



ELECTRONIC TUBE REFERENCE

5R4GYB

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Directly heated full-wave high-vacuum rectifier designed for high-altitude aircraft and other demanding supplies. Its rugged construction provides approximately 250 mA output with high inverse-voltage capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	5 V / 2 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	3100 V
NOMINAL OUTPUT CURRENT	250 mA
PEAK FORWARD CURRENT	715 mA
<i>Published ratings and characteristics promoted where applicable; additional source-table values retained in TUBE_SECTION_PARAMETER.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	3100 V
NOMINAL OUTPUT CURRENT	250 mA
PEAK FORWARD CURRENT	715 mA
<i>Second physical rectifier section; promoted electrical properties populated from identical section.</i>	

Directly heated full-wave vacuum rectifier with coated filament for high-altitude aircraft power supplies.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC)	5 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Current	2 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
P i n 1- No Connec – published value 1	1	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
P i n 1- No Connec – published value 2	4	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
tion	6	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 2 -Filament – published value 1	2	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 2 -Filament – published value 2	8	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
For altitudes uç to	20000 ft	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Voltage (RMS, without load) – published value 1	1400 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Voltage (RMS, without load) – published value 2	1500 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (RMS, without load) – published value 3	2000 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Filter-Input Capacitor – published value 1	20	CapacitorInputFilter
Filter-Input Capacitor – published value 2	20	CapacitorInputFilter
Filter-Input Capacitor – published value 3	20	CapacitorInputFilter
Impedance Per Plate° – published value 1	225 ohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Impedance Per Plate° – published value 2	250 ohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Impedance Per Plate° – published value 3	375 ohm	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
current – published value 1	145 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
current – published value 2	110 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
current – published value 3	170 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
DC Output Current – published value 1	250 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
DC Output Current – published value 2	150 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
DC Output Current – published value 3	150 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
For altitudes up to	2000	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Voltage (RMS, without load) – published value 1	1500 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (RMS, without load) – published value 2	1900 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Filter-Input Choke – published value 1	5 H	ChokeInputFilter
Filter-Input Choke – published value 2	10 H	ChokeInputFilter
current – published value 1	40 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
current – published value 2	40 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
DC Output Current – published value 1	250 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
DC Output Current – published value 2	175 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PEAK INVERSE PLATE VOLTAGE – published value 1	2650 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
PEAK INVERSE PLATE VOLTAGE – published value 2	3100 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
PEAK PLATE CURRENT PER PLATE – published value 1	715 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
PEAK PLATE CURRENT PER PLATE – published value 2	715 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
the maximum-rated value. When a filter-input capacitor larger than 20	20 mA	CapacitorInputFilter
MAXIMUM PEAK PLATE CURRENT PER PL~TE=715 MA	715 mA	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC)	5 V	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Current	2 A	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
P i n 1- No Connec – published value 1	1	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
P i n 1- No Connec – published value 2	4	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
tion	6	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.
Pin 2 -Filament – published value 1	2	Published datasheet value; multiple values on a source row represent separate source-table conditions or limits.

TUBE TINKER

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