

ELECTRONIC TUBE REFERENCE

8382

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
THYRATRON

Gas-filled controlled-discharge tube for switching, pulse, and industrial control service. Grid triggering initiates rapid gas conduction.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	8.5 V / 1.05 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Thyatron
No fixed ratings recorded.
Published promoted values applied where semantically applicable; additional source-table values retained in TUBE_SECTION_PARAMETER.

Gas-filled controlled-discharge tube for switching, pulse, or industrial control 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 · Thyatron

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	2.2 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	1.6 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate to cathode	0.26 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Supply Voltage	75 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Resistance (Approx.)	2200 ohm	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance	12800	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current	15 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
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	8 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.
Plate Supply Voltage	150 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid Resistor	4700 ohm	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Driver Power Output	250	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Useful Power Output ^b	1.6 W	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Supply Voltage	170 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Input	3 W	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Useful Power Output ^b	1.5 W	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Supply Voltage	135 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid Resistor	30000 ohm	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Driver Power Output	150	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Useful Power Outputb	800	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.
Heater Current – published value 3	1.05	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid to plate – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid to plate – published value 2	1.8 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid to plate – published value 3	2.6 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell, and heater 2 – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell, and heater 2 – published value 2	3.8 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell, and heater 2 – published value 3	4.6 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell , and heater 2 – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
shell , and heater 2 – published value 2	1.4 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
shell , and heater 2 – published value 3	1.8 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate tocathode – published value 1	2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate tocathode – published value 2	0.2 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate tocathode – published value 3	0.32 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	1.1 pF	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Heater to cathode – published value 3	1.7 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	3 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (1) – published value 3	11 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Current (1) – published value 4	19 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
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.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current (2) – published value 4	100	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) 1,3 – published value 1	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) 1,3 – published value 2	3	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) 1,3 – published value 3	11400	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Transconductance (1) 1,3 – published value 4	14200	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Reverse Grid Current 1,7 – published value 1	1	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Reverse Grid Current 1,7 – published value 2	7	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Reverse Grid Current 1,7 – published value 3	0.3	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note	1 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 1	3 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 2	75 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 3	5 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
= 100, and cathode-Dy.p ass capacitor (μ f) = 1000 – published value 1	100	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
= 100, and cathode-Dy.p ass capacitor (μ f) = 1000 – published value 2	1000	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Note – published value 1	75 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 2	-9 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 1	5	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 2	175	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
with do plate supply volts = 150, grid resistor (ohms) = 2500, – published value 1	150 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
with do plate supply volts = 150, grid resistor (ohms) = 2500, – published value 2	2500 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
and driver power output (mill iwatts) = 250	250 W	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 1	6 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 2	0.9 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
rote	7 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
~c grid supply volts = -1.2, – published value 1	-1 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
~c grid supply volts = -1.2, – published value 2	2 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
grid–circuit resistance (megohms) = 1 (the Internal resist anCe	1 Mohm	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note – published value 1	8 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Note – published value 2	6.5 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
rms 60 –cps ac grid signal volts = 8, do grid-ci rcu~t resistance – published value 1	6 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
rms 60 –cps ac grid signal volts = 8, do grid-ci rcu~t resistance – published value 2	8 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
(ohms)	2 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
with capacitor {μ f)'~ 500, and metal shell connected to ground	500	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 11 – published value 1	11 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Note 11 – published value 2	300 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
voltages appl ied, are subjected to 20 blows f5 in each posi	20 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
frequency range fi rom 5 to 500 cps and back to 5 cps. One – published value 1	5	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	300 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Voltage	250 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Negative-bias value	55 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid Current	5 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode Current	25 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Plate Dissipation	2 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid-Circuit Resistance – published value 1	0 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid-Circuit Resistance – published value 2	5 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Negative-bias value	200 V	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Cathode Current	22 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.
Grid-Circuit Resistance	0.05 mA	Published datasheet value; multiple numbers on a source row represent separate limits or operating conditions.

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker