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AMPLIFIER TRIODE

<u>GENERAL DATA</u>			
Electrical:			
Filament:			
Voltage	4.5		volts
Current	1.1		amp
Amplification Factor . .	8.5		
Direct Interelectrode Capacitances (Approx.):			
Grid to Plate	8.3		μ if
Grid to Cathode	4.0		μ if
Plate to Cathode	3.0		μ if

Mechanical:

Mounting Position	Vertical, or Horizontal with Plane of Electrodes Vertical
Maximum Overall Length	5-5/8"
Maximum Diameter	2-3/16"
Bulb	S-17
Base	Medium 4-Pin Bayonet

AF POWER AMPLIFIER AND MODULATOR - Class A

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE	350 max.	volts
PLATE DISSIPATION	7.5 max.	watts

Typical Operation:

DC Plate Voltage	350	volts
DC Grid Voltage*	-30	volts
Peak AF Grid Voltage (Approx.)	30	volts
DC Plate Current	9	ma.
Plate Resistance	8700	ohms
Transconductance	980	μ mhos
Load Resistance	18000	ohms
Power Output (5% second harmonic) . . .	0.6	watts

RF POWER AMPLIFIER - Class B Telephony

Carrier conditions per tube for use with
a maximum modulation factor of 1.0

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE	350 max.	volts
DC PLATE CURRENT	40 max.	ma.
PLATE INPUT	14 max.	watts
PLATE DISSIPATION	10 max.	watts

Typical Operation:

DC Plate Voltage	350	volts
DC Grid Voltage*	-40	volts
Peak RF Grid Voltage	90	volts
DC Plate Current	32	ma.

* With dc filament excitation.

MAY 1, 1946

TUBE DIVISION

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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AMPLIFIER TRIODE

Driving Power (Approx.) #	0.1 . . watt
Power Output	2 . . watts

PLATE-MODULATED RF POWER AMPLIFIER - Class C Telephony

Carrier conditions per tube for use with a
maximum modulation factor of 1.0

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE	350 max. volts
DC GRID VOLTAGE.	-150 max. volts
DC PLATE CURRENT	40 max. ma.
DC GRID CURRENT.	10 max. ma.
PLATE INPUT.	14 max. watts
PLATE DISSIPATION.	7 max. watts

Typical Operation:

DC Plate Voltage	300 . . volts
DC Grid Voltage*	-100 . . volts
Peak RF Grid Voltage (Approx.)	140 . . volts
DC Plate Current	30 . . ma.
DC Grid Current.	2 . . ma.
Driving Power (Approx.)	0.3 . . watt
Power Output (Approx.)	4 . . watts

RF POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

Key-down conditions per tube without modulation##

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE	350 max. volts
DC GRID VOLTAGE.	-150 max. volts
DC PLATE CURRENT	40 max. ma.
DC GRID CURRENT.	10 max. ma.
PLATE INPUT.	14 max. watts
PLATE DISSIPATION.	10 max. watts

Typical Operation:

DC Plate Voltage	350 . . volts
DC Grid Voltage*	-80 . . volts
Peak RF Grid Voltage	130 . . volts
DC Plate Current	35 . . ma.
DC Grid Current.	2 . . ma.
Driving Power (Approx.)	0.25 . . watt
Power Output (Approx.)	6 . . watts

* With dc filament excitation.

At crest of af cycle with modulation factor of 1.

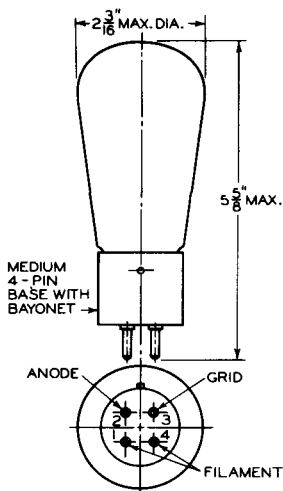
Modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115% of the carrier conditions.

Data on operating frequencies for the 5556 are given
on the sheet TRANS. TUBE RATINGS vs FREQUENCY.

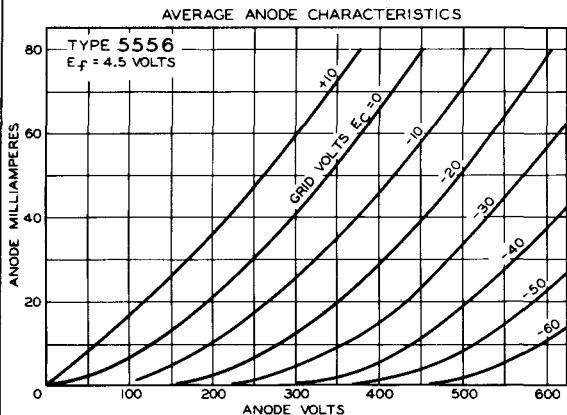


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92CS-6717



92CS-6718



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POWER TRIODE*Useful at frequencies up to 30 Mc***GENERAL DATA****Electrical:**

Filament, Thoriated Tungsten:

Voltage 4.5 ac or dc volts

Current 1.1 amp

Amplification Factor, for

plate volts = 350,

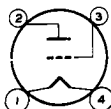
grid volts = -20, and

plate ma = 19 8.5

Direct Interelectrode Capacitances:

Grid to plate 6.7 μf Grid to filament. 2.3 μf Plate to filament 2.2 μf **Mechanical:**Mounting Position Vertical, base down or up, or
Horizontal with pins 1 and 4 in vertical planeMaximum Overall Length. 4-1/2" ←Maximum Diameter. 1-5/8" ←Weight (Approx.). 2 oz ←Base. Medium-Shell Small 4-Pin
with Bayonet (JETEC No. A4-10) ←Basing Designation for BOTTOM VIEW. 4D ←

Pin 1 - Filament



Pin 3 - Grid

Pin 2 - Plate

Pin 4 - Filament

AF POWER AMPLIFIER & MODULATOR -- Class A**Maximum Ratings, Absolute Values:**

DC PLATE VOLTAGE. 350 max. volts

PLATE DISSIPATION 7.5 max. watts

Typical Operation:

DC Plate Voltage. 350 volts

DC Grid Voltage*. -30 volts

Peak AF Grid Voltage (Approx.). 30 volts

DC Plate Current. 9 ma

Plate Resistance (Approx.). 8700 ohms

Load Resistance 18000 ohms

Second Harmonic Distortion. 5 %

Power Output. 0.6 watt

RF POWER AMPLIFIER -- Class B Telephony*Carrier conditions per tube for use with a max. modulation factor of 1.0***Maximum Ratings, Absolute Values:**

DC PLATE VOLTAGE. 350 max. volts

* : See next page.

← Indicates a change.



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POWER TRIODE

DC PLATE CURRENT	40 max.	ma
PLATE INPUT.	14 max.	watts
PLATE DISSIPATION.	10 max.	watts

Typical Operation:

DC Plate Voltage	350	volts
DC Grid Voltage*	-40	volts
Peak RF Grid Voltage	90	volts
DC Plate Current	32	ma
Driving Power (Approx.)*	0.1	watt
Power Output	2	watts

PLATE-MODULATED RF POWER AMPLIFIER -- Class C Telephony

Carrier conditions per tube for use with a max. modulation factor of 1.0

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE	350 max.	volts
DC GRID VOLTAGE.	-150 max.	volts
DC PLATE CURRENT	40 max.	ma
DC GRID CURRENT.	10 max.	ma
PLATE INPUT.	14 max.	watts
PLATE DISSIPATION.	7 max.	watts

Typical Operation:

DC Plate Voltage	300	volts
DC Grid Voltage*	-100	volts
Peak RF Grid Voltage (Approx.)	140	volts
DC Plate Current	30	ma
DC Grid Current (Approx.).	2	ma
Driving Power (Approx.).	0.3	watt
Power Output (Approx.)	4	watts

RF POWER AMPLIFIER & OSCILLATOR -- Class C Telegraphy[□]
and
RF POWER AMPLIFIER -- Class C FM Telephony

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE	350 max.	volts
DC GRID VOLTAGE.	-150 max.	volts
DC PLATE CURRENT	40 max.	ma
DC GRID CURRENT.	10 max.	ma
PLATE INPUT.	14 max.	watts
PLATE DISSIPATION.	10 max.	watts

Typical Operation:

DC Plate Voltage	350	volts
DC Grid Voltage*	-80	volts
Peak RF Grid Voltage	130	volts

* With dc filament excitation.

[□]: See next page.



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POWER TRIODE

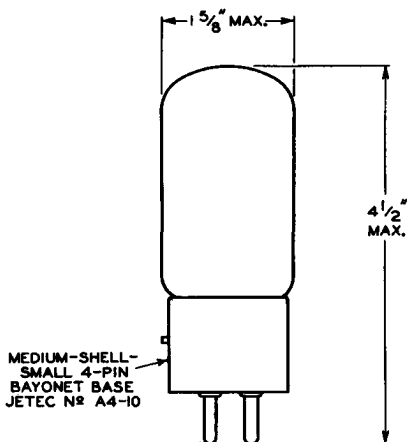
DC Plate Current	35	ma
DC Grid Current (Approx.)	2	ma
Driving Power (Approx.)	0.25	watt
Power Output (Approx.)	6	watts

* At crest of af cycle with modulation factor of 1.

□ Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115% of the carrier conditions.

MAXIMUM RATINGS vs OPERATING FREQUENCY

FREQUENCY	6	15	30	Mc
MAXIMUM PERMISSIBLE PERCENTAGE OF MAXIMUM RATED PLATE VOLTAGE AND PLATE INPUT:				
Class B Telephony	100	85	70	%
Class C Telephony	100	75	50	%
Class C Telegraphy	100	75	50	%



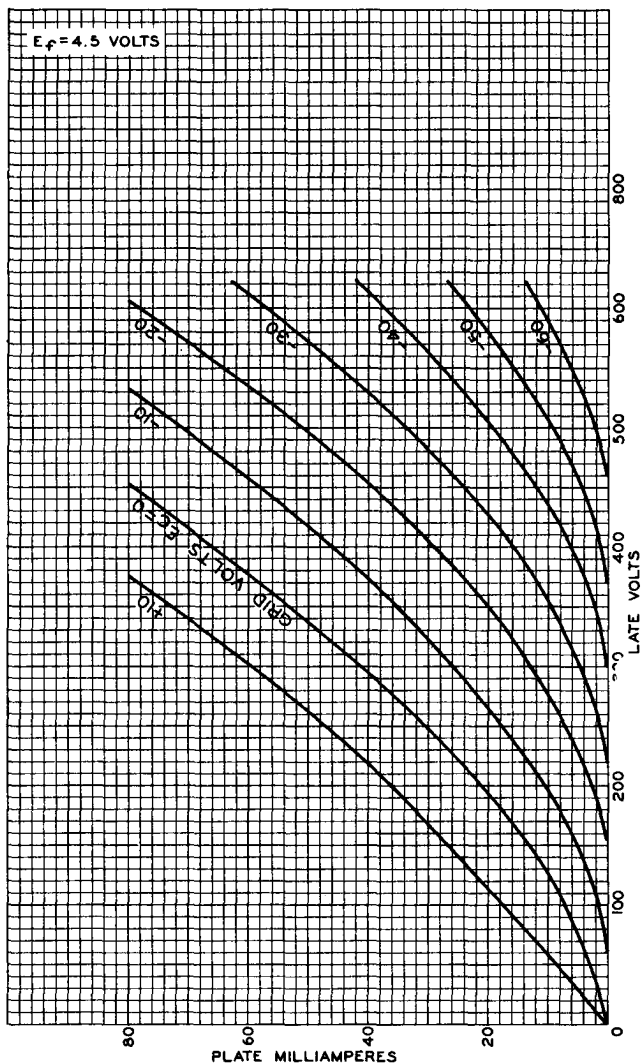
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AVERAGE PLATE CHARACTERISTICS



TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6718RI