

ELECTRONIC TUBE REFERENCE

6DA4

Rectifier - Damper Diode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Glass-octal half-wave vacuum rectifier designed for television horizontal-deflection damper service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	4CG	BASE PINS	5
NOMINAL HEATER	6.3 V / 1.2 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

4CG - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Rectifier	
MAXIMUM PLATE VOLTAGE	4400 V
MAXIMUM PLATE DISSIPATION	5.5 W
PEAK INVERSE VOLTAGE	4400 V
NOMINAL OUTPUT CURRENT	155 mA
PEAK FORWARD CURRENT	900 mA
FORWARD VOLTAGE DROP	21 V
MAXIMUM HEATER-CATHODE VOLTAGE	4400 V
WARM-UP TIME	11 s
<i>Published promoted values applied where applicable; additional ratings and operating data retained as parameters.</i>	

Glass-octal half-wave vacuum rectifier used as a damper tube in television horizontal-deflection service.



SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage	4400 V	—
Peak plate current	900 mA	—
DC plate current	155 mA	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater-to-cathode capacitance	3 pF	—
Plate-to-cathode/heater capacitance	6 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Westinghouse Data Book

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

1965 WESTINGHOUSE DATA BOOK

Section 1 · Rectifier

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	1.2 A	—
Voltage Drop	21 V	I _b =250mA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Inverse Voltage	4400 V	—
Plate Dissipation	5.5 W	—
Peak Plate Current	900 mA	—
DC Plate Current	155 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC plate current, design center	145 mA	—
Maximum heater-cathode voltage, heater negative DC	900 V	—
Maximum heater-cathode voltage, heater negative total DC and peak	4400 V	—
Maximum heater-cathode voltage, heater positive DC	100 V	—
Maximum heater-cathode voltage, heater positive total DC and peak	300 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater-to-cathode capacitance	3 pF	—
Plate-to-cathode-and-heater capacitance	6 pF	—
Cathode-to-plate-and-heater capacitance	8 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	—
HeaterCurrentNominal	1.2 A	—
Maximum Plate Dissipation	5.5 W	DamperService



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

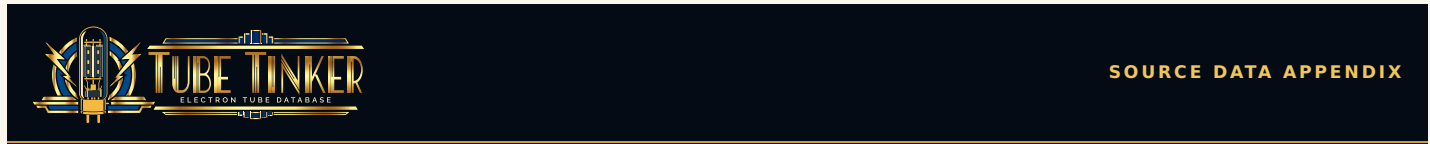
Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC) – published value 1	6.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Voltage (AC or DC) – published value 2	10 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Current	1.2 A	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate to cathode and heater	6	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to plate and heater	8	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater to cathode	3	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 1--Same as – published value 1	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 1--Same as – published value 2	3	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 2 – published value 1	2	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 2 – published value 2	5	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 2 -Internal – published value 1	2	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 2 -Internal – published value 2	7	Published datasheet value; multiple values represent separate source-table limits or conditions.
Connection–	8	Published datasheet value; multiple values represent separate source-table limits or conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PEAK INVERSE PLATE VOLTAGE`	4400 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PEAK PLATE CURRENT	900 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC PLATE CURRENT	155 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE DISSIPATION – published value 1	5 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PLATE DISSIPATION – published value 2	5 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater negative with respect to cathode 4400 max,	4400 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater positive with respect to cathode	300 V	Published datasheet value; multiple values represent separate source-table limits or conditions.



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
Heater Voltage (ac/dc) 6.3	16.8 V	Published in approved 17DM4A target datasheet entry; Section1
Heater Current 1.2	450 mA	Published in approved 17DM4A target datasheet entry; Section1
Heater Warm-up Time (Average)	11 seconds	Published in approved 17DM4A target datasheet entry; Section1
Peak Inverse Plate Voltage*	6000 V	Published in approved 17DM4A target datasheet entry; Section1
Peak Plate Current +100	1200 mA	Published in approved 17DM4A target datasheet entry; Section1
+300	200 mA	Published in approved 17DM4A target datasheet entry; Section1
Plate Dissipation	6.5 W	Published in approved 17DM4A target datasheet entry; Section1
Peak value	-5000 V	Published in approved 17DM4A target datasheet entry; Section1
Average value	-900 V	Published in approved 17DM4A target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
# Pulse duration must not exceed 15% of a horizontal scanning cycle (	10 microseconds	Published in approved 17DM4A target datasheet entry; Section1