

ELECTRONIC TUBE REFERENCE

6X5

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
RECTIFIER-RECTIFIER

Indirectly heated full-wave high-vacuum rectifier for capacitor-input or choke-input power supplies. Its 6.3 V heater and moderate output capability suit receiver and general electronic B-plus supplies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6S	BASE PINS	6
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	1250 V
NOMINAL OUTPUT CURRENT	70 mA
PEAK FORWARD CURRENT	210 mA
FORWARD VOLTAGE DROP	22 V
MAXIMUM HEATER-CATHODE VOLTAGE	450 V
<i>Published ratings and characteristics promoted where clearly stated; identical repeated sections compressed when applicable.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	1250 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>	

Full-wave high-vacuum rectifier for capacitor-input or choke-input filter service.



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 voltage	6.3 V	Section1
Heater current	600 mA	Section1
RMS AC voltage per plate maximum	325 V	FullWave
Peak inverse voltage maximum	1250 V	FullWave
DC output current maximum	70 mA	FullWave
Maximum heater-cathode DC voltage	450 V	FullWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average tube voltage drop	22 V	At75mAOutputCurrentPerPlate



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaTer VoLTAGE (A. C. or D. C)).. aessacse s	6.3 V	HeaTer VoLTAGE (A. C. or D. C)).. aessacse s 6.3 Volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HEATER CURRENT ccvovuvnes e seevers e	600 mA	HEATER CURRENT ccvovuvnes e seevers e 0.6 Ampere
A-C PLATE VOLTAGE PER PLATE (RMS) 350 max. Volts	350 V	A-C PLATE VOLTAGE PER PLATE (RMS) 350 max. Volts
PEAK INVERSE VOLTAGE.... 1250 max. Volts	1250 V	PEAK INVERSE VOLTAGE.... 1250 max. Volts
D-C OutPuT CURRENT..... csessesrsssseccese 75 max. Milliamperes	75 mA	D-C OutPuT CURRENT..... csessesrsssseccese 75 max. Milliamperes
The heater should be operated at 6.3 volts. 2 'I&LQ'?\MSI eh N	2 V	The heater should be operated at 6.3 volts. 2 'I&LQ'?\MSI eh N
fluctuate so that it exceeds 7.5 volts. The dc 2 YU R I	2 V	fluctuate so that it exceeds 7.5 volts. The dc 2 YU R I
limited to 400 volts	0 V	limited to 400 volts. 23 _120
rectifiers and filter circuits, refer to page 24 and D-C LOAD MILLIAMPERES	24 mA	rectifiers and filter circuits, refer to page 24 and D-C LOAD MILLIAMPERES
n SCREEN VOLTS =	300 V	n SCREEN VOLTS =300
> voLTS [Ec	0 V	> voLTS [Ec1=0
PLATE VOLTS	4583 V	PLATE VOLTS 92C—4583R1



SOURCE DATA APPENDIX

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 1 · Rectifier

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filter service	Capacitor-input or choke-input	—



SOURCE DATA APPENDIX

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	6.3 V	Published nominal value
Heater or filament current	600 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Rectified output current	70 mA	Published maximum or highest listed value



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
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	—

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



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	450 V	ChokeInputFilter
DC output current	70 mA	ChokeInputFilter
Input choke	8 H	ChokeInputFilter
Total effective plate supply impedance per plate	150 ohm	CapacitorInputFilter



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 5 of 7

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

1971 RCA HB3 BINDER 5 OF 7

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	600 mA	—
Peak inverse voltage	1250 V	FullWave
DC output current	70 mA	FullWave
Peak plate current per plate	210 mA	EachPlate
Maximum heater-cathode voltage	450 V	—
AC plate voltage per plate	325 V	CapacitorInputFilter

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward voltage drop	22 V	—

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