RCA-12EG6 is a pentagrid amplifier of the 7-pin miniature type intended for use as a radio-frequency amplifier tube in "hybrid" automobile receivers in which the tube and transistor electrode voltages are obtained directly from a 12-volt storage battery.

The design of this tube permits use of both grid No.1 and grid No.3 as independent control electrodes. This feature provides for improved automatic volume control under large-signal conditions when both grids are biased by the avc voltage.

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
Voltage range (AC or DC) ......... 10.0 to 15.9 volts
This voltage range is on an absolute basis. For
longest life, it is recommended that the heater be
operated within the voltage range of 12 to 14 volts.
Current (Approx.) at 12.6 volts .... 0.15 amp
Direct interelectrode Capacitances:
Grid No.3 to plate ............ 0.25 max. µf
Grid No.3 to grid No.1 ......... 0.15 max. µf
Grid No.3 to heater cathode, grid No.1, grid No.2 & 4, grid No.3, and grid No.5 .... 6.5 µf
Grid No.1 to heater cathode, grids No.2 & 4, grid No.3, and grid No.5 .... 5.7 µf
Plate to heater, cathode, grid No.1, grids No.2 & 4, grid No.3, and grid No.5 .... 12 µf
Grid No.1 to cathode and grid No.5 .... 3.2 µf
Cathode to heater, grids No.2 & 4, grid No.3, and plate .... 23 µf
Grid No.1 to plate .... 0.04 max. µf

Characteristics, Class A1 Amplifier:
With 12.6 volts on heater and grid No.3 connected to grid No.1 through 100,000-ohm resistor
Plate Voltage ............. 12.6 volts
Grids No.2 & 4 [Screen-Grid] Voltage .... 12.6 volts
Grid-No.1 [Control-Grid] Voltage:
Developed across 2.2-megohm resistor .... -0.6 volt
Plate Current ............ 0.55 ma
Grids-No.2 & 4 Current ............ 2.8 ma
Transconductance, Grid No.3 to Plate .... 800 µhos
Plate Resistance (Approx.) .... 0.15 megohm
Grid-No.1 Voltage (Approx.) for grid-No.3-to-Plate transconductance of 20 µhos .... -3 volts

Mechanical:
Operating Position ....... Any
Maximum Overall Length .... 2-1/8"
Maximum Seated Length .... 1-7/8"
Length from Base Seat to Bulb Top (Excluding lip) .... 1-1/2" ± 3/32"
Fig. 1 - Average Characteristics of Type 12EG6.  
Fig. 2 - Average Characteristics of Type 12EG6.
Fig. 3 - Average Characteristics of Type 128G6.
DIMENSIONAL OUTLINE

SMALL-BUTTON MINIATURE
7-PIN BASE
JETEC #87-1

*APPLIES IN ZONE STARTING 0.375" FROM BASE SEAT.
*MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED
BY RING GAUGE OF 7/16" I.D.

SOCKET CONNECTIONS

Bottom View

7CH
PIN 1 - GRID No.1
PIN 2 - CATHODE, GRID No.5
PIN 3 - HEATER
PIN 4 - HEATER
PIN 5 - PLATE
PIN 6 - GRIDS No.2 & 4
PIN 7 - GRID No.3

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