

ELECTRONIC TUBE REFERENCE

6X5GT

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
RECTIFIER-RECTIFIER

Glass-octal full-wave vacuum rectifier for receiver and general electronic power supplies. Its 6.3 V heater-cathode construction provides moderate-current full-wave B-plus rectification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6S	BASE PINS	5
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

6S - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – IS	A	IS – Internal Screen	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – 2P	A	P – Plate (Anode)	CONNECTED
PIN5 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	1280 V
NOMINAL OUTPUT CURRENT	70 mA
PEAK FORWARD CURRENT	210 mA
FORWARD VOLTAGE DROP	22 V
MAXIMUM HEATER-CATHODE VOLTAGE	450 V
<i>Representative row for two identical rectifier sections.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	1280 V
NOMINAL OUTPUT CURRENT	70 mA
PEAK FORWARD CURRENT	210 mA
FORWARD VOLTAGE DROP	22 V
MAXIMUM HEATER-CATHODE VOLTAGE	450 V
<i>Second physical rectifier section; electrical properties populated from corresponding identical section.</i>	

6X5GT is a Rectifier vacuum tube documented in the RCA Receiving Tube Manual. The supplied excerpt was reviewed for heater data, section arrangement, maximum ratings, electrical characteristics, interelectrode capacitances, typical operating conditions, and stated applications.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1944 Hytron

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

1944 HYTRON

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum AC Voltage Per Plate RMS	350 V	—



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
RMS Input per Anode	325 V	CapacitorInputFilter
Supply Impedance per Anode	150 ohm	CapacitorInputFilter; minimum
Reservoir Condenser	32 uF	CapacitorInputFilter; maximum



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	600 mA	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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
Maximum peak inverse voltage	1250 V	—
Nominal DC output current	70 mA	—
Maximum peak forward current	210 mA	—
Maximum RMS supply voltage	325 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward voltage drop	22 V	—
Forward-voltage-drop test current	70 mA	—



SOURCE DATA APPENDIX

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Inverse Voltage	1250 V	—
Peak Anode Current	200 mA	—
RMS Input Voltage per Anode	450 V	—



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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater current	600 mA	Nominal
AC plate voltage per plate RMS	325 V	CapacitorInputFilter
DC output current	70 mA	CapacitorInputFilter
AC plate voltage per plate RMS	400 V	ChokeInputFilter
DC output current	70 mA	ChokeInputFilter
Input choke	10 H	ChokeInputFilter
Filter input capacitor	10 uF	CapacitorInputFilter
Total effective plate supply impedance per plate	525 ohm	CapacitorInputFilter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC output voltage at filter input	310 V	CapacitorInputFilter



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Steady-state peak plate current per plate	245 mA	—
Transient peak plate current per plate	1.1 A	—
AC plate voltage per plate	325 V	CapacitorInputFilter
Input capacitor	10 uF	CapacitorInputFilter
DC output current	70 mA	CapacitorInputFilter
AC plate voltage per plate	400 V	ChokeInputFilter
Input choke	10 H	ChokeInputFilter
DC output current	70 mA	ChokeInputFilter

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop at 70 mA per plate	22 V	—



SOURCE DATA APPENDIX

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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AC Plate-Supply Voltage per Plate	325 V	CapacitorInputFilter
AC Plate-Supply Voltage per Plate	450 V	ChokeInputFilter
DC Output Voltage at Filter Input	370 V	CapacitorInputFilter;Iout=70mA
DC Output Voltage at Filter Input	380 V	ChokeInputFilter;Iout=70mA