

ELECTRONIC TUBE REFERENCE

8441

Nuvistor Tubes (all numbers) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Triode for RF, audio, control, or industrial electronic service; source data do not support a narrower parent category confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	8.5 V / 950 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	6800 Ω
TRANSCONDUCTANCE	0.0094 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	0.2 W
MAXIMUM CATHODE CURRENT	15 mA
Published promoted values applied where semantically applicable; additional source-table values retained in TUBE_SECTION_PARAMETER.	

Power or transmitting triode for RF, audio, control, or industrial service. The supplied datasheet was reviewed for heater/filament data, maximum ratings, characteristics, typical operating conditions, capacitances, and construction details.

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 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
heater voltage between 6.0 and 8.5 volts to meet specific – published value 1	6 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
heater voltage between 6.0 and 8.5 volts to meet specific – published value 2	8.5 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid to plate	0.9 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
and heater	4.2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
and heater	1.7 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate to cathode	0.22 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater to cathode	1.3 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Supply Voltage	110 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Resistance (Approx.)	6800 ohm	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance	9400	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	7 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid Voltage (Approx.) for plate $\mu_a = 10$ – published value 1	10 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid Voltage (Approx.) for plate $\mu_a = 10$ – published value 2	-4 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Pin 2 –Plate	2	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Pin 4 –Grid	4	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Pin 10 –Heater	10	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Pin 12 –Heater	12	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater Current – published value 1	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater Current – published value 2	0.95	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid to plate – published value 1	2	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid to plate – published value 2	0.8	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid to plate – published value 3	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell , and heater – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell , and heater – published value 2	3.4 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
shell 1 , and heater – published value 3	5 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell , and heater – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell , and heater – published value 2	1.3 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell , and heater – published value 3	2.1 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate to cathode – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate to cathode – published value 2	0.16 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate to cathode – published value 3	0.28 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater to cathode – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater to cathode – published value 2	1 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater to cathode – published value 3	1.6 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (1) – published value 1	1 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (1) – published value 2	13 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (1) – published value 3	5.5 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (1) – published value 4	8.8 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current (2) – published value 1	2	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (2) – published value 2	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (2) – published value 3	4	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (2) – published value 4	50	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) – published value 1	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) – published value 2	13	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) – published value 3	7900	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) – published value 4	10900	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (2) – published value 1	2	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (2) – published value 2	35	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (2) – published value 3	6700	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Reverse Grid Current – published value 1	16	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Reverse Grid Current – published value 2	0.05	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 1: with do heater volts = .specified center value, Ef(ct r)	1 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Note 3: With do plate supply volts= 110, grid and metal shell connected – published value 1	3 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 3: With do plate supply volts= 110, grid and metal shell connected – published value 2	110 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
= 150, and cathode-Dyp ass capacitor (μf) = 1000 – published value 1	150	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
= 150, and cathode-Dyp ass capacitor (μf) = 1000 – published value 2	1000	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note u: With do plate volts = 110, do grid volts = -5, antl metal shell – published value 1	110 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note u: With do plate volts = 110, do grid volts = -5, antl metal shell – published value 2	-5 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 5: With do heater volts = 0.9 specified center value – published value 1	5 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 5: With do heater volts = 0.9 specified center value – published value 2	0.9 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 6: With do plate supply volts = 150 Oc grid supply volts = -1. 7, – published value 1	6 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 6: With do plate supply volts = 150 Oc grid supply volts = -1. 7, – published value 2	150 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 6: With do plate supply volts = 150 Oc grid supply volts = -1. 7, – published value 3	-1 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 6: With do plate supply volts = 150 Oc grid supply volts = -1. 7, – published value 4	7 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
grid-circuit resistance (megohms) L 1 (the internal resistance)	1 Mohm	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 7: With do heater-cathode volts = 100 – published value 1	7 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 7: With do heater-cathode volts = 100 – published value 2	100 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 8: With grid 100 volts negative with respect to all other electrodes – published value 1	8 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 8: With grid 100 volts negative with respect to all other electrodes – published value 2	100 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 9: With plate 300 volts negative with respect to all other electrodes – published value 1	9 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 9: With plate 300 volts negative with respect to all other electrodes – published value 2	300 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
voltages applied, are subjected to 20 blows 15 in each position! – published value 1	20 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
voltages applied, are subjected to 20 blows 15 in each position! – published value 2	15 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
frequency range from 5 to 500 cps and back to 5 cps. One such – published value 1	5	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
frequency range from 5 to 500 cps and back to 5 cps. One such – published value 2	500	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
frequency range from 5 to 500 cps and back to 5 cps. One such – published value 3	5	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
ity and Shorts, Transconductance 1 1 1, Reverse Grid Current, and – published value 1	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
ity and Shorts, Transconductance 1 1 1, Reverse Grid Current, and – published value 2	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
ity and Shorts, Transconductance 1 1 1, Reverse Grid Current, and – published value 3	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
plate dissipation (Rating 2 –0.2 watt) – published value 1	2 W	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
plate dissipation (Rating 2 –0.2 watt) – published value 2	0.2 W	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater-Cycling Life (100 Hours)	100	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
production run with heater volts = 1 .35x specified center	1 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
value cycled 1 minute ON and 2 minutes OFF, do heater– cathode – published value 1	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
value cycled 1 minute ON and 2 minutes OFF, do heater– cathode – published value 2	2	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
dissipation (Rating x – I watt 1	1 W	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
conductance 1 1 1, Reverse Grid Current, Inoperatives, and – published value 1	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
conductance 1 1 1, Reverse Grid Current, Inoperatives, and – published value 2	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
conductance 1 1 1, Reverse Grid Current, Inoperatives, and – published value 3	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage – published value 1	300 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Supply Voltage – published value 2	300 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Voltage – published value 1	250 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Voltage – published value 2	250 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Negative-bias value – published value 1	55 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Negative-bias value – published value 2	55 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Positive-bias value	0 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Cathode Current – published value 1	15 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Cathode Current – published value 2	2.5 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Dissipation – published value 1	1 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Dissipation – published value 2	0.2 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.