

ELECTRONIC TUBE REFERENCE

7034

Power - Beam (NOT sweep) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Compact forced-air-cooled external-anode radial-beam tetrode for RF, wide-band video, linear amplification, and modulation service to approximately 500 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6 V / 2.6 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Beam Power	
AMPLIFICATION FACTOR	5
MAXIMUM PLATE VOLTAGE	2000 V
MAXIMUM SCREEN VOLTAGE	400 V
MAXIMUM PLATE DISSIPATION	250 W
MAXIMUM SCREEN DISSIPATION	12 W
MAXIMUM GRID DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	250 mA
Promoted fields populated from published ratings/characteristics; additional published values retained in TUBE_SECTION_PARAMETER.	

This bulletin also applies to RCA-7035/4X150D which is identical with RCA-7034/ UX150A except for its heater rating of 26.5 + 10% volts, 0.58 ampere. 7034/4X150A e 7035/4X150D [BEAM POWER TUBE Unipotential Cathode For Use at Frequencies Up to 500 Mc 2-15/32" Max. Length Coaxial-Electrode

Structure Forced-Air Cooled 1.635" Max. Diameter Compact Design 370 Watts CW Output up to 150 Mc
 Integral Radiator 140 Watts CW Output at 500 Mc RCA-T7034/4X150A is a very small and compact, Direct
 Interelectrode Capacitances: D Grid No.1 to plate . . 0.03 ppf forced—air-cooled beam power tube
 designed for Grid No.1 to cathode grld No 2 service at frequencies up to 500 Mc. It is and heater . . [16
 ppf Plate to cathode, grld No 2 useful as an af power amplifier and modulator, a and heater . . . e e e 4.4
 gt wide—band amplifier in video applications, a Mechanical: gperating Position. ANY
 linear rf power amplifier Maximum Overall Length. e 2-15/32" in single-sideband M

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
rating of 26.5 + 10% volts,	10 V	rating of 26.5 + 10% volts,
0.58 ampere.	580 mA	0.58 ampere.
Unipotential Cathode For Use at Frequencies Up to 500 Mc 2-15/32" Max. Length	32 MHz	Unipotential Cathode For Use at Frequencies Up to 500 Mc 2-15/32" Max. Length
Compact Design 370 Watts CW Output up to 150 Mc Integral Radiator	150 W	Compact Design 370 Watts CW Output up to 150 Mc Integral Radiator
140 Watts CW Output at	500 W	140 Watts CW Output at 500 Mc
service at frequencies up to 500 Mc. It is and heater . . [	16 MHz	service at frequencies up to 500 Mc. It is and heater . . [16 prf
useful as an af power amplifier and modulator, a and heater . . . e e e e	4.4	useful as an af power amplifier and modulator, a and heater . . . e e e e 4.4 gt
linear rf power amplifier Maximum Overall Length. e	32	linear rf power amplifier Maximum Overall Length. e 2-15/32"
amplifier or oscillator. Johnson No,	-1	amplifier or oscillator. Johnson No,124-110-1
250 watts. air over the base seals; past the grid-No.2 seal, glass	2 W	250 watts. air over the base seals; past the grid-No.2 seal, glass
cies up to 150 Mc, itoffers substantially higher altitudes and ambient temperatures,the air flow mus	150 MHz	cies up to 150 Mc, itoffers substantially higher altitudes and ambient temperatures,the air flow must be

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
250 watts with no sacrifice in tube reliability. altitudes and ambient temperatures, the air flow must be	250 W	250 watts with no sacrifice in tube reliability. altitudes and ambient temperatures, the air flow must be
DC PLATE VOLTAGE 2000 max, volts	2000 V	DC PLATE VOLTAGE 2000 max, volts
DC GRID-No.2 (SCREEN) VOLTAGE. 400 max. volts	400 V	DC GRID-No.2 (SCREEN) VOLTAGE. 400 max. volts
MAX.-SIGNAL OC PLQTE CURRENT 250 max. ma	250 mA	MAX.-SIGNAL OC PLQTE CURRENT 250 max. ma
GENERAL DATA PLATE DISSIPATION & « « 250 max. watts	250 W	GENERAL DATA PLATE DISSIPATION & « « 250 max. watts
Electrical: GRID-NC.2 DISSIPATION 12 max, watts	12 W	Electrical: GRID-NC.2 DISSIPATION 12 max, watts
voltage (AC or 0c)® 6.0+10% volis Heater negative with	10 V	voltage (AC or 0c)® 6.0+10% volis Heater negative with
respect to cathode . 150 max. volts	150 V	respect to cathode . 150 max. volts
Current at 6.0 volts	2.6 V	Current at 6.0 volts 2.6 amperes
Minimum heating time 30 seconds respect to cathocde . 150 max. volts	150 V	Minimum heating time 30 seconds respect to cathocde . 150 max. volts
for grid-No.2 volts =	300 V	for grid-No.2 volts = 300 and
Typical CCS Operation: Typical CCS Operation (With bandwidth of	5 MHz	Typical CCS Operation: Typical CCS Operation (With bandwidth of 5 Mc):
DC Plate voltage 750 1000	1250 V	DC Plate voltage 750 1000 1250 volts
DC Grid-No.2 voltage 300 300	300 V	DC Grid-No.2 voltage 300 300 300 volts
DC Plate voltage 800 1000 1500	2000 V	DC Plate voltage 800 1000 1500 2000 volts
DC Grid-No.1 voltage -60 -65 =	70 V	DC Grid-No.1 voltage -60 -65 =70 volts
DC Grid-No.2 voltage 300 300 300	300 V	DC Grid-No.2 voltage 300 300 300 300 volts
Peak RF Grid-No	1 V	Peak RF Grid-No.1 voltage:

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid) voltage. -40 -43 -50 -50 volts Synchronizing level. 85 95	100 V	Grid) voltage. -40 -43 -50 -50 volts Synchronizing level. 85 95 100 volts
Peak AF Grid-No.1-to-Grid- Pedestal level 65 70	75 V	Peak AF Grid-No.1-to-Grid- Pedestal level 65 70 75 volts
No.1 voltage 80 86 100 100 volts DC Plate Current	100 V	No.1 voltage 80 86 100 100 volts DC Plate Current:
Zero-Signal DC Plate Synchronizing level. . . . 335 330	305 mA	Zero-Signal DC Plate Synchronizing level. . . . 335 330 305 ma
Current. . . e . 210 165 100 100 ma Pedestal level . 25 240	230 mA	Current. . . e . 210 165 100 100 ma Pedestal level . 25 240 230 ma
Current. 435 u50 u%6 470 ma sSynchronizing level. 50 45	45 mA	Current. 435 u50 u%6 470 ma sSynchronizing level. 50 45 45 ma
Zero--Signal DC Grid-No. 2 Pedestal level 20 15	10 mA	Zero--Signal DC Grid-No. 2 Pedestal level 20 15 10 ma
Current. 0 0 0	0 mA	Current. 0 0 0 0 ma
Current. 76 52 32 36 ma Synchronizing level. 15 20	25 mA	Current. 76 52 32 36 ma Synchronizing level. 15 20 25 ma
Effective Load Re3istance Pedestal level . . . i y y ma	1 mA	Effective Load Re3istance Pedestal level . . . i y y ma
(Plate to plate) . . M400 4250 6570 8760 ohms Driver Power Output (Approx.):'	8760 ohm	(Plate to plate) . . M400 4250 6570 8760 ohms Driver Power Output (Approx.):'
Max.-Signal Driving Power Synchronizing level. . . . 7 8	9 W	Max.-Signal Driving Power Synchronizing level. . . . 7 8 9 watts
(Approx.}. 0 0 0 0 watts Pedestal level 4.25 4.7	5.5 W	(Approx.}. 0 0 0 0 watts Pedestal level 4.25 4.7 5.5 watts
APPrOX.}e « « « <« « . . 170 230 400	580 W	APPrOX.}e « « « <« « . . 170 230 400 580 watts

SOURCE OPERATING CONDITIONS

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1962 Eimac

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

1962 EIMAC

Section 1 · Beam Power

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Capacitance	15.7 pF	—
Output Capacitance	4.5 pF	—
Feedback Capacitance	0.03 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency of Maximum Rating	150 MHz	—
Maximum DC Plate Current	250 mA	ClassAB1
Typical Linear Plate Voltage	2000 V	ClassAB1
Typical Linear Plate Output Power	300 W	ClassAB1
Class C Plate-Modulated Maximum Plate Voltage	1600 V	ClassC;Telephony

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Highest Useful Frequency	500 MHz	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 6 of 7

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

1971 RCA HB3 BINDER 6 OF 7

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC)a – published value 1	6	Published datasheet value
Voltage (AC or DC)a – published value 2	0	Published datasheet value
Voltage (AC or DC)a – published value 3	10	Published datasheet value
Current at heater volts = 6.0 – published value 1	6 A	Published datasheet value
Current at heater volts = 6.0 – published value 2	26 A	Published datasheet value
/'''~,	300	Published datasheet value
grid-No.2 ma. = 50 – published value 1	50 mA	Published datasheet value
grid-No.2 ma. = 50 – published value 2	5 mA	Published datasheet value
Grid No.1 to plate	0.03	Published datasheet value
and heater	16	Published datasheet value
and heater – published value 1	4	Published datasheet value
and heater – published value 2	4	Published datasheet value
Pin 1 -Grid No.24 – published value 1	1	Published datasheet value
Pin 1 -Grid No.24 – published value 2	8	Published datasheet value
Pin 3 -Heater	3	Published datasheet value
Pin 4 -Cathode	4	Published datasheet value
Pin 7 -Heater	7	Published datasheet value
20° C	20	Published datasheet value
DC Plate Voltage – published value 1	800	Published datasheet value
DC Plate Voltage – published value 2	1000	Published datasheet value
DC Plate Voltage – published value 3	1500	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC Plate Voltage – published value 4	2000	Published datasheet value
DC Grid–No.2 Voltage – published value 1	300	Published datasheet value
DC Grid–No.2 Voltage – published value 2	300	Published datasheet value
DC Grid–No.2 Voltage – published value 3	300	Published datasheet value
DC Grid–No.2 Voltage – published value 4	300	Published datasheet value
Grid) Voltage – published value 1	40	Published datasheet value
Grid) Voltage – published value 2	43	Published datasheet value
Grid) Voltage – published value 3	50	Published datasheet value
Grid) Voltage – published value 4	50	Published datasheet value
Grid–No.1 Voltage – published value 1	80	Published datasheet value
Grid–No.1 Voltage – published value 2	86	Published datasheet value
Grid–No.1 Voltage – published value 3	100	Published datasheet value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
for each class of service, a minimum air flow of 5.6 cfim	5.6	Published datasheet value
class of service, a minimum air flow of 5.3 cfm must	5.3 cfm	Published datasheet value
of plate surface at junction with fins)	250 mA	Published datasheet value
Temperature of Plate Seal	200 mA	Published datasheet value
Grid–No.2 Seal	175 mA	Published datasheet value
DC PLATE VOLTAGE	2 A	Published datasheet value
DC GRID–No.2 (SCREEN–RID) VOLTAGE	400 mA	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAX.—SIGNAL DC PLATE CURRENT _h	250 mA	Published datasheet value
GRID—No.2 INPUT _h	12 mA	Published datasheet value
PLATE DISSIPATION _h	250 mA	Published datasheet value
Heater negative with respect to cathode	150 mA	Published datasheet value



SOURCE OPERATING CONDITIONS

199X Svetlana

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

199X SVETLANA
Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	2000 V	—
Maximum Screen Voltage	400 V	—
Maximum Plate Dissipation	250 W	—
Maximum Screen Dissipation	12 W	—