



ELECTRONIC TUBE REFERENCE

6BA11

Voltage - Dual Pentode Triode electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

PENTODE-PENTODE-TRIODE

Compactron combining a medium-mu triode with twin pentodes for television vertical-deflection oscillator/driver and combined sync/automatic-gain-control circuitry.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12ER	BASE PINS	12
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

12ER - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	H – Heater	CONNECTED
PIN2	C	P – Plate (Anode)	CONNECTED
PIN3	B	G2 – Screen Grid	CONNECTED
PIN3	C	G2 – Screen Grid	CONNECTED
PIN3	–	IS – Internal Screen	CONNECTED
PIN4	B	G1 – Control Grid	CONNECTED
PIN4	C	G1 – Control Grid	CONNECTED
PIN5	C	G3 – Suppressor Grid	CONNECTED
PIN6	B	P – Plate (Anode)	CONNECTED
PIN7	B	G3 – Suppressor Grid	CONNECTED
PIN8	B	K – Cathode	CONNECTED
PIN8	C	K – Cathode	CONNECTED
PIN8	–	IS – Internal Screen	CONNECTED

TERMINAL	SECTION	ELEMENT	STATUS
PIN9	A	G1 – Control Grid	CONNECTED
PIN10	A	K – Cathode	CONNECTED
PIN11	A	P – Plate (Anode)	CONNECTED
PIN12	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0018 S
AMPLIFICATION FACTOR	18
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Triode section; ratings and characteristics retained in parameter rows where not safely promotable.</i>	

SECTION2 Pentode	
TRANSCONDUCTANCE	0.0017 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	1.1 W
MAXIMUM SCREEN DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	12 mA
<i>Pentode section; ratings and characteristics retained in parameter rows where not safely promotable.</i>	

SECTION3 Pentode	
TRANSCONDUCTANCE	0.006 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	1.1 W
<i>Pentode section; ratings and characteristics retained in parameter rows where not safely promotable.</i>	

Triode plus twin-pentode tube used as a vertical-deflection oscillator and in combined sync/AGC television circuits.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 3 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage. ...ttt it i ienreiinnannenes 8.4 6.3 Volts	6.3 V	Heater Voltage. ...ttt it i ienreiinnannenes 8.4 6.3 Volts
Heater Current i i i ittt ieiteearennannans 450 600 Ma	600 mA	Heater Current i i i ittt ieiteearennannans 450 600 Ma
Output: P0 (K4 h 4 1) i it i i i ittt renenannns 1.9 Pf	1.9 Pf	Output: PO (K4 h 4 1) i it i i i ittt renenannns 1.9 Pf
Plate Voltage . ittt it et i ittt it et 300 300 Volts	300 V	Plate Voltage . ittt it et i ittt it et 300 300 Volts
Positive DC Grid No. 3 Voltageciiiiiieriinennnnnnns — 3.0 Volts	3 V	Positive DC Grid No. 3 Voltageciiiiiieriinennnnnnns — 3.0 Volts
Negative DC Grid No. 3 Voltagecciiiiiiiiiniienennnnnn. — 50 Volts	50 V	Negative DC Grid No. 3 Voltagecciiiiiiiiiniienennnnnn. — 50 Volts
Peak Positive Grid No. 3 Voltage.....ccoiiiiiiiennnnnn... — 50 Volts	50 V	Peak Positive Grid No. 3 Voltage.....ccoiiiiiiiennnnnn... — 50 Volts
Negative DC Grid No. 1 Voltagecoieiiriiiiniinnnraninnns — 50 Volts	50 V	Negative DC Grid No. 1 Voltagecoieiiriiiiniinnnraninnns — 50 Volts
Plate Dissipation (Each Plate)iiei iiiiniininennns 1.5 1.1 Watts	1.1 W	Plate Dissipation (Each Plate)iiei iiiiniininennns 1.5 1.1 Watts
DC Cathode Current ... i i et e it enen s 20 12 Ma	12 mA	DC Cathode Current ... i i et e it enen s 20 12 Ma
Grid No. 3 Circuit Resistance (Each Grid).....cccvvuiiaa... — 0.5 Megohm	0.5 Megohm	Grid No. 3 Circuit Resistance (Each Grid).....cccvvuiiaa... — 0.5 Megohm
Grid No.2 Voltage — 67.5 67.5 67.5 67.5 Volts	67.5 V	Grid No.2 Voltage — 67.5 67.5 67.5 67.5 Volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 3 Voltage — 0 0 V 0 -10 0 Volts		Grid No. 3 Voltage — 0 0 -10 0 Volts
Grid No. 1 Voltage -11 1 V 0 Notel Note 1 Note 1 Volts		Grid No. 1 Voltage -11 0 Notel Note 1 Note 1 Volts
Plate Current 5.0 2.5 mA — 2. Y] 2.5 Ma		Plate Current 5.0 — 2. Y] 2.5 Ma
Grid No. 2 Current — — 4.4 mA — 7.0 4.4 Ma		Grid No. 2 Current — — — 7.0 4.4 Ma
Grid No. 1 Voltage	1 V	Grid No. 1 Voltage
Grid No. 3 Voltage (Approx.)	3 V	Grid No. 3 Voltage (Approx.)


SOURCE DATA APPENDIX

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
Heater voltage	6.3 V	—
Heater current	600 mA	—
Plate current	50 mA	Typical operating conditions

1961 TUNG SOL

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	600 mA	—
Plate current	50 mA	Typical operating conditions


SOURCE DATA APPENDIX

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Vertical-deflection oscillator/driver	TriodeSection
Plate voltage	200 V	TriodeSection
Plate current	4 mA	TriodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	70	TriodeSection

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Second sync/AGC pentode section	PentodeSection2
Plate voltage	150 V	PentodeSection2
Screen voltage	100 V	PentodeSection2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6000 μS	PentodeSection2

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Sync/AGC pentode section	PentodeSection1
Plate voltage	150 V	PentodeSection1
Screen voltage	100 V	PentodeSection1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6000 μ S	PentodeSection1



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 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC) = a	6.3 V	Section1;PublishedColumn1
Voltage (AC or DC) = a	0.6 V	Section1;PublishedColumn2
Warm-up time (Average)	11 s	Section1
Heater negative with respect to cathode. max	200 V	Section1
Heater positive with respect to cathode. max	200 V	Section1
Plate Voltage	100 V	Section1;PublishedColumn1
Grid-No. Voltage	-10 V	Section1;PublishedColumn1
Grid-No. Voltage	0 V	Section1;PublishedColumn2
Grid-No. Voltage	67.5 V	Section1;PublishedColumn1
Grid-No.1 Voltage g	9 V	Section1;PublishedColumn1
Grid No.1 Transconductance	1800 μ S	Section1;PublishedColumn1
Grid No.1 Transconductance	1700 μ S	Section1;PublishedColumn2
Plate Current	0 mA	Section1;PublishedColumn1
Plate Current	2.5 mA	Section1;PublishedColumn2
Grid No. Current	7 mA	Section1;PublishedColumn1
Grid No. Current	4.4 mA	Section1;PublishedColumn2
for plate μ a =	100 V	Section1;PublishedColumn1
for plate μ a =	-3.2 V	Section1;PublishedColumn2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
for plate μ a =	-18 V	Section1;PublishedColumn1
for plate μ a =	2.3 V	Section1;PublishedColumn2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to plate	2 pF	Section1
Input: GT to (KT,H)	2 pF	Section1
Output: PT to (KT,IS,H)	1.9 pF	Section1
G P to Pp	3 pF	Section1;PublishedColumn1
G P to Pp	2 pF	Section1;PublishedColumn2
Gap to all other electrodes	3.6 pF	Section1
GLP to all other electrodes	6 pF	Section1
PP to all other electrodes	3 pF	Section1
G P to G P max	2 pF	Section1;PublishedColumn1
G P to G P max	0.026 pF	Section1;PublishedColumn2

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage max. max	300 V	Section1;PublishedColumn1
Peak positive value - max	50 V	Section1
DC negative value - max	50 V	Section1
DC positive value. - max	3 V	Section1
Grid-No. (Screen-Grid) Voltage. - max	2 V	Section1;PublishedColumn1
Grid-No. (Screen-Grid) Voltage. - max	150 V	Section1;PublishedColumn2
Negative-bias value - max	50 V	Section1
Cathode Current max	20 mA	Section1;PublishedColumn1
Cathode Current max	12 mA	Section1;PublishedColumn2
Grid-No. Input - max	2 W	Section1;PublishedColumn1
Grid-No. Input - max	0.75 W	Section1;PublishedColumn2
Plate Dissipation (Each Plate). max	1.5 W	Section1;PublishedColumn1
Plate Dissipation (Each Plate). max	1.1 W	Section1;PublishedColumn2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
(Each Grid) - max	0.5 Mohm	Section1
For fixed-bias operation max. max	0.25 Mohm	Section1;PublishedColumn1

1971 RCA HB3 BINDER 4 OF 7

Section 2 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC) = a	6.3 V	Section2;PublishedColumn1
Voltage (AC or DC) = a	0.6 V	Section2;PublishedColumn2
Warm-up time (Average)	11 s	Section2
Heater negative with respect to cathode. max	200 V	Section2
Heater positive with respect to cathode. max	200 V	Section2
Plate Voltage	100 V	Section2;PublishedColumn1
Grid-No. Voltage	-10 V	Section2;PublishedColumn1
Grid-No. Voltage	0 V	Section2;PublishedColumn2
Grid-No. Voltage	67.5 V	Section2;PublishedColumn1
Grid-No.1 Voltage g	9 V	Section2;PublishedColumn1
Grid No.1 Transconductance	1800 μ S	Section2;PublishedColumn1
Grid No.1 Transconductance	1700 μ S	Section2;PublishedColumn2
Plate Current	0 mA	Section2;PublishedColumn1
Plate Current	2.5 mA	Section2;PublishedColumn2
Grid No. Current	7 mA	Section2;PublishedColumn1
Grid No. Current	4.4 mA	Section2;PublishedColumn2
for plate μ a =	100 V	Section2;PublishedColumn1
for plate μ a =	-3.2 V	Section2;PublishedColumn2
for plate μ a =	-18 V	Section2;PublishedColumn1
for plate μ a =	2.3 V	Section2;PublishedColumn2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to plate	2 pF	Section2
Input: GT to (KT,H)	2 pF	Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output: PT to (KT,IS,H)	1.9 pF	Section2
G P to Pp	3 pF	Section2;PublishedColumn1
G P to Pp	2 pF	Section2;PublishedColumn2
Gap to all other electrodes	3.6 pF	Section2
GlP to all other electrodes	6 pF	Section2
PP to all other electrodes	3 pF	Section2
G P to G P max	2 pF	Section2;PublishedColumn1
G P to G P max	0.026 pF	Section2;PublishedColumn2

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage max. max	300 V	Section2;PublishedColumn1
Peak positive value - max	50 V	Section2
DC negative value - max	50 V	Section2
DC positive value. - max	3 V	Section2
Grid-No. (Screen-Grid) Voltage. - max	2 V	Section2;PublishedColumn1
Grid-No. (Screen-Grid) Voltage. - max	150 V	Section2;PublishedColumn2
Negative-bias value - max	50 V	Section2
Cathode Current max	20 mA	Section2;PublishedColumn1
Cathode Current max	12 mA	Section2;PublishedColumn2
Grid-No. Input - max	2 W	Section2;PublishedColumn1
Grid-No. Input - max	0.75 W	Section2;PublishedColumn2
Plate Dissipation (Each Plate). max	1.5 W	Section2;PublishedColumn1
Plate Dissipation (Each Plate). max	1.1 W	Section2;PublishedColumn2
(Each Grid) - max	0.5 Mohm	Section2
For fixed-bias operation max. max	0.25 Mohm	Section2;PublishedColumn1

Section 3 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC) = a	6.3 V	Section3;PublishedColumn1
Voltage (AC or DC) = a	0.6 V	Section3;PublishedColumn2
Warm-up time (Average)	11 s	Section3
Heater negative with respect to cathode. max	200 V	Section3
Heater positive with respect to cathode. max	200 V	Section3
Plate Voltage	100 V	Section3;PublishedColumn1
Grid-No. Voltage	-10 V	Section3;PublishedColumn1
Grid-No. Voltage	0 V	Section3;PublishedColumn2
Grid-No. Voltage	67.5 V	Section3;PublishedColumn1
Grid-No.1 Voltage g	9 V	Section3;PublishedColumn1
Grid No.1 Transconductance	1800 μ S	Section3;PublishedColumn1
Grid No.1 Transconductance	1700 μ S	Section3;PublishedColumn2
Plate Current	0 mA	Section3;PublishedColumn1
Plate Current	2.5 mA	Section3;PublishedColumn2
Grid No. Current	7 mA	Section3;PublishedColumn1
Grid No. Current	4.4 mA	Section3;PublishedColumn2
for plate μ a =	100 V	Section3;PublishedColumn1
for plate μ a =	-3.2 V	Section3;PublishedColumn2
for plate μ a =	-18 V	Section3;PublishedColumn1
for plate μ a =	2.3 V	Section3;PublishedColumn2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to plate	2 pF	Section3
Input: GT to (KT,H)	2 pF	Section3
Output: PT to (KT,IS,H)	1.9 pF	Section3
G P to Pp	3 pF	Section3;PublishedColumn1
G P to Pp	2 pF	Section3;PublishedColumn2
Gap to all other electrodes	3.6 pF	Section3

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GLP to all other electrodes	6 pF	Section3
PP to all other electrodes	3 pF	Section3
G P to G P max	2 pF	Section3;PublishedColumn1
G P to G P max	0.026 pF	Section3;PublishedColumn2

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage max. max	300 V	Section3;PublishedColumn1
Peak positive value - max	50 V	Section3
DC negative value - max	50 V	Section3
DC positive value. - max	3 V	Section3
Grid-No. (Screen-Grid) Voltage. - max	2 V	Section3;PublishedColumn1
Grid-No. (Screen-Grid) Voltage. - max	150 V	Section3;PublishedColumn2
Negative-bias value - max	50 V	Section3
Cathode Current max	20 mA	Section3;PublishedColumn1
Cathode Current max	12 mA	Section3;PublishedColumn2
Grid-No. Input - max	2 W	Section3;PublishedColumn1
Grid-No. Input - max	0.75 W	Section3;PublishedColumn2
Plate Dissipation (Each Plate). max	1.5 W	Section3;PublishedColumn1
Plate Dissipation (Each Plate). max	1.1 W	Section3;PublishedColumn2
(Each Grid) - max	0.5 Mohm	Section3
For fixed-bias operation max. max	0.25 Mohm	Section3;PublishedColumn1



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) 6.3	8.4 V	Published in approved 8BA11 target datasheet entry; Section1
Heater Current 0.6	450 mA	Published in approved 8BA11 target datasheet entry; Section1
Heater Warm-up Time 11	11 seconds	Published in approved 8BA11 target datasheet entry; Section1
Plate Voltage	300 V	Published in approved 8BA11 target datasheet entry; Section1
Average Cathode Current	20 mA	Published in approved 8BA11 target datasheet entry; Section1
Plate Dissipation	1.5 W	Published in approved 8BA11 target datasheet entry; Section1
Plate Voltage	250 V	Published in approved 8BA11 target datasheet entry; Section1
Grid Voltage	-11 V	Published in approved 8BA11 target datasheet entry; Section1
Transconductance	1800 μ S	Published in approved 8BA11 target datasheet entry; Section1
Plate Current	5 mA	Published in approved 8BA11 target datasheet entry; Section1
Grid Voltage (Approx.) for plate current of 100 μ A	-18 V	Published in approved 8BA11 target datasheet entry; Section1
For fixed-bias operation	0.25 M Ω	Published in approved 8BA11 target datasheet entry; Section1
For cathode-bias operation	1 M Ω	Published in approved 8BA11 target datasheet entry; Section1
Plate Voltage (Each Unit)	300 V	Published in approved 8BA11 target datasheet entry; Section1
Peak positive value	50 V	Published in approved 8BA11 target datasheet entry; Section1
DC negative value	50 V	Published in approved 8BA11 target datasheet entry; Section1
DC positive value	3 V	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Voltage	150 V	Published in approved 8BA11 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.1 (Control-Grid) Voltage, Negative bias value	50 V	Published in approved 8BA11 target datasheet entry; Section1
Cathode Current	12 mA	Published in approved 8BA11 target datasheet entry; Section1
Plate Dissipation (Each Unit)	1.1 W	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.2 Input	0.75 W	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.3-Circuit Resistance (Each Unit)	0.5 MΩ	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.1-Circuit Resistance	0.5 MΩ	Published in approved 8BA11 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	2 pF	Published in approved 8BA11 target datasheet entry; Section1
Grid to Cathode and Heater	2 pF	Published in approved 8BA11 target datasheet entry; Section1
Plate to Cathode, Heater, and Internal Shield	1.9 pF	Published in approved 8BA11 target datasheet entry; Section1
Grid No.3 to Plate (Each Unit)	2 pF	Published in approved 8BA11 target datasheet entry; Section1
Grid No.3 to all Other Electrodes (Each Grid)	3.6 pF	Published in approved 8BA11 target datasheet entry; Section1
Grid No.1 to all Other Electrodes)	6 pF	Published in approved 8BA11 target datasheet entry; Section1
Plate to all Other Electrodes (Each Plate)	3 pF	Published in approved 8BA11 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage (Each Unit) 100	100 V	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.3 Voltage (Each Unit) -10	0 V	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.2 Voltage 67.5	67.5 V	Published in approved 8BA11 target datasheet entry; Section1
Plate Current (Each Unit) 0	2.5 mA	Published in approved 8BA11 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 Current 7	4.4 mA	Published in approved 8BA11 target datasheet entry; Section1
Plate Voltage 100	100 V	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.3 Voltage 0	0 V	Published in approved 8BA11 target datasheet entry; Section1
Grid-No.1 Transconductance	1700 μ S	Published in approved 8BA11 target datasheet entry; Section1
Plate Current	2.5 mA	Published in approved 8BA11 target datasheet entry; Section1
100 /iA	3.2 V	Published in approved 8BA11 target datasheet entry; Section1

1975 RCA RC30

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 6.3	8.4 V	Published in approved 8BA11 target datasheet entry; Section2
Heater Current 0.6	450 mA	Published in approved 8BA11 target datasheet entry; Section2
Heater Warm-up Time 11	11 seconds	Published in approved 8BA11 target datasheet entry; Section2
Plate Voltage	300 V	Published in approved 8BA11 target datasheet entry; Section2
Average Cathode Current	20 mA	Published in approved 8BA11 target datasheet entry; Section2
Plate Dissipation	1.5 W	Published in approved 8BA11 target datasheet entry; Section2
Plate Voltage	250 V	Published in approved 8BA11 target datasheet entry; Section2
Grid Voltage	-11 V	Published in approved 8BA11 target datasheet entry; Section2
Transconductance	1800 μ S	Published in approved 8BA11 target datasheet entry; Section2
Plate Current	5 mA	Published in approved 8BA11 target datasheet entry; Section2
Grid Voltage (Approx.) for plate current of 100 μ A	-18 V	Published in approved 8BA11 target datasheet entry; Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For fixed-bias operation	0.25 MΩ	Published in approved 8BA11 target datasheet entry; Section2
For cathode-bias operation	1 MΩ	Published in approved 8BA11 target datasheet entry; Section2
Plate Voltage (Each Unit)	300 V	Published in approved 8BA11 target datasheet entry; Section2
Peak positive value	50 V	Published in approved 8BA11 target datasheet entry; Section2
DC negative value	50 V	Published in approved 8BA11 target datasheet entry; Section2
DC positive value	3 V	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.2 (Screen-Grid) Voltage	150 V	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.1 (Control-Grid) Voltage, Negative bias value	50 V	Published in approved 8BA11 target datasheet entry; Section2
Cathode Current	12 mA	Published in approved 8BA11 target datasheet entry; Section2
Plate Dissipation (Each Unit)	1.1 W	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.2 Input	0.75 W	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.3-Circuit Resistance (Each Unit)	0.5 MΩ	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.1-Circuit Resistance	0.5 MΩ	Published in approved 8BA11 target datasheet entry; Section2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	2 pF	Published in approved 8BA11 target datasheet entry; Section2
Grid to Cathode and Heater	2 pF	Published in approved 8BA11 target datasheet entry; Section2
Plate to Cathode, Heater, and Internal Shield	1.9 pF	Published in approved 8BA11 target datasheet entry; Section2
Grid No.3 to Plate (Each Unit)	2 pF	Published in approved 8BA11 target datasheet entry; Section2
Grid No.3 to all Other Electrodes (Each Grid)	3.6 pF	Published in approved 8BA11 target datasheet entry; Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to all Other Electrodes)	6 pF	Published in approved 8BA11 target datasheet entry; Section2
Plate to all Other Electrodes (Each Plate)	3 pF	Published in approved 8BA11 target datasheet entry; Section2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage (Each Unit) 100	100 V	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.3 Voltage (Each Unit) -10	0 V	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.2 Voltage 67.5	67.5 V	Published in approved 8BA11 target datasheet entry; Section2
Plate Current (Each Unit) 0	2.5 mA	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.2 Current 7	4.4 mA	Published in approved 8BA11 target datasheet entry; Section2
Plate Voltage 100	100 V	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.3 Voltage 0	0 V	Published in approved 8BA11 target datasheet entry; Section2
Grid-No.1 Transconductance	1700 μS	Published in approved 8BA11 target datasheet entry; Section2
Plate Current	2.5 mA	Published in approved 8BA11 target datasheet entry; Section2
100 /iA	3.2 V	Published in approved 8BA11 target datasheet entry; Section2

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