

ELECTRONIC TUBE REFERENCE

6CM3

Rectifier - Damper Diode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Indirectly heated high-current rectifier for demanding television service. Its high inverse-voltage and current capability suit specialized TV power and deflection-related circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9HP	BASE PINS	9
NOMINAL HEATER	6.3 V / 2.4 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9HP - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	–	IC
PIN2	–	P – Plate (Anode)	CONNECTED
PIN3	–	–	IC
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	–	–	IC
PIN7	–	P – Plate (Anode)	CONNECTED
PIN8	–	–	IC
PIN9	–	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	5500 V
NOMINAL OUTPUT CURRENT	400 mA
PEAK FORWARD CURRENT	1.7 A
FORWARD VOLTAGE DROP	10 V
MAXIMUM HEATER-CATHODE VOLTAGE	5500 V
<i>Half-wave damper rectifier for color television.</i>	

Miniature type used as combined vhf oscillator and mixer in color and black-and-white television receivers.



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

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to cathode and heater cp(k+h)	20 pF	—
Heater to cathode ch_k	4 pF	—
(ib) =	350 mA	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak ibm	1700 mA	—
Average Ib~a~)	400 mA	—

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Instantaneous Tube Voltage Drop	10 V	At 350 mA instantaneous plate current



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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	1.8 pF	Published datasheet value
Plate to Cathode, Heater, Grid No	2	Published datasheet value
Tetrode Plate to Triode Plate	0.03 pF	Published datasheet value
Heater to Cathode (Each Unit)	3 pF	Published datasheet value
Plate to Cathode and Heater	20 pF	Published datasheet value
Heater to Cat' de	4 PF	Published datasheet value
Grid to Plate	3 pF	Published datasheet value

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	125 volts	Published datasheet value
Grid-No	125 volts	Published datasheet value
Grid-No	-1 volt	Published datasheet value
Amplification Factor	40	Published datasheet value
Plate Resistance (Approx.)	0.2 megohm	Published datasheet value
Transconductance	6500	Published datasheet value
Plate Current	12 mA	Published datasheet value
Grid-No	4 mA	Published datasheet value
Peak Inverse Plate Voltage*	5500 volts	Published datasheet value
Peak Plate Current	1700 mA	Published datasheet value
Average Plate Current	400 mA	Published datasheet value
Plate Dissipation	12 watts	Published datasheet value
Tube Voltage Drop for plate current of	10 mA	Published datasheet value
Plate Voltage	250 volts	Published datasheet value
Grid Voltage	-8 volts	Published datasheet value
Transconductance	4400	Published datasheet value
Plate Current	20 mA	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid Voltage (Approx.) for plate current of	-14 volts	Published datasheet value
DC Plate Voltage	550 volts	Published datasheet value
Peak Negative-Pulse Grid Voltage	220 volts	Published datasheet value
Peak Cathode Current	77 mA	Published datasheet value
Average Cathode Current	22 mA	Published datasheet value
Plate Dissipation	6 watts	Published datasheet value