

Remote-Cutoff Pentode

7-PIN MINIATURE TYPE

For Automobile Radio Receivers Operating
Directly from 6-Cell Storage Batteries

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage range (DC). 10 to 15.9 volts

For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts.

Current (Approx.) at 12.6 volts 0.15 amp

Direct Interelectrode Capacitances:^a

Grid No.1 to plate. 0.006 max. $\mu\mu\text{f}$

Grid No.1 to cathode, grid No.3 &
internal shield, grid No.2,
and heater. 5.5 $\mu\mu\text{f}$

Plate to cathode, grid No.3 & internal
shield, grid No.2, and heater 4.8 $\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

Heater Voltage. 12.6 volts

Plate Voltage 12.6 volts

Grid No.3 Connected to cathode at socket

Grid-No.2 Voltage 12.6 volts

Grid-No.1 Supply Voltage. 0 volts

Grid-No.1 Resistor (Bypassed) 2.2 megohms

Plate Resistance (Approx.). 0.35 megohm

Transconductance. 1500 μmhos

Plate Current 1.1 ma

Grid-No.2 Current 0.45 ma

Grid-No.1 Voltage (Approx.) for
transconductance (μmhos) = 40 -2.7 volts

Grid-No.1 Voltage (Approx.) for
transconductance (μmhos) = 10,
grid-No.1 resistor = 0, and with
grid No.1 connected to grid No.3. -3.5 volts

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 General Section

Bulb. T5-1/2

Base. Small-Button Miniature 7-Pin (JEDEC No.E7-1)

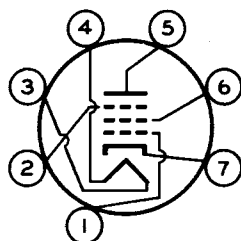
← Indicates a change.



12AF6

Basing Designation for BOTTOM VIEW. 7BK

Pin 1—Grid No.1
Pin 2—Grid No.3,
Internal
Shield
Pin 3—Heater



Pin 4—Heater
Pin 5—Plate
Pin 6—Grid No.2
Pin 7—Cathode

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	16 max.	volts
GRID No.3 (SUPPRESSOR GRID)	Connect to cathode at socket	
GRID-No.2 (SCREEN-GRID) VOLTAGE	16 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Positive-bias value	0 max.	volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	16 max.	volts
Heater positive with respect to cathode	16 max.	volts

Maximum Circuit Values:

Grid-No.1—Circuit Resistance.	2.2 max.	megohms
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^a Without external shield.