Electronic TUBE

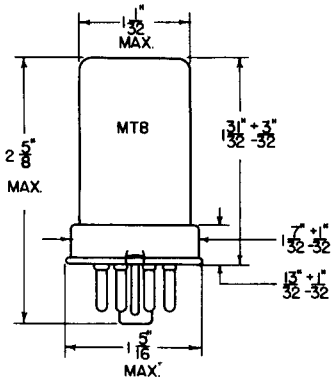
6J5
Description and Rating
GENERAL-PURPOSE TRIODE

GENERAL DESCRIPTION

Principal Application: The 6J5 is a general-purpose triode designed for use as a detector, amplifier or oscillator. Features of the 6J5 include a relatively high transconductance and a medium amplification factor. It is well suited to resistance-coupled service, having high output voltage capabilities.

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
Mounting Position	Any
Direct Interelectrode Capacitances: #	
Grid to Plate	3.4 μμf
Input	3.4 μμf
Output	3.6 μμf

PHYSICAL DIMENSIONS

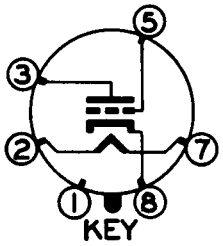


RTMA 8-1

TERMINAL CONNECTIONS

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

BASING DIAGRAM



RTMA 6Q
BOTTOM VIEW

MAXIMUM RATINGS

DESIGN CENTER VALUES

Plate Voltage	300	Volts
Positive D-C Grid Voltage	0	Volts
Plate Dissipation	2.5	Watts
Cathode Current	20	Milliamperes
Heater-Cathode Voltage	90	Volts
Grid Circuit Resistance	1.0	Megohm

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A_1 AMPLIFIER

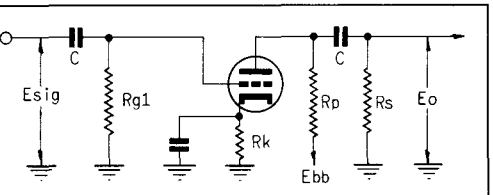
Plate Voltage	90	250	Volts
Grid Voltage	0	-8	Volts
Amplification Factor	20	20	
Plate Resistance (Approx)	6700	7700	Ohms
Transconductance	3000	2600	Micromhos
Plate Current	10	9	Milliamperes
Grid Voltage (Approx) for I_b = 10 Microamperes	-7	-18	Volts

 # with pin 1 connected to pin 8 at the socket

Supersedes ET-T299 dated 5-46

CLASS A RESISTANCE-COUPLED AMPLIFIER

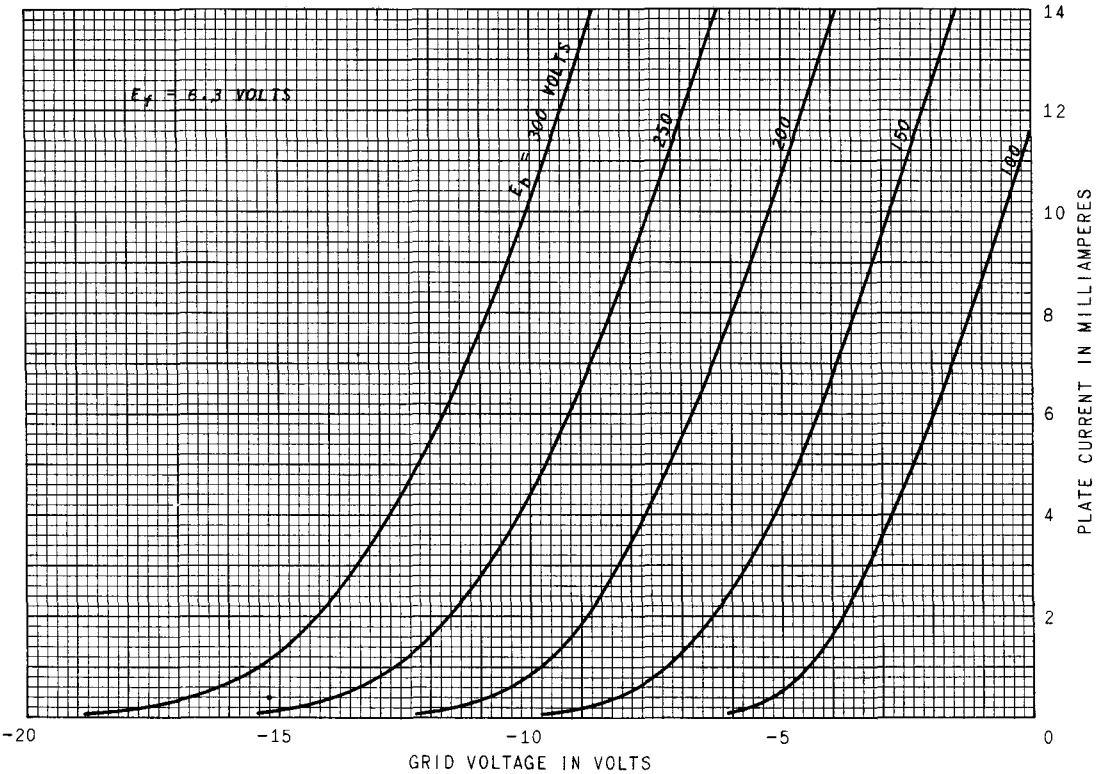
Rp Meg.	Rs Meg.	Rg1 Meg.	Ebb = 90 Volts Rk	Gain	Eo	Ebb = 180 Volts Rk	Gain	Eo	Ebb = 300 Volts Rk	Gain	Eo
0.10	0.10	0.1	3300	14	13	2200	14	26	1800	14	40
0.10	0.24	0.1	3600	14	16	2700	15	33	2200	15	51
0.24	0.24	0.1	7500	14	16	5100	15	30	4300	15	44
0.24	0.51	0.1	9100	14	19	6800	15	39	5100	15	54
0.51	0.51	0.1	13000	14	16	9100	15	30	6800	16	40
0.51	1.0	0.1	15000	14	19	10000	16	32	7500	16	45
0.24	0.24	10	0	15	13	0	16	33	0	17	46
0.24	0.51	10	0	16	17	0	17	38	0	18	62
0.51	0.51	10	0	16	14	0	18	32	0	18	53
0.51	1.0	10	0	17	18	0	18	41	0	19	68



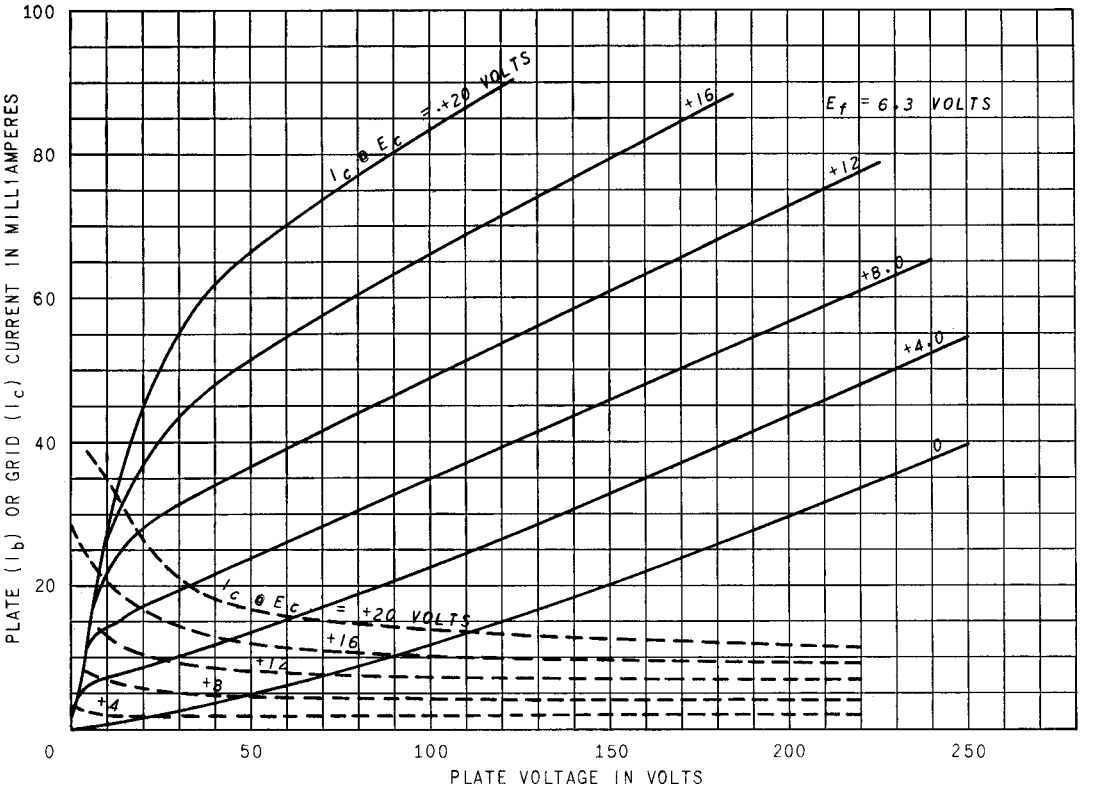
Note: Coupling capacitors (C) should be selected to give desired frequency response. Rk should be adequately by-passed.

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.

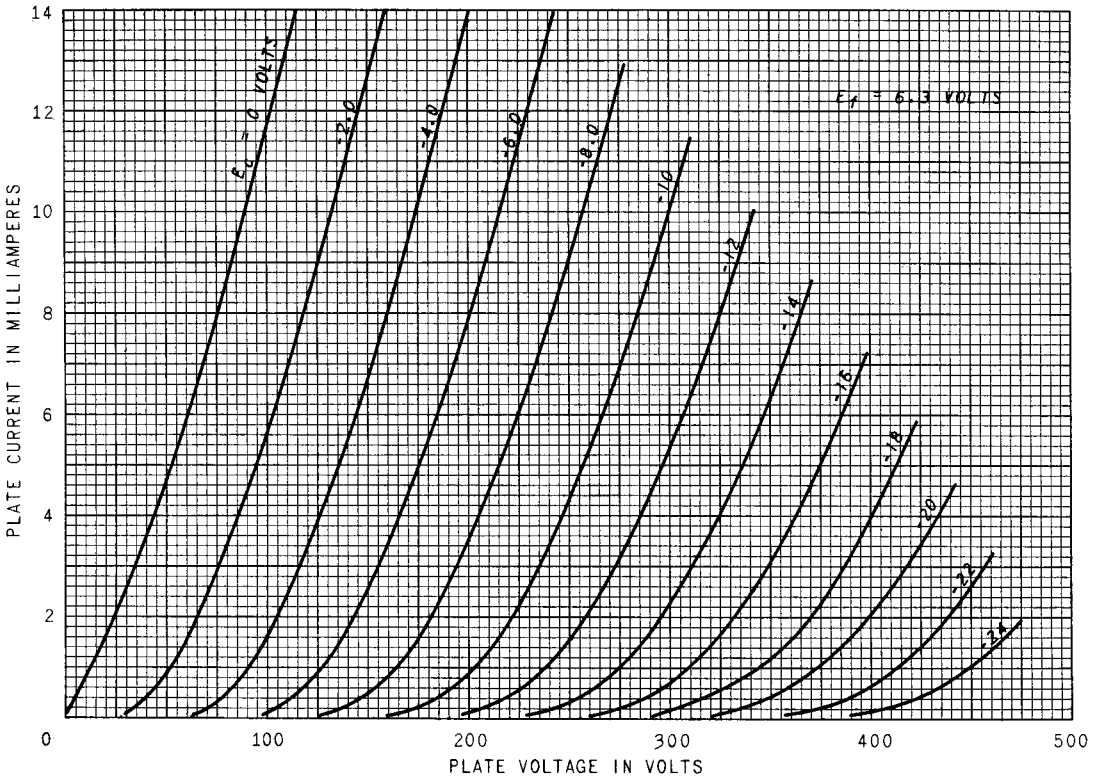
AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



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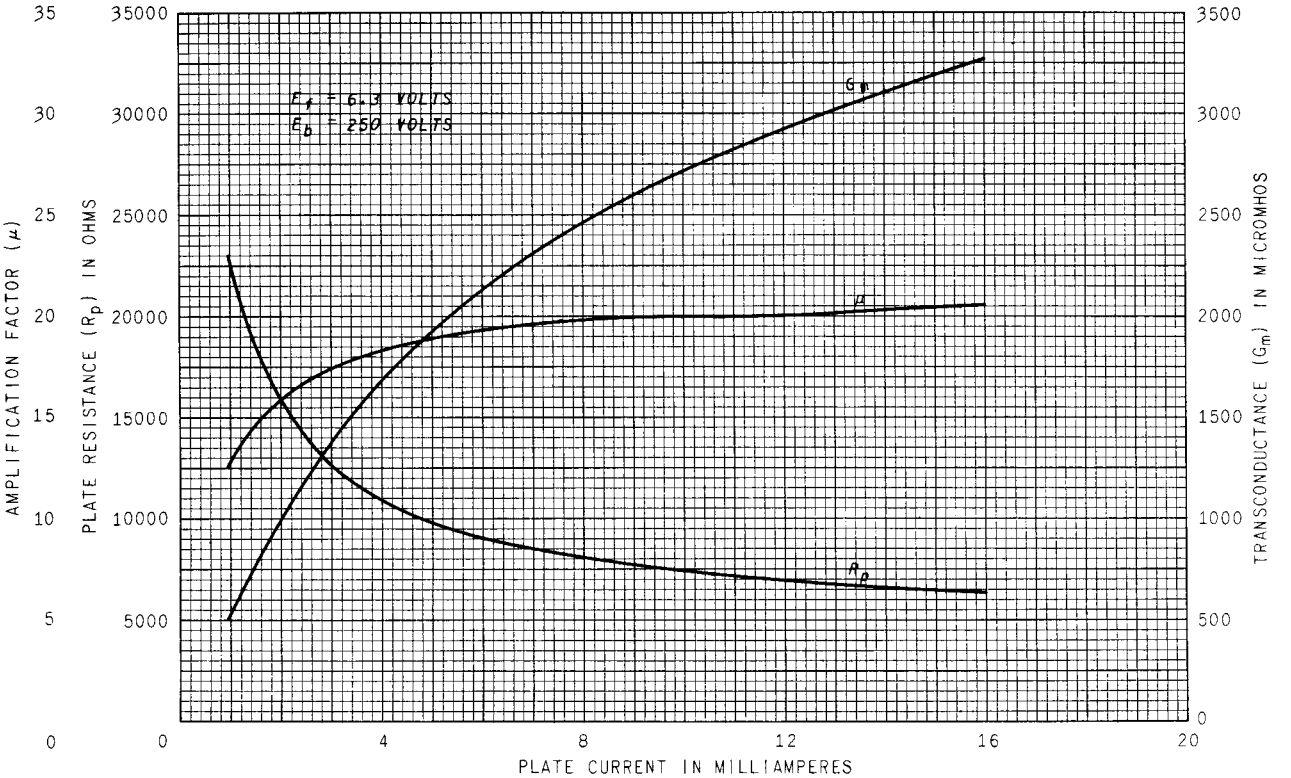

TUBE DEPARTMENT

GENERAL ELECTRIC

Schenectady 5, N. Y.