

12AF6

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
<i>For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts.</i>		
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	<i>Connected to cathode at socket</i>	
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 <i>General Section</i>
Bulb.	T5-1/2
Base.	Small-Button Miniature 7-Pin (JEDEC No. E7-1)

← Indicates a change.

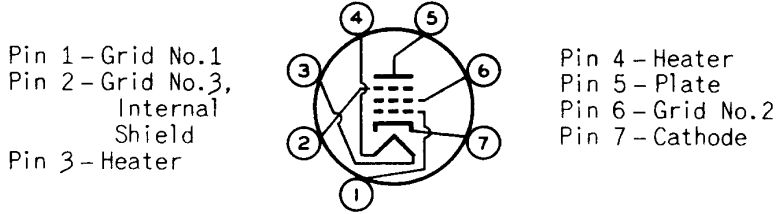


RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA
7-61

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

^a Without external shield.