



ELECTRONIC TUBE REFERENCE

5J6

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Twin triode for RF power amplification and oscillator service, also usable as an audio amplifier or push-pull mixer at frequencies extending to about 600 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	4.7 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	7100 Ω
TRANSCONDUCTANCE	0.0053 S
AMPLIFICATION FACTOR	38
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	1.5 W
Referenced ratings not printed in this source; not inferred.	

SECTION2 Triode	
PLATE RESISTANCE	7100 Ω
TRANSCONDUCTANCE	0.0053 S
AMPLIFICATION FACTOR	38
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	1.5 W
<i>Second physical triode section; electrically identical twin section.</i>	

Miniature type used as combined rf power amplifier and oscillator or as twin af amplifier. With push-pull arrangement of the grids and the plates in parallel, this type can also be used as a mixer at frequencies as high as 600 MHz. Outlines section, 5C; requires miniature 7-contact socket. Type 5J6 is identical with 7BF type 6J6A except for heater ratings. 5J6 6J6A



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	4.7 V	—
Heater current	600 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Westinghouse Data Book

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

1965 WESTINGHOUSE DATA BOOK

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage maximum	300 V	—
Plate dissipation maximum per section	1.5 W	—
Heater-cathode voltage maximum	100 V	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum mixer frequency	600 MHz	PushPull
Transconductance	5300 μ S	—
Amplification factor	38	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	7000 ohm	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	RF oscillator / amplifier / mixer	—


SOURCE DATA APPENDIX

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	ClassA; EachSection
Cathode bias resistor	50 ohm	ClassA; BothSections
Plate current	8.5 mA	ClassA; EachSection
DC plate voltage	150 V	ClassC; PushPull; RFPower
DC grid voltage	-10 V	ClassC; PushPull; RFPower
DC plate current	30 mA	ClassC; PushPull; RFPower
Driving power	0.35 W	ClassC; PushPull; RFPower
RF power output	3.5 W	ClassC; PushPull; RFPower

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	5300 uS	EachSection
Amplification factor	38	EachSection
Plate resistance	7.2 kOhm	EachSection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.6 pF	EachSection



SOURCE OPERATING CONDITIONS

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warmup Time	11 s	—



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	ClassA;EachSection
Cathode bias resistor	50 ohm	ClassA;BothSections
Plate current	8.5 mA	ClassA;EachSection
Maximum plate voltage	300 V	EachSection
Maximum plate dissipation	1.5 W	EachSection
Class C plate voltage	150 V	Oscillator
Class C grid voltage	-10 V	Oscillator
Class C plate current	30 mA	Oscillator
Power output	3.5 W	ClassC;Oscillator
Heater/filament voltage	4.7 V	DerivativeSheet
Heater/filament current	600 mA	DerivativeSheet

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater warm-up time	11 s	ControlledWarmup

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	7100 ohm	EachSection
Transconductance	5300 uS	EachSection
Amplification factor	38	EachSection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.6 pF	EachSection
Grid-to-cathode capacitance	2.2 pF	EachSection
Plate-to-cathode capacitance	0.4 pF	EachSection


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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc)	6.3 volts	Published value from supplied target entry
Heater Current	0.45 ampere	Published value from supplied target entry
Heater Warm-up Time (Average)	11 seconds	Published value from supplied target entry
Plate Voltage	300 volts	Published value from supplied target entry
Grid Voltage, Positive-bias value	0 volts	Published value from supplied target entry
Plate Dissipation	1.5 watts	Published value from supplied target entry
Plate Voltage	100 volts	Published value from supplied target entry
Amplification Factor	38	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.)	7100 ohms	Published value from supplied target entry
Transconductance	5300	Published value from supplied target entry
Plate Current	8.5 mA	Published value from supplied target entry
Grid Current	8 mA	Published value from supplied target entry
Plate Voltage	160 volts	Published value from supplied target entry
Grid Voltage"	-10 volts	Published value from supplied target entry
Plate Current	30 mA	Published value from supplied target entry
Grid Current (Approx.)	16 mA	Published value from supplied target entry
Power Output (Approx.)	3.5 watts	Published value from supplied target entry
Heater Current	0.8 ampere	Published value from supplied target entry
Plate Voltage	250 volts	Published value from supplied target entry
Grid-No	250 volts	Published value from supplied target entry
Grid-No.1 (Control-Grid) Voltage	-20 volts	Published value from supplied target entry
Plate Resistance (Approx.)	50000 ohms	Published value from supplied target entry
Transconductance	4100 mhos	Published value from supplied target entry
Plate Current	43 mA	Published value from supplied target entry
Grid-No	3.5 mA	Published value from supplied target entry

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Heater-Cathode Voltage ±	100 volts	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	1.6 pF	Published value from supplied target entry
Grid to Cathode and Heater	2.6 pF	Published value from supplied target entry
Plate to Cathode and Heater (Unit No.1)	1.6 pF	Published value from supplied target entry
Plate to Cathode and Heater (Unit No	1 pF	Published value from supplied target entry
Plate to Cathode, Heater, Grid No	6.5 pF	Published value from supplied target entry