



12AW6

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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.)^o:Grid to Plate 0.025 max. μf Input. 6.5 μf Output 1.5 μf ^o 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" $\pm$ 3/32"

Maximum Diameter 3/4"

Bulb T-5-1/2

Base Small-Button Miniature 7-Pin

Basing Designation for BOTTOM VIEW 7CM

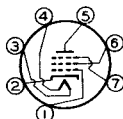
Pin 1-Grid No.1

Pin 2-Cathode

Pin 3-Heater

Pin 4-Heater

Pin 5-Plate



Pin 6-Grid No.2

Pin 7-Grid No.3,

Internal
ShieldAMPLIFIER-Class A₁Pentode 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.

APRIL 15, 1947

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

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

AMPLIFIER - Class A₁Triode 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	..	μ mhos
Plate Current.	7.0	5.5	..	ma.

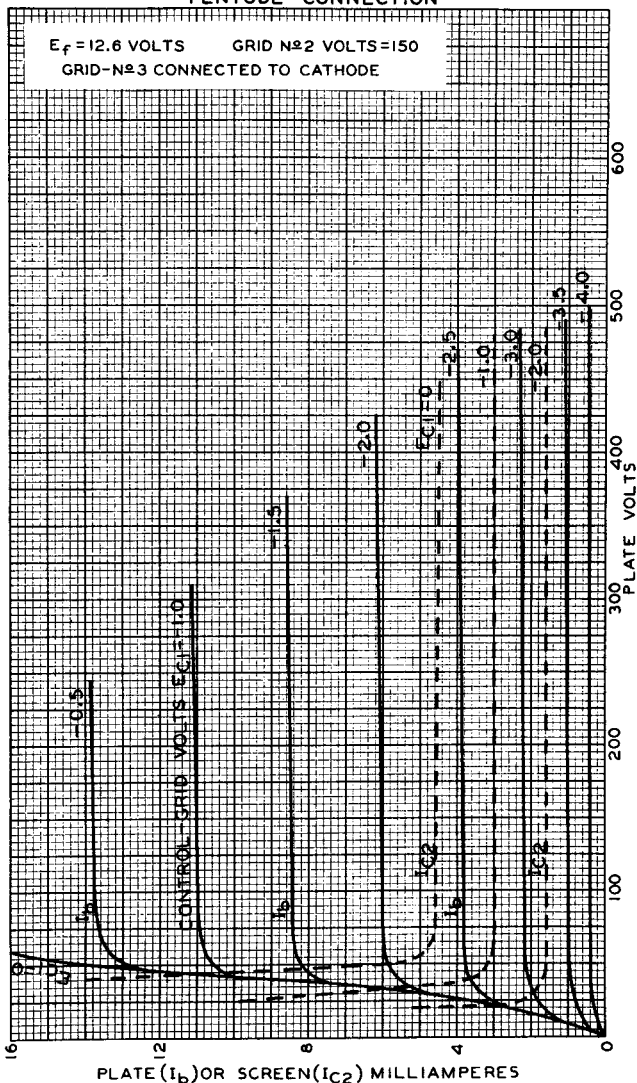
□ Grid-No.3 is not suitable for use as a control or signal electrode.

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



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12AW6 AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



MARCH 26, 1947

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92CM-6855

12AW6



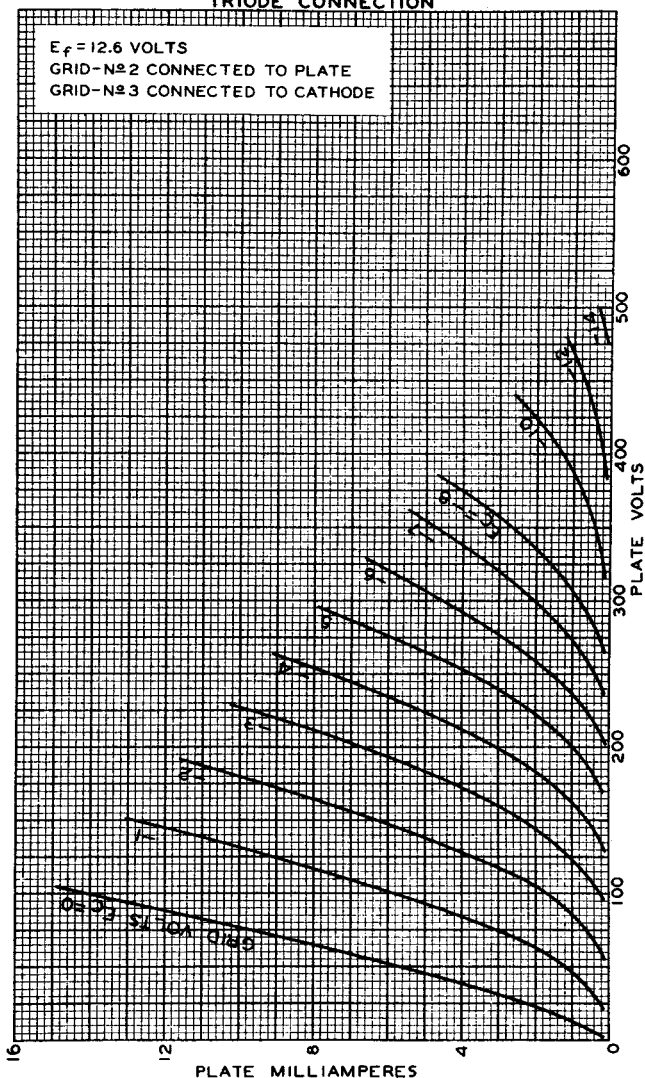
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AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION

 $E_f = 12.6$ VOLTS

GRID-№2 CONNECTED TO PLATE

GRID-№3 CONNECTED TO CATHODE



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92CM-6856