

ELECTRONIC TUBE REFERENCE

5U4G

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Directly heated full-wave high-vacuum rectifier widely used in substantial power supplies. Its 5 V filament supports approximately 225 mA DC output and high peak-current capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	5T	BASE PINS	8
NOMINAL HEATER	5 V / 3 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

5T - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – IS	A	IS – Internal Screen	CONNECTED
PIN2 – F	–	F – Filament	CONNECTED
PIN4 – P1	A	P – Plate (Anode)	CONNECTED
PIN6 – P2	A	P – Plate (Anode)	CONNECTED
PIN8 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	1550 V
NOMINAL OUTPUT CURRENT	225 mA
PEAK FORWARD CURRENT	800 mA
FORWARD VOLTAGE DROP	58 V
<i>Representative row for identical repeated sections.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	1550 V
NOMINAL OUTPUT CURRENT	225 mA
PEAK FORWARD CURRENT	800 mA
FORWARD VOLTAGE DROP	58 V
<i>Second physical rectifier section; promoted electrical properties populated from identical section.</i>	

Mesh full-wave rectifier electrically identical to 5Z3 apart from socket. The supplied Emission Labs sheet was read for filament data, maximum ratings, representative operating points, gm/rp/mu, output conditions, capacitances, and rectifier filter conditions as applicable.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1937 Raytheon Radio Receiving Tubes

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

1937 RAYTHEON RADIO RECEIVING TUBES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	5 V	Section1
Heater/filament current	3 A	Section1
RMS AC voltage per plate maximum	500 V	FullWave
Peak inverse voltage maximum	1400 V	FullWave
DC output current maximum	250 mA	FullWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average tube voltage drop	61 V	FullWave



SOURCE OPERATING CONDITIONS

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1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Inverse Voltage	1550 V	—
Peak Current per Anode	675 mA	—
Rectified Current	225 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RMS Input per Anode	550 V	—
RMS Input per Anode	450 V	CapacitorInputFilter
Rectified Current	225 mA	CapacitorInputFilter
Reservoir Capacitor	32 uF	CapacitorInputFilter
RMS Input per Anode	550 V	ChokeInputFilter
Rectified Current	225 mA	ChokeInputFilter
Input Choke Inductance	3 H	ChokeInputFilter


SOURCE DATA APPENDIX

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1958 Brimar Radio Valve No 7

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

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RMS Input per Anode	450 V	CapacitorInputFilter
Reservoir Capacitance	32 uF	CapacitorInputFilter
RMS Input per Anode	550 V	ChokeInputFilter
Input Choke Inductance	3 H	ChokeInputFilter
Rectified Current	225 mA	—


SOURCE DATA APPENDIX

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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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament/heater voltage	5 V	Published condensed-characteristics chart
Filament/heater current	3 A	Published condensed-characteristics chart
DC output current maximum	225 mA	FullWave
Peak inverse voltage maximum	1550 V	FullWave
RMS supply voltage per plate maximum	450 V	FullWave
Peak current per plate maximum	800 mA	FullWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop	44 V	At 225 mA DC



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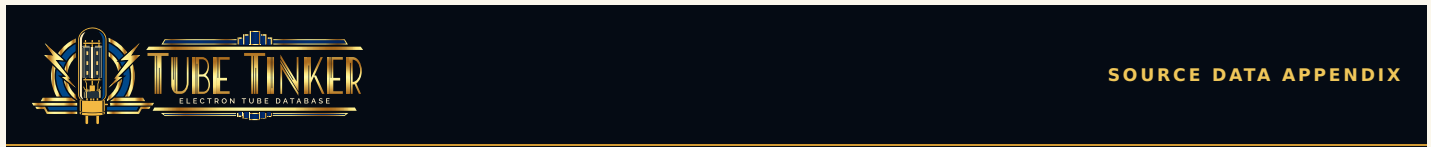
1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	5 V	—
HeaterOrFilamentCurrent	3 A	—



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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
SteadyStatePeakPlateCurrentPerPlate	675 mA	—



SOURCE DATA APPENDIX

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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse plate voltage maximum	1550 V	—
AC plate supply voltage per plate	450 V RMS	CapacitorInputFilter
Input capacitor	40 uF	CapacitorInputFilter
DC output current	225 mA	CapacitorInputFilter
DC output voltage at filter input	470 V	CapacitorInputFilter
AC plate supply voltage per plate	300 V RMS	CapacitorInputFilter
Input capacitor	40 uF	CapacitorInputFilter
DC output current	245 mA	CapacitorInputFilter
DC output voltage at filter input	290 V	CapacitorInputFilter
AC plate supply voltage per plate	550 V RMS	ChokeInputFilter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input choke	10 H	ChokeInputFilter
DC output current	225 mA	ChokeInputFilter
DC output voltage at filter input	440 V	ChokeInputFilter

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	5 V	—
Heater current	3 A	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Full-wave power-supply rectifier	—


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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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage maximum	1550 V	EachPlate
Steady-state peak plate current maximum	675 mA	EachPlate
AC plate voltage per plate	450 V RMS	FullWave;CapacitorInputFilter
DC output current maximum	225 mA	FullWave;CapacitorInputFilter
Minimum effective plate-supply impedance per plate	75 Ω	CapacitorInputFilter
AC plate voltage per plate	550 V RMS	FullWave;ChokeInputFilter
DC output current maximum	225 mA	FullWave;ChokeInputFilter
Minimum input choke	3 H	ChokeInputFilter

Characteristic		
Parameter	Published Value	Condition / Note
Tube voltage drop at 225 mA per plate	58 V	EachPlate



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2026 Emission Labs

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

2026 EMISSION LABS

Section 1 · Rectifier

Characteristics		
Parameter	Published Value	Condition / Note
Filament voltage	5 V	—
Filament current	3 A	—

Other		
Parameter	Published Value	Condition / Note
Maximum transformer AC voltage	550 V RMS	—
Maximum DC output current	225 mA	CapacitorInputFilter
Maximum DC output current	265 mA	ChokeInputFilter
Maximum first capacitor	40 uF	CapacitorInputFilter
Repeated peak current	800 mA	—
One-time transient peak current	4 A	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

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