



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
Shield

AMPLIFIER - Class A₁

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	..	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.

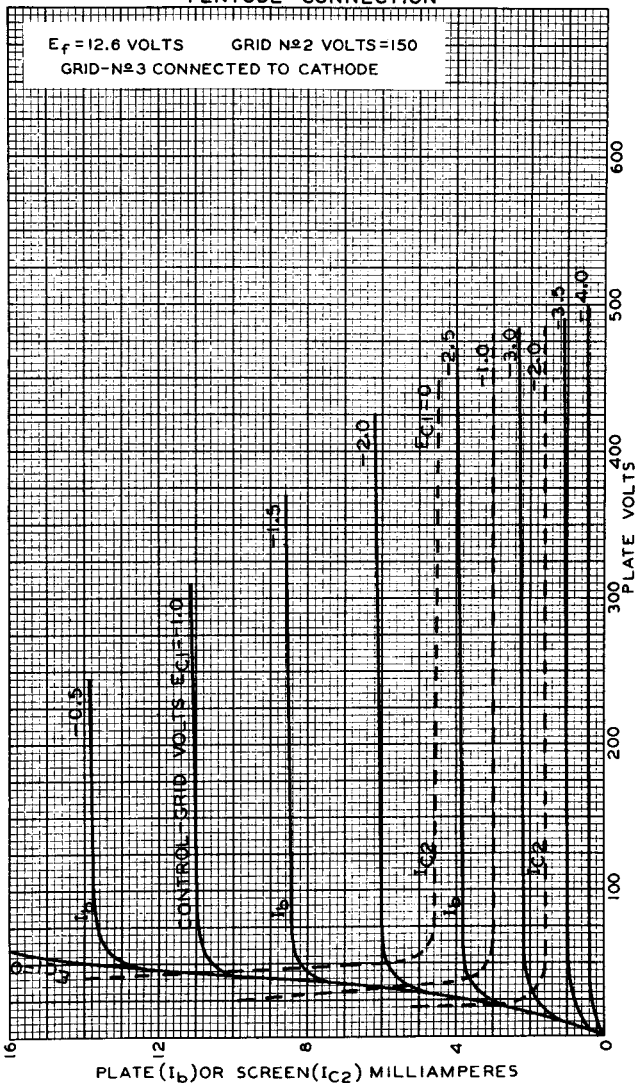
□ Grid-No.3 is not suitable for use as a control or signal electrode.

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



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12AW6 AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



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RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6855

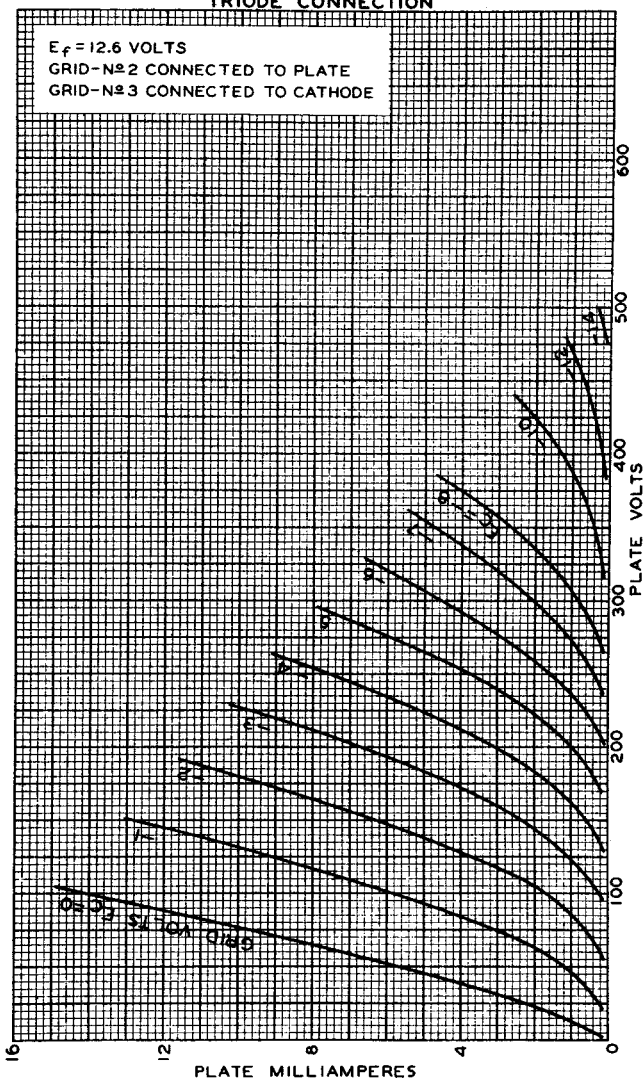
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AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION

$E_f = 12.6$ VOLTS
GRID-№2 CONNECTED TO PLATE
GRID-№3 CONNECTED TO CATHODE



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