

ELECTRONIC TUBE REFERENCE

7027

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Beam-power tube designed for high-fidelity Class-A and push-pull Class-AB1 audio amplification, with documented output reaching roughly 50 watts per pair.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AC	BASE PINS	8
NOMINAL HEATER	6.3 V / 900 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7AC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	–	–	NC · verified
PIN2 – Pin 2	–	H – Heater	CONNECTED · verified
PIN3 – Pin 3	A	P – Plate (Anode)	CONNECTED · verified
PIN4 – Pin 4	A	G2 – Screen Grid	CONNECTED · verified
PIN5 – Pin 5	A	G1 – Control Grid	CONNECTED · verified
PIN7 – Pin 7	–	H – Heater	CONNECTED · verified
PIN8 – Pin 8	A	BP – Beam-Forming Plate	CONNECTED · verified
PIN8 – Pin 8	A	K – Cathode	CONNECTED · verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	22500 Ω
TRANSCONDUCTANCE	0.006 S
MAXIMUM PLATE VOLTAGE	500 V
MAXIMUM SCREEN VOLTAGE	450 V
MAXIMUM PLATE DISSIPATION	30 W
MAXIMUM SCREEN DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	150 mA
A.F. beam pentode. Limiting-value unit typo $W_a=30\text{ V}$ is interpreted semantically as 30 W.	

Beam-power tube for high-fidelity Class A and push-pull Class AB1 audio power amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	900 mA	—
Plate voltage	250 V	ClassA
Screen voltage	250 V	ClassA
Grid voltage	-14 V	ClassA
Plate current	72 mA	ClassA
Screen current	5 mA	ClassA
Push-pull plate voltage	450 V	ClassAB1;TwoTubes
Push-pull screen voltage	350 V	ClassAB1;TwoTubes
Maximum-signal power output	50 W	ClassAB1;PushPull;TwoTubes

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	22500 ohm	ClassA
Transconductance	6000 uS	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.5 pF	—
Input capacitance	10 pF	—
Output capacitance	7.5 pF	—

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Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	250 V	—
Typical Screen Voltage	250 V	—
TypicalControlGridVoltage	-14 V	—
Typical Plate Current	72 mA	—
Typical Screen Current	5 mA	—
LoadResistanceSingle	22500 ohm	ClassA1;OneTube
PowerOutputSingle	6.5 W	ClassA1;OneTube
PlateToPlateLoadResistance	5000 ohm	PushPull;ClassA1;TwoTubes
PowerOutputPushPull	17.5 W	PushPull;ClassA1;TwoTubes

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridCapacitance	12.5 pF	—
Plate Capacitance	10 pF	—
PlateGridCapacitance	3 pF	—



TUBE TINKER
ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

2026 JJ Electronic

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2026 JJ ELECTRONIC

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Uf	6.3 V	Published value
If	900 mA	Published value
Ua	250	Published value
Ug2	250	Published value
Ug1	-14	Published value
Ia	72	Published value
Ra	22.5	Published value
N	6.5	Published value
Triode Pentode cg1	12.5 pF	Published value
Ua	450	Published value
Ug2	450	Published value
Wa	30	Published value