	42	11	4300	54	29	3000	62	56
0.51	*	0.51	12000	46	12	6200	59	29	4300	66	55
0.51	*	1.0	13000	50	13	6800	63	36	5100	71	66
0.24	10	0.24	---	40	4	---	53	16	---	62	34
0.24	10	0.51	---	48	6	---	62	22	---	68	44
0.51	10	0.51	---	49	6	---	64	19	---	71	41
0.51	10	1.0	---	53	9	---	68	25	---	77	50



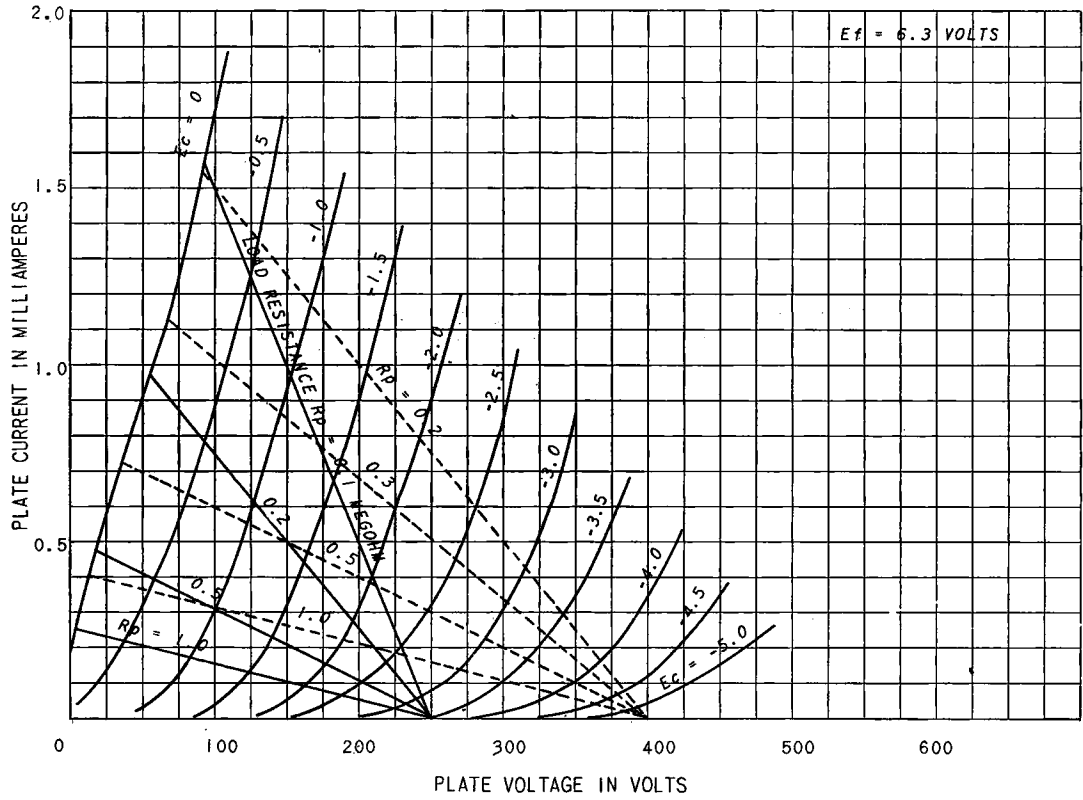
Note: Coupling capacitors (C) should be selected to give desired frequency response. Rk should be adequately by-passed.

Notes: 1. Eo is maximum RMS voltage output for five percent (5%) total harmonic distortion. 2. Gain measured at 2.0 volts RMS output. 3. For zero-bias data generator impedance is negligible. *Value of Rg1 is non-critical.

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Electronics Department

GENERAL  ELECTRIC

Schenectady, N. Y.