



ELECTRONIC TUBE REFERENCE

5BC3A

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Novar full-wave vacuum rectifier for radio and television supplies with high DC requirements. Its 5 V heater supports approximately 348 mA DC output and substantial peak-current capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9QJ	BASE PINS	9
NOMINAL HEATER	5 V / 3 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier

PEAK INVERSE VOLTAGE	1700 V
NOMINAL OUTPUT CURRENT	348 mA
PEAK FORWARD CURRENT	1 A

Full-wave Novar rectifier; capacitor-input and choke-input operating points retained as parameters.

SECTION2 Rectifier

PEAK INVERSE VOLTAGE	1700 V
NOMINAL OUTPUT CURRENT	348 mA
PEAK FORWARD CURRENT	1 A

Second physical rectifier section; promoted electrical properties populated from identical section.

Novar full-wave vacuum rectifier for radio and television power supplies with high DC requirements. Electrical ratings, characteristics, and capacitances were interpreted from the supplied RCA manual

excerpt where reproduced; reference-only entries were not supplemented from outside sources.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	5 V	—
Filament current	3 A	—
Peak inverse plate voltage	1700 V	EachPlate
Peak plate current per plate	1 A	EachPlate
Hot-switching transient plate current per plate	5 A	HotSwitching
AC plate-to-plate supply voltage	600 V	CapacitorInputFilter
Filter-input capacitor	40 uF	CapacitorInputFilter
Effective plate-supply impedance per plate	21 ohm	CapacitorInputFilter
DC output voltage at 300 mA	290 V	CapacitorInputFilter
DC output voltage at 150 mA	335 V	CapacitorInputFilter
AC plate-to-plate supply voltage	900 V	CapacitorInputFilter
Effective plate-supply impedance per plate	67 ohm	CapacitorInputFilter
DC output voltage at 275 mA	460 V	CapacitorInputFilter
DC output voltage at 137.5 mA	520 V	CapacitorInputFilter
AC plate-to-plate supply voltage	1100 V	CapacitorInputFilter
Effective plate-supply impedance per plate	97 ohm	CapacitorInputFilter
DC output voltage at 162 mA	630 V	CapacitorInputFilter
DC output voltage at 81 mA	680 V	CapacitorInputFilter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filter-input choke	10 H	ChokeInputFilter
DC output voltage at 346 mA	340 V	ChokeInputFilter;900VAC
DC output voltage at 275 mA	440 V	ChokeInputFilter;1100VAC
DC output voltage at 174 mA	355 V	ChokeInputFilter;900VAC
DC output voltage at 137.5 mA	455 V	ChokeInputFilter;1100VAC
Heater/filament voltage	5 V	DerivativeSheet
Heater/filament current	3 A	DerivativeSheet

1971 RCA HB3 BINDER 4 OF 7

Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	5 V	—
Filament voltage	5 V	—
Filament current	3 A	—
Peak inverse plate voltage	1700 V	EachPlate
Peak plate current per plate	1 A	EachPlate
Hot-switching transient plate current per plate	5 A	HotSwitching
AC plate-to-plate supply voltage	600 V	CapacitorInputFilter
Filter-input capacitor	40 uF	CapacitorInputFilter
Effective plate-supply impedance per plate	21 ohm	CapacitorInputFilter
DC output voltage at 300 mA	290 V	CapacitorInputFilter
DC output voltage at 150 mA	335 V	CapacitorInputFilter
AC plate-to-plate supply voltage	900 V	CapacitorInputFilter
Effective plate-supply impedance per plate	67 ohm	CapacitorInputFilter
DC output voltage at 275 mA	460 V	CapacitorInputFilter
DC output voltage at 137.5 mA	520 V	CapacitorInputFilter
AC plate-to-plate supply voltage	1100 V	CapacitorInputFilter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Effective plate-supply impedance per plate	97 ohm	CapacitorInputFilter
DC output voltage at 162 mA	630 V	CapacitorInputFilter
DC output voltage at 81 mA	680 V	CapacitorInputFilter
Filter-input choke	10 H	ChokeInputFilter



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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

1975 RCA RC30

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Hot-switching transient plate current per plate	6 A	—
AC plate-to-plate supply voltage	600 V	CapacitorInputFilter
Filter input capacitor	40 uF	CapacitorInputFilter
DC output voltage at 300 mA	290 V	CapacitorInputFilter
AC plate-to-plate supply voltage	900 V	ChokeInputFilter
Filter input choke	10 H	ChokeInputFilter
DC output voltage at 348 mA	340 V	ChokeInputFilter

1975 RCA RC30

Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Hot-switching transient plate current per plate	6 A	—
AC plate-to-plate supply voltage	600 V	CapacitorInputFilter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filter input capacitor	40 uF	CapacitorInputFilter
DC output voltage at 300 mA	290 V	CapacitorInputFilter
AC plate-to-plate supply voltage	900 V	ChokeInputFilter
Filter input choke	10 H	ChokeInputFilter
DC output voltage at 348 mA	340 V	ChokeInputFilter

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