

High-Mu Triode

7-PIN MINIATURE TYPE
For VHF-Amplifier Applications

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3 $\pm$ 10%	volts
Current at 6.3 volts.	0.18	amp

Direct Interelectrode Capacitances (Approx.):^a

Grid to plate	0.52	$\mu\mu\text{f}$
Grid to cathode, internal shield, and heater.	5	$\mu\mu\text{f}$
Plate to cathode, internal shield, and heater.	3.5	$\mu\mu\text{f}$
Heater to cathode	2.5 ^b	$\mu\mu\text{f}$

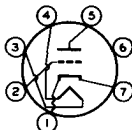
Characteristics, Class A₁ Amplifier:

Plate Voltage	135	volts
Grid Voltage.	-1	volt
Amplification Factor.	78	
Plate Resistance (Approx.).	5400	ohms
Transconductance.	15000	μmhos
Plate Current	11.5	ma
Grid Voltage (Approx.) for transconductance (μmhos) =		
150	-4.2	volts
1500.	-2.5	volts
Input Resistance ^c	275	ohms
Input Capacitance ^c	11.2	$\mu\mu\text{f}$
Noise Figure ^d	4.7	db

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" $\pm$ 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)
Basing Designation for BOTTOM VIEW.	7FP

Pin 1 - Cathode
 Pin 2 - Grid
 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 VOLTAGE.	200 max.	volts
GRID VOLTAGE:		
Negative-bias value.	50 max.	volts
Positive-bias value.	0 max.	volts
AVERAGE CATHODE CURRENT.	22 max.	ma
PLATE DISSIPATION.	2.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode. .	100 max.	volts
Heater positive with respect to cathode. .	100 max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:

For cathode-bias operation 1 max. megohm

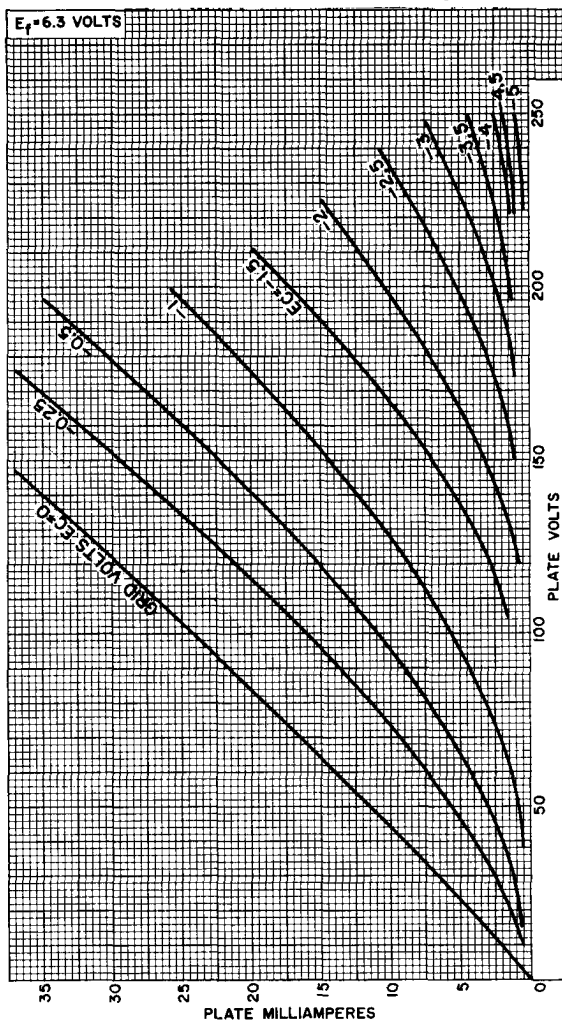
^a With external shield JEDEC No.316 connected to cathode except as noted.

^b With external shield JEDEC No.316 and internal shield connected to ground.

^c Measured at 200 Mc with heater volts = 6.3 and plate effectively grounded for rf voltages.

^d For a neutralized triode amplifier at a frequency of 200 Mc with signal-source impedance adjusted for minimum noise output.

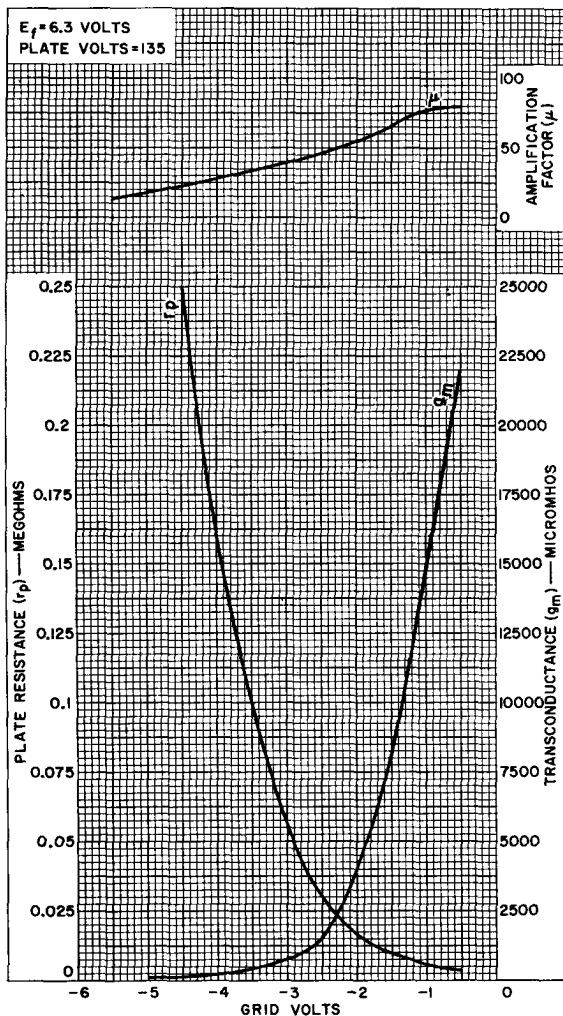
AVERAGE PLATE CHARACTERISTICS



92CM-11024



AVERAGE CHARACTERISTICS



92CM-11023

