

ELECTRONIC TUBE REFERENCE

5V4G

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Indirectly heated full-wave high-vacuum rectifier designed for relatively low internal voltage drop. Its five-volt heater and moderate current capability suit receiver, amplifier, and general electronic power supplies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	5L	BASE PINS	4
NOMINAL HEATER	5 V / 2 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

5L - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN2 – H	–	H – Heater	CONNECTED
PIN4 – P1	A	P – Plate (Anode)	CONNECTED
PIN6 – P2	A	P – Plate (Anode)	CONNECTED
PIN8 – K	A	K – Cathode	CONNECTED
PIN8 – H	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	1400 V
NOMINAL OUTPUT CURRENT	175 mA
PEAK FORWARD CURRENT	525 mA
FORWARD VOLTAGE DROP	23 V
<i>Representative row for identical repeated sections.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	1400 V
NOMINAL OUTPUT CURRENT	175 mA
PEAK FORWARD CURRENT	525 mA
FORWARD VOLTAGE DROP	23 V
<i>Second physical rectifier section; electrical properties populated from corresponding identical section.</i>	

5V4G is a Rectifier device. Indirectly heated full-wave high-vacuum rectifier with low internal voltage drop. The supplied sheet explicitly states that 5V4G and 83V have identical ratings and electrical characteristics.



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	2 A	Section1
RMS AC voltage per plate maximum	400 V	FullWave
Peak inverse voltage maximum	1100 V	FullWave
DC output current maximum	200 mA	FullWave
Peak plate current maximum	700 mA	FullWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average tube voltage drop	25 V	FullWave



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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	1400 V	—
Peak Current per Anode	525 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Rectified Current	175 mA	—
RMS Input per Anode	500 V	—
RMS Input per Anode	375 V	CapacitorInputFilter
Rectified Current	175 mA	CapacitorInputFilter
Reservoir Capacitor	32 uF	CapacitorInputFilter
RMS Input per Anode	500 V	ChokeInputFilter
Rectified Current	175 mA	ChokeInputFilter
Input Choke Inductance	4 H	ChokeInputFilter



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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	375 V	CapacitorInputFilter
Reservoir Capacitance	32 uF	CapacitorInputFilter
RMS Input per Anode	500 V	ChokeInputFilter
Input Choke Inductance	4 H	ChokeInputFilter
Rectified Current	175 mA	—



SOURCE DATA APPENDIX

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	2 A	Published condensed-characteristics chart
DC output current maximum	175 mA	FullWave
Peak inverse voltage maximum	1400 V	FullWave
RMS supply voltage per plate maximum	375 V	FullWave
Peak current per plate maximum	525 mA	FullWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop	25 V	At 175 mA DC



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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
THE TUNG-SOL	83 V	THE TUNG-SOL 5V4G AND 83V ARE POWER RECTIFIERS WITH LOW INTERNAL VOLTAGE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAXIMUM STEADY-STATE PEAK PLATE CURRENT PER PLATE	525 mA	Maximum Ratings MAXIMUM STEADY-STATE PEAK PLATE CURRENT PER PLATE 525 MA.
Peak inverse voltage	1400 V	—
Steady-state peak plate current per plate	525 mA	—
AC plate voltage per plate	375 V	CapacitorInputFilter
DC output current	175 mA	CapacitorInputFilter
Plate-supply impedance per plate	65 ohm	CapacitorInputFilter
AC plate voltage per plate	500 V	ChokeInputFilter
DC output current	175 mA	ChokeInputFilter
Input choke	4 H	ChokeInputFilter

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AC PLATE VOLTAGE PER PLATE (RMS~""X•	375 V	CapacitorInputFilter AC PLATE VOLTAGE PER PLATE (RMS~""X• 375 VOLTS
DC OUTPUT CURRENT N" %'	175 mA	CapacitorInputFilter DC OUTPUT CURRENT N" %' 175 MA.
TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE PER PLATE NINA	65 ohm	CapacitorInputFilter TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE PER PLATE NINA 65 OHMS

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC OUTPUT CURRENT N" x •	175 mA	ChokeInputFilter DC OUTPUT CURRENT N" x • 175 MA.
T	23 V	ChokeInputFilter T 118E VOLTAGE DROP 23 VOLTS
PLATE AT Z	75 mA	ChokeInputFilter PLATE AT Z75 MA. PER PLATE
CHOKE INPUT. L	20 H	ChokeInputFilter =CHOKE INPUT. L = 20 h _ Et = 5.0 Volts
CHOKE INPUT. L	5 V	ChokeInputFilter =CHOKE INPUT. L = 20 h _ Et = 5.0 Volts
Tube voltage drop	23 V	At 175mA per plate