



ELECTRONIC TUBE REFERENCE

14AF7

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

RCA 14AF7 medium-mu dual triode with two identical indirectly heated sections, 12.6 V 0.15 A heater, 300 V and 2.5 W maximum ratings per section, 8AC lock-in base.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8AC	BASE PINS	8
NOMINAL HEATER	12.6 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	7600 Ω
TRANSCONDUCTANCE	0.0021 S
AMPLIFICATION FACTOR	16
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2.5 W
RCA Tube Department 14AF7 medium-mu twin triode, 15 November 1948, confirmed by GE Essential Characteristics. Each identical physical triode: design-center maximum plate voltage 300 V, plate dissipation 2.5 W, grid positive DC bias max 0 V, peak heater-cathode voltage ± 90 V. Heater 12.6 V 0.15 A rating (nominal 14 V 0.16 A for series-string application). Typical Class A operating conditions per section: V_a 100 V, grid 0 V: μ 17, r_p 6500 Ω, g_m 2600 μmhos, I_a 10.8 mA; V_a 100 V, cathode resistor 600 Ω: μ 16, r_p 8400 Ω, g_m 1900 μmhos, I_a 5 mA; V_a 250 V, cathode resistor 1100 Ω: μ 16, r_p 7600 Ω, g_m 2100 μmhos, I_a 9 mA. Direct capacitances each section without external shield: C_{gp} 2.3 pF, C_{gk} 2.2 pF, C_{pk} 1.6 pF; inter-section max grid1-grid2 0.20 pF, plate1-plate2 0.60 pF, grid1-plate2 0.06 pF, grid2-plate1 0.10 pF. T-9 lock-in octal 8-pin base 8AC, pin1 heater, pin2 cathode triode2, pin3 plate triode2, pin4 grid triode2, pin5 grid triode1, pin6 plate triode1, pin7 cathode triode1, pin8 heater, base shell via plug. Source continuation was also filed erroneously under 14AF7_2, which has been deleted.	

SECTION2 Triode	
PLATE RESISTANCE	7600 Ω
TRANSCONDUCTANCE	0.0021 S
AMPLIFICATION FACTOR	16
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2.5 W
<i>RCA Tube Department 14AF7 medium-mu twin triode, 15 November 1948, confirmed by GE Essential Characteristics. Each identical physical triode: design-center maximum plate voltage 300 V, plate dissipation 2.5 W, grid positive DC bias max 0 V, peak heater-cathode voltage ± 90 V. Heater 12.6 V 0.15 A rating (nominal 14 V 0.16 A for series-string application). Typical Class A operating conditions per section: Va 100 V, grid 0 V: mu 17, rp 6500 Ω, gm 2600 μhos, Ia 10.8 mA; Va 100 V, cathode resistor 600 Ω: mu 16, rp 8400 Ω, gm 1900 μhos, Ia 5 mA; Va 250 V, cathode resistor 1100 Ω: mu 16, rp 7600 Ω, gm 2100 μhos, Ia 9 mA. Direct capacitances each section without external shield: Cgp 2.3 pF, Cgk 2.2 pF, Cpk 1.6 pF; inter-section max grid1-grid2 0.20 pF, plate1-plate2 0.60 pF, grid1-plate2 0.06 pF, grid2-plate1 0.10 pF. T-9 lock-in octal 8-pin base 8AC, pin1 heater, pin2 cathode triode2, pin3 plate triode2, pin4 grid triode2, pin5 grid triode1, pin6 plate triode1, pin7 cathode triode1, pin8 heater; base shell via plug. Source continuation was also filed erroneously under 14AF7_2, which has been deleted.</i>	

14AF7 is listed in the supplied receiving-tube handbook as a medium-mu twin triode. The published heater rating is 12.6 V at 0.15 A.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

Published test conditions and operating points. Values on this page are preserved as reported by this source.

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published handbook rating
Plate voltage	250 V	ClassA
Control-grid bias	10 V	ClassA
Plate current	9 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	7600 ohm	Published handbook characteristic
Transconductance	2100 μ S	Published handbook characteristic
Amplification factor	16	Published handbook characteristic
Heater voltage	12.6 V	Published heater rating
Heater current	150 mA	Published heater rating

TUBE TINKER

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