

ELECTRONIC TUBE REFERENCE

6BJ8

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS
CONSTRUCTION
DIODE-DIODE-TRIODE

Twin-diode medium-mu triode for television receiver applications, with published operating data including horizontal-deflection oscillator service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode	
NOMINAL OUTPUT CURRENT	9 mA
FORWARD VOLTAGE DROP	2.6 V
Representative row for two diode sections.	

SECTION2 Triode	
PLATE RESISTANCE	7150 Ω
TRANSCONDUCTANCE	0.0028 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	4 W
MAXIMUM CATHODE CURRENT	22 mA
Published promoted values applied where applicable; additional table data retained as parameters.	

SECTION3 Diode

No fixed ratings recorded.

Second physical Diode section added for documented twin-diode triode construction.

Twin diode medium-mu triode for television receiver applications. The supplied datasheet was read for heater data, maximum ratings, characteristics, typical operating information, and interelectrode capacitances where published.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
PositivePulsePlateVoltageMaximum	1200 V	HorizontalDeflectionOscillator
Heater Warmup Time	11 s	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	8 mA	ClassA



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Diode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage	6.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Current	600 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to plate	2.6	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid to heater and cathode	2.8	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate to heater and cathode – published value 1	0	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate to heater and cathode – published value 2	31	Published datasheet value; multiple values represent separate source-table limits or conditions.
cathode and heater	1.9	Published datasheet value; multiple values represent separate source-table limits or conditions.
plate and heater	4.6	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Voltage – published value 1	90 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Voltage – published value 2	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid Voltage – published value 1	0 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid Voltage – published value 2	-9 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Amplification Factor – published value 1	22 A	Published datasheet value; multiple values represent separate source-table limits or conditions.
Amplification Factor – published value 2	20 A	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Resistance (Approx.) – published value 1	4700 ohm	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Resistance (Approx.) – published value 2	7150 ohm	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance – published value 1	4700	Published datasheet value; multiple values represent separate source-table limits or conditions.
Transconductance – published value 2	2800	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Current – published value 1	13.5 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Current – published value 2	8 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 1- Diode-No.2 – published value 1	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 1- Diode-No.2 – published value 2	5	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate	6	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 2- Diode-No.2	2	Published datasheet value; multiple values represent separate source-table limits or conditions.
Cathode	7	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 3- Diode-No.1 – published value 1	3	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 3- Diode-No.1 – published value 2	8	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 4 -Heater	4	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC PLATE VOLTS – published value 1	92 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC PLATE VOLTS – published value 2	9364 V	Published datasheet value; multiple values represent separate source-table limits or conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode-No.1 plate to triode grid	0.07 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Diode-No.2 plate to triode grid	0.11 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Diode-No.1 plate to diode-No.2 plate	0.06 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE VOLTAGE	300 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Positive bias value	0 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
AVERAGE CATHODE CURRENT	20 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE DISSIPATION	3.5 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater negative with respect to cathode	200 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater positive with respect to cathode	200 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid-Circuit Resistance	1 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC PLATE VOLTAGE	300 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PEAK NEGATIVE-PULSE GRID VOLTAGE	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE DISSIPATION	3.5 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater negative with respect to cathode	200 V	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
cathode-bias operation – published value 1	2 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
cathode-bias operation – published value 2	2 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE CURRENT	54 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
CURRENT	9 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.