

ELECTRONIC TUBE REFERENCE

6BZ8

Voltage - Dual Triode (similar high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Medium-mu semi-remote-cutoff twin triode designed for low-noise VHF amplification, especially cascode television-tuner and controlled-gain RF applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9AJ	BASE PINS	9
NOMINAL HEATER	6.3 V / 400 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9AJ - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2P	B	P – Plate (Anode)	CONNECTED
PIN2 – 2G1	B	G1 – Control Grid	CONNECTED
PIN3 – 2K	B	K – Cathode	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – 1G1	A	G1 – Control Grid	CONNECTED
PIN8 – 1K	A	K – Cathode	CONNECTED
PIN9 – IS	A	IS – Internal Screen	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	5600 Ω
TRANSCONDUCTANCE	0.008 S
AMPLIFICATION FACTOR	45
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.2 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Representative specification for repeated identical sections.</i>	

SECTION2 Triode	
PLATE RESISTANCE	5600 Ω
TRANSCONDUCTANCE	0.008 S
AMPLIFICATION FACTOR	45
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.2 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Medium-mu twin triode for low-noise VHF cascode-amplifier service.</i>	

Medium-mu twin triode used as a cascode amplifier in VHF television tuners and in push-pull cathode-drive RF amplifiers.



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 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	125 V	Published operating/characteristic table
Grid Voltage	-13 V	Published operating/characteristic table
Cathode Resistor	100 ohm	Published operating/characteristic table

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	10 mA	Published operating/characteristic table
Transconductance	1 uS	Published operating/characteristic table
Plate Resistance	5600 ohm	Published operating/characteristic table



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID TO PLATE (G TO P)	1.15 µµf	Capacitances GRID TO PLATE (G TO P) 1.15 µµf
PLATE TO CATHODE (P TO K)	0.15 µµf	Capacitances PLATE TO CATHODE (P TO K) 0.15 µµf

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.15 pF	Section1
Inter-section plate capacitance	0.01 pF	Section1ToSection2

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HEATER VOLTAGE	6.3 V	Maximum Ratings HEATER VOLTAGE 6.3 VOLTS
MAXIMUM PLATE DISSIPATION	2.2 W	Maximum Ratings MAXIMUM PLATE DISSIPATION 2.2 WATTS
MAXIMUM GRID CIRCUIT RESISTANCE 0	1 Mohm	Maximum Ratings MAXIMUM GRID CIRCUIT RESISTANCE 0.1 MEGOHM
Plate voltage	125 V	ClassA
Cathode resistor	100 ohm	ClassA
Plate current	10 mA	ClassA
Cascode plate current	15 mA	Cascode Eb=250V

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HEATER VOLTAGE b•	3 V	ClassA HEATER VOLTAGE b•3 VOLTS
HEATER CURRENT D•	4 A	ClassA HEATER CURRENT D•4 AMP.
PLATE VOLTAGE	125 V	ClassA PLATE VOLTAGE 125 VOLTS
CATHODE RESISTOR	100 ohm	ClassA CATHODE RESISTOR 100 OHMS
GRID VOLTAGE (APPROX.) FOR Gm	50 μMHOS	ClassA GRID VOLTAGE (APPROX.) FOR Gm =50 μMHOS —13 VOLTS
GRID VOLTAGE (APPROX.) FOR Gm	13 V	ClassA GRID VOLTAGE (APPROX.) FOR Gm =50 μMHOS —13 VOLTS
CASCO DE TRANSCONDUCTANCE (Eb	250 V	ClassA CASCO DE TRANSCONDUCTANCE (Eb 250V Ec1 - p•SV) 10 000 μMHOS
CASCO DE TRANSCONDUCTANCE (Eb	0 μMHOS	ClassA CASCO DE TRANSCONDUCTANCE (Eb 250V Ec1 - p•SV) 10 000 μMHOS
CASCODE PLATE CURRENT (Eb	250 V	ClassA CASCODE PLATE CURRENT (Eb 250V Eli _p..S V) 15 MA.
CASCODE PLATE CURRENT (Eb	15 mA	ClassA CASCODE PLATE CURRENT (Eb 250V Eli _p..S V) 15 MA.
Plate resistance	5600 ohm	—
Transconductance	8000 uS	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	45	—
Cascode transconductance	10000 μ S	Cascode Eb=250V

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	ClassA
Cathode resistor	100 ohm	ClassA
Plate current	10 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	5600 ohm	—
Transconductance	8000 μ S	—
Amplification factor	45	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-to-cathode capacitance	0.15 pF	Section2



TUBE TINKER
ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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

1975 RCA RC30

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 4.2	6.3 V	Published in approved 6BZ8 target datasheet entry; Section1
Heater Current 0.6	400 mA	Published in approved 6BZ8 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode Current	22 mA	Published in approved 6BZ8 target datasheet entry; Section1
Plate Dissipation	2.2 W	Published in approved 6BZ8 target datasheet entry; Section1
Cathode-Bias Resistor	220 Ω	Published in approved 6BZ8 target datasheet entry; Section1
Plate Resistance (Approx.)	5300 Ω	Published in approved 6BZ8 target datasheet entry; Section1
Plate Current	10 mA	Published in approved 6BZ8 target datasheet entry; Section1
Grid Voltage (Approx.) for transconductance of	50 μS	Published in approved 6BZ8 target datasheet entry; Section1
Grid Voltage (Approx.) for transconductance of 50 /imhos	-13 V	Published in approved 6BZ8 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate 1.2	1.2 pF	Published in approved 6BZ8 target datasheet entry; Section1
Plate to Grid, Heater, and Internal Shield	2.4 pF	Published in approved 6BZ8 target datasheet entry; Section1
Plate to Cathode	0.12 pF	Published in approved 6BZ8 target datasheet entry; Section1
Heater to Cathode 2.8	2.8 pF	Published in approved 6BZ8 target datasheet entry; Section1

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