RCA

12AW6

SHARP-CUTOFF PENTODE

MINIATURE TYPE

GENERAL DATA

Electrical:

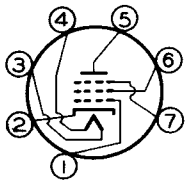
Heater, for Unipotential Cathode:		
Voltage	12.6	ac or dc volts
Current	0.15	amp
Direct Interelectrode Capacitances (Approx.)°:		
Grid to Plate	0.025 max.	μμf
Input	6.5	μμf
Output	1.5	μμf

° With no external shield.

Mechanical:

Mounting Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length from Base Seat to Bulb Top (excluding tip)	1-1/2" ± 3/32"
Maximum Diameter	3/4"
Bulb	T-5-1/2
Base	Small-Button Miniature 7-Pin
Basing Designation for BOTTOM VIEW	7CM

Pin 1 – Grid No.1
Pin 2 – Cathode
Pin 3 – Heater
Pin 4 – Heater
Pin 5 – Plate



Pin 6 – Grid No.2
Pin 7 – Grid No.3, Internal Shield

AMPLIFIER – Class A_1

Pentode Connection

Maximum Ratings, *Design-Center Values*:

PLATE VOLTAGE	300 max.	volts
GRID-No.2 (SCREEN) VOLTAGE	150 max.	volts
GRID-No.2 SUPPLY VOLTAGE	300 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative bias value	50 max.	volts
Positive bias value	0 max.	volts
PLATE DISSIPATION	2 max.	watts
GRID-No.2 DISSIPATION	0.5 max.	watt
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

Typical Operation and Characteristics:

Plate Voltage	100	125	250	volts
Grid-No.3 (Suppressor) Voltage□	Connected to cathode at socket			
Grid-No.2 Voltage	100	125	150	volts
Cathode-Bias Resistor	100	100	200	ohms

□ See next page.

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Plate Resistance (Approx.)	0.3	0.5	0.8	megohm
Transconductance	4750	5100	5000	μmhos
Grid-No.1 Voltage for plate current of 10 μamp	-5	-6	-8	volts
Plate Current	5.5	7.2	7	ma.
Grid-No.2 Current	1.6	2.1	2	ma.

AMPLIFIER - Class A_1

Triode Connection▲

Maximum Ratings, *Design-Center Values*:

PLATE VOLTAGE	300 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative bias value	50 max.	volts
Positive bias value	0 max.	volts
PLATE AND GRID-No.2 DISSIPATION (Total)	2.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

Typical Operation and Characteristics:

Plate Voltage	180	250	volts
Cathode-Bias Resistor	350	825	ohms
Plate Resistance	7900	11000	ohms
Amplification Factor	45	42	
Transconductance	5700	3800	μmhos
Plate Current	7.0	5.5	ma.

□ Grid-No.3 is not suitable for use as a control or signal electrode.

▲ Grid-No.2 tied to plate and grid-No.3 tied to cathode.

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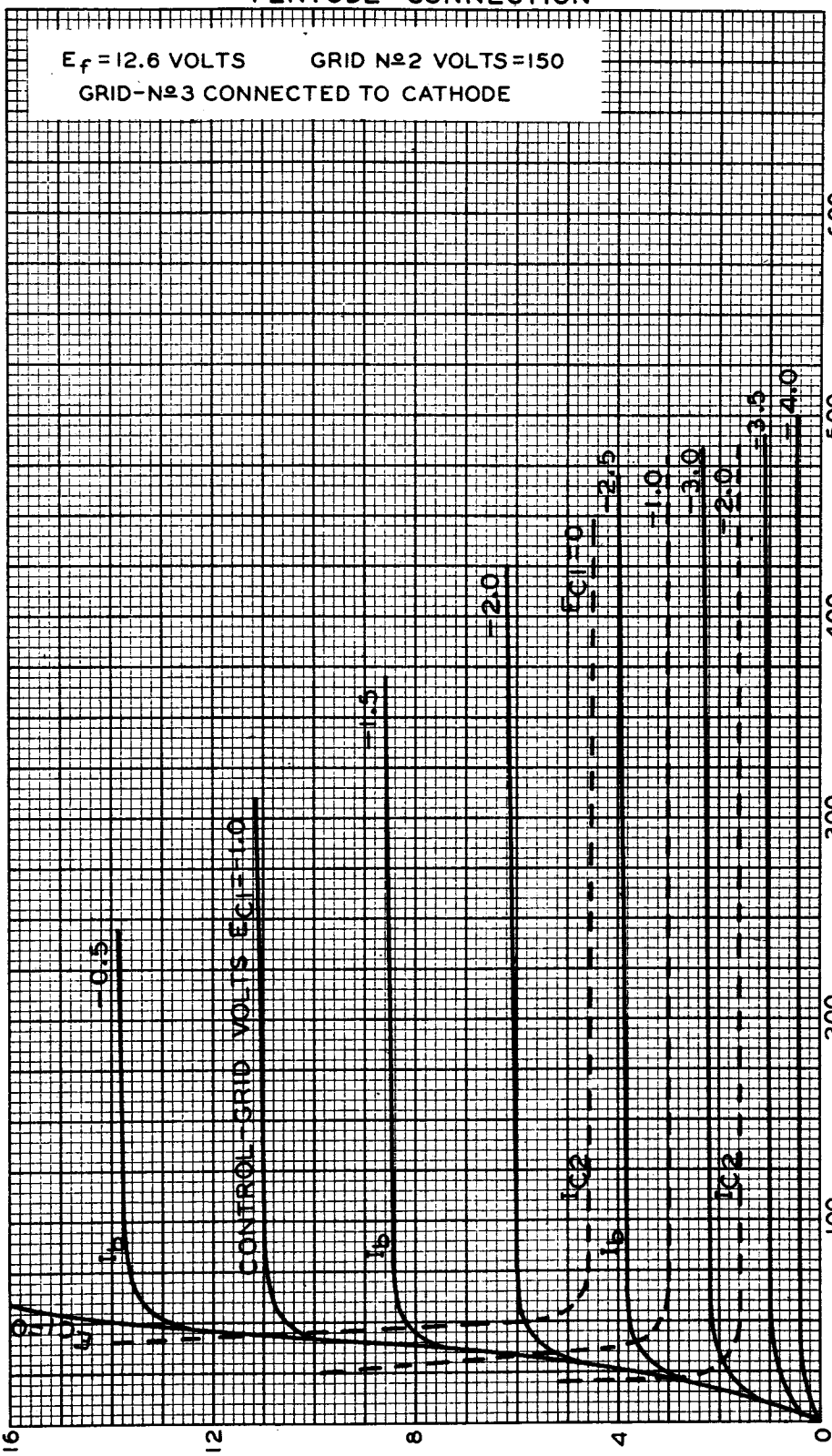
AVERAGE PLATE CHARACTERISTICS
PENTODE CONNECTION



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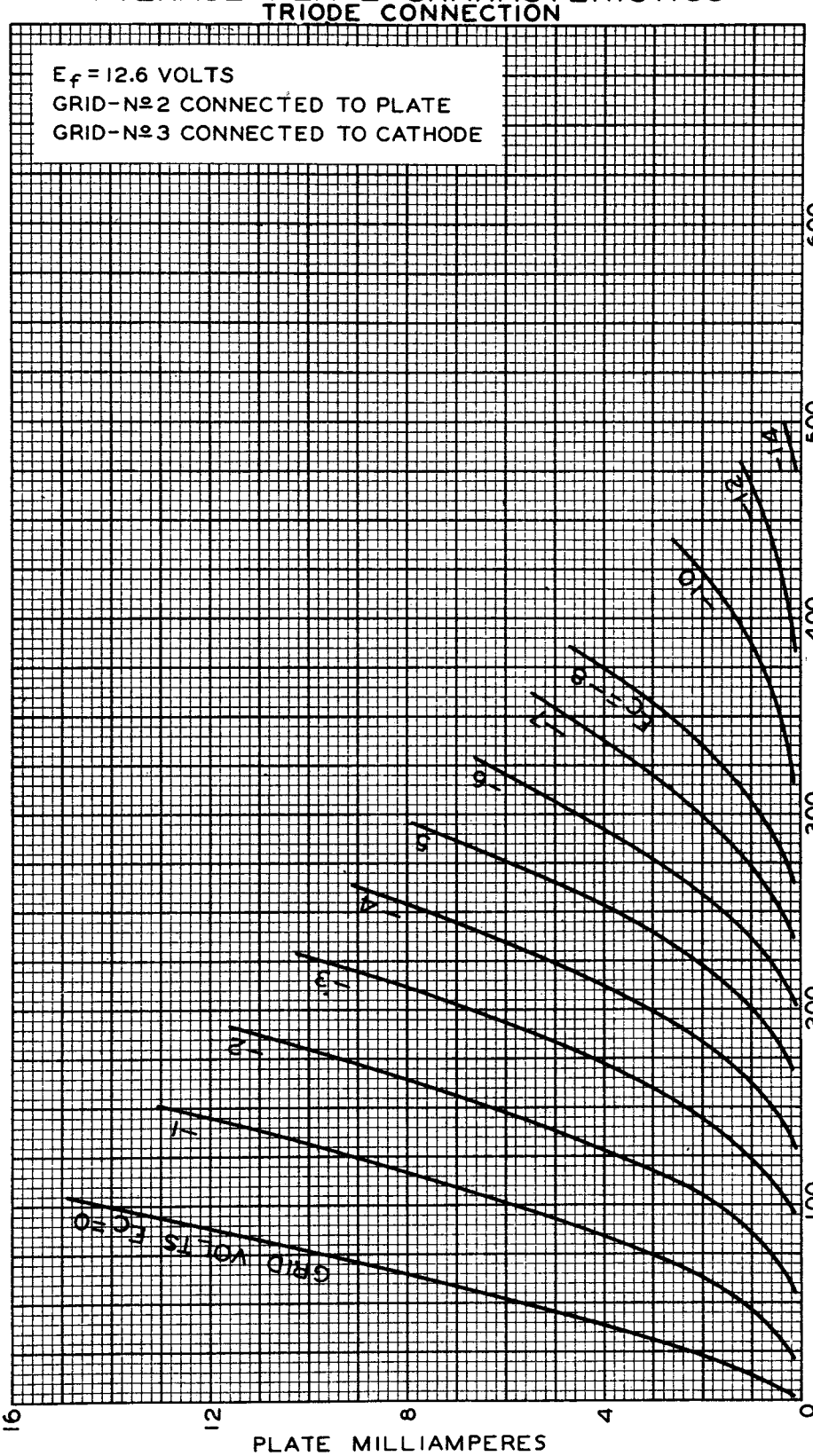
AVERAGE PLATE CHARACTERISTICS

TRIODE CONNECTION



MARCH 26,1947 TUBE DEPARTMENT 92CM-6856
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY