

ELECTRONIC TUBE REFERENCE

6101

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
TRIODE-TRIODE

Reliable long-life twin triode intended for demanding amplifier applications, with rugged construction for equipment exposed to mechanical stress and extended operating periods.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7BF	BASE PINS	7
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7BF - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2P	B	P – Plate (Anode)	CONNECTED
PIN2 – 1P	A	P – Plate (Anode)	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – 1G1	A	G1 – Control Grid	CONNECTED
PIN6 – 2G1	B	G1 – Control Grid	CONNECTED
PIN7 – K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	6300 Ω
TRANSCONDUCTANCE	0.006 S
AMPLIFICATION FACTOR	38
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	0.85 W
<i>Published ratings and characteristics promoted where applicable; additional source-table values retained in TUBE_SECTION_PARAMETER.</i>	

SECTION2 Triode	
PLATE RESISTANCE	6300 Ω
TRANSCONDUCTANCE	0.006 S
AMPLIFICATION FACTOR	38
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	0.85 W
<i>Second physical triode restored under current one-row-per-physical-section policy.</i>	

The RCA 6101 is a premium medium-mu twin triode based on 6J6.

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	330 V	Published handbook rating
Plate voltage	100 V	ClassA
Plate current	8.5 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	6300 ohm	Published handbook characteristic
Transconductance	6000 μ S	Published handbook characteristic
Amplification factor	38	Published handbook characteristic
Heater/filament voltage	6.3 V	Published heater/filament rating
Heater/filament current	450 mA	Published heater/filament rating

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	450 mA	—
Plate Resistance	6300 ohm	Each section
Transconductance	6000 uS	Each section
Amplification Factor	38 ratio	Each section



SOURCE DATA APPENDIX

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
Intended for appiicntions at altitudes up to 55000	55000	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Voltage – published value 1	6 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Voltage – published value 2	3 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Voltage – published value 3	10 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Current	450 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Grid to Plate – published value 1	1	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate – published value 2	5	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Heater to Cathode	60	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Supply Voltage	100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Cathode-Bias Resistor	50 ohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Resistance	6300 ohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Transconductance	6000	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current	8.5 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 1 -Plate of – published value 1	1	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 1 -Plate of – published value 2	5	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 2 -Plate of – published value 1	2	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 2 -Plate of – published value 2	6	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 3 –Heater – published value 1	3	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 3 –Heater – published value 2	7	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 4 -Heater	4	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
~' Corresponds to altitude of about 55000 feet	55000 ft	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Heater Current – published value 1	1 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Heater Current – published value 2	420 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Heater-to-Cathode Capacitance – published value 1	2	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Heater-to-Cathode Capacitance – published value 2	4	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (1) – published value 1	1 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (1) – published value 2	14 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (1) – published value 3	6.5 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (1) – published value 4	11.5 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (2) – published value 1	2 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (2) – published value 2	1 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (2) – published value 3	5 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (2) – published value 4	200 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (3) – published value 1	3 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current (3) – published value 2	1 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (3) – published value 3	7 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Plate Current (3) – published value 4	5 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Transconductance (1) – published value 1	1	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Transconductance (1) – published value 2	4	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Transconductance (1) – published value 3	4500	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Transconductance (1) – published value 4	7500	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Transconductance (2) – published value 1	2	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Transconductance (2) – published value 2	6.4	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Reverse Grid Current (1) – published value 1	1 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Reverse Grid Current (1) – published value 2	1 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Reverse Grid Current (1) – published value 3	500 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Reverse Grid Current (2) – published value 1	2 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Reverse Grid Current (2) – published value 2	9 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Reverse Grid Current (2) – published value 3	10 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Reverse Grid Current (2) – published value 4	1 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note – published value 1	1 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note – published value 2	6.3 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note – published value 1	3 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note – published value 2	100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note	100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Nate – published value 1	5 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Nate – published value 2	250 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note – published value 1	7 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note – published value 2	250 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
to 9: Witty Dlate suD Ply voltage of 250 volts, grid – circuit resistance – published value 1	9 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
to 9: Witty Dlate suD Ply voltage of 250 volts, grid – circuit resistance – published value 2	250 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
500 onms common to Dotty units. Plate of unit Mo.1 tied to plate	500	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Note 10: With Dlate suDDly voltage OT 100 volt 5, grid –Circuit re5i5ta nce – published value 1	10 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note 10: With Dlate suDDly voltage OT 100 volt 5, grid –Circuit re5i5ta nce – published value 2	100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Note 10: With Dlate suDDly voltage OT 100 volt 5, grid –Circuit re5i5ta nce – published value 3	5 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
50 ohms Common to Dotty units. Plate of unit No.i tied to plate	50 ohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
ote 11: With 100 volts do between heater and Cathode – published value 1	11 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
ote 11: With 100 volts do between heater and Cathode – published value 2	100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
ote 12: Witty grid 100 volts negative with respect to all other elec– – published value 1	12 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
ote 12: Witty grid 100 volts negative with respect to all other elec– – published value 2	100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
do plate voltage of 250 volts, do grid voltage of -8 – published value 1	250 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
do plate voltage of 250 volts, do grid voltage of -8 – published value 2	-8 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
volts, plate load resistance of 20000 ohms, and vibrational	20000 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
supply voltage of 100 volts, grid-circuit resistance of	100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
0. 1 megohm common to both units, cathode-bias resistor of – published value 1	0 Mohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
0. 1 megohm common to both units, cathode-bias resistor of – published value 2	1 Mohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
50 ohms common to both units, and plate load resistance	50 ohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
variation in transconductance from the 0-hour reading	0	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PLATE VOLTAGE	330 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
PLATE DISSIPATION – published value 1	0 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
PLATE DISSIPATION – published value 2	85 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Heater negative with respect to cathode	180 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Heater positive with respect to cathode	180 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
For cathode-bias operation – published value 1	0 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
For cathode-bias operation – published value 2	5 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
RMS Output Voltage	25 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
RMS Output Voltage	7 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.