

ELECTRONIC TUBE REFERENCE

8JU8A

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
RECTIFIER-RECTIFIER

Four-diode tube for color phase detection, noise-immune color-killer circuits, and FM stereo bridge matrixing. Its multiple diode elements serve signal detection and switching rather than high-current power rectification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9PQ	BASE PINS	9
NOMINAL HEATER	8.4 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

9PQ - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	D	P – Plate (Anode)	CONNECTED
PIN2	C	P – Plate (Anode)	CONNECTED
PIN2	D	K – Cathode	CONNECTED
PIN3	C	K – Cathode	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	–	IS – Internal Screen	CONNECTED
PIN7	B	P – Plate (Anode)	CONNECTED
PIN8	A	P – Plate (Anode)	CONNECTED
PIN8	B	K – Cathode	CONNECTED
PIN9	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	300 V
NOMINAL OUTPUT CURRENT	9 mA
PEAK FORWARD CURRENT	54 mA
FORWARD VOLTAGE DROP	10 V
<i>Inherited from explicit parent 6JU8A; supplied 8JU8A sheet changes heater characteristics only.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	300 V
NOMINAL OUTPUT CURRENT	9 mA
PEAK FORWARD CURRENT	54 mA
FORWARD VOLTAGE DROP	10 V
<i>Second physical rectifier section; promoted electrical properties populated from identical section.</i>	

Quadruple-diode tube for color phase detection, noise-immune color-killer circuits, and FM stereo bridge matrixing.

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

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current at 70 V	60 mA	InstantaneousValue

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum heater-cathode voltage, heater positive	300 V	EachUnit
Heater voltage nominal	8.4 V	—
Heater current nominal	450 mA	—

1971 RCA HB3 BINDER 5 OF 7

Section 2 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current at 70 V	60 mA	InstantaneousValue

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum heater-cathode voltage, heater positive	300 V	EachUnit

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
Peak Heater-Cathode Voltage	300 V	Other
Peak Inverse Plate Voltage	300 V	MaximumRating
Peak Plate Current	54 mA	MaximumRating
Average Output Current	9 mA	MaximumRating
Plate Current for plate voltage of	10 V	MaximumRating;PublishedValue1
Plate Current for plate voltage of	60 V	MaximumRating;PublishedValue2
Peak Inverse Plate Voltage	300 V	Section1
Nominal Output Current	9 mA	Section1
Peak Forward Current	54 mA	Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Unit No.1	1.8 pF	Capacitance
Unit No	2 pF	Capacitance;PublishedValue1
Unit No	2.2 pF	Capacitance;PublishedValue2
Plate of Unit No	2 pF	Capacitance;PublishedValue1
Plate of Unit No	0.62 pF	Capacitance;PublishedValue2
Unit No	3 pF	Capacitance;PublishedValue1
Unit No	1.9 pF	Capacitance;PublishedValue2
Unit No	4 pF	Capacitance;PublishedValue1
Unit No	2.2 pF	Capacitance;PublishedValue2
Plate of Unit No	4 pF	Capacitance;PublishedValue1
Plate of Unit No	0.94 pF	Capacitance;PublishedValue2
Cathode of Unit No.1 to Heater and Internal Shield	1.8 pF	Capacitance

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode of Unit No	3 pF	Capacitance;PublishedValue1
Cathode of Unit No	1.9 pF	Capacitance;PublishedValue2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward Voltage Drop	10 V	Section1

TUBE TINKER

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