



ELECTRONIC TUBE REFERENCE

8013A

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

High-vacuum half-wave rectifier for very-high-voltage, low-current supplies. Rated for approximately 40 kV peak inverse voltage, 20 mA DC output, and 150 mA peak current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	4P	BASE PINS	4
NOMINAL HEATER	2.5 V / 5 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
MAXIMUM PLATE DISSIPATION	12 W
PEAK INVERSE VOLTAGE	40000 V
NOMINAL OUTPUT CURRENT	20 mA
PEAK FORWARD CURRENT	150 mA
<i>Electrical section extracted from supplied RCA data sheet.</i>	

High-vacuum half-wave rectifier for very-high-voltage low-current service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 General Electric Transmitting Types

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

1950 GENERAL ELECTRIC TRANSMITTING TYPES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
X-ray shielding required above	16000 V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 6 of 7

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

1971 RCA HB3 BINDER 6 OF 7

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage nominal	2.5 V	WholeTube
Heater/filament current nominal	5 A	WholeTube

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage	2 V	Published source row
Voltage (value 2)	37 V	Published source row
Voltage (value 3)	2.5 V	Published source row
Voltage (value 4)	2.63 V	Published source row

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Current at	2.5 V	Published source row
Current at (value 2)	4.7 V	Published source row
Current at (value 3)	5 V	Published source row
Current at (value 4)	5.3 V	Published source row
PLATE DISSIPATION	12 W	Published source row
Verified Maximum plate dissipation	12 W	Verified from supplied datasheet rating/characteristic table
Verified Peak inverse plate voltage	40000 V	Verified from supplied datasheet rating/characteristic table
Verified Rectifier average output current	20 mA	Verified from supplied datasheet rating/characteristic table
Verified Rectifier peak forward current	150 mA	Verified from supplied datasheet rating/characteristic table

TUBE TINKER

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