

ELECTRONIC TUBE REFERENCE

6KV6A

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Improved 6KV6-family beam-power tube for horizontal-deflection output service, optimized for high-current television line-scan operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9QU	BASE PINS	9
NOMINAL HEATER	6.3 V / 1.6 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9QU - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	G2 – Screen Grid	CONNECTED
PIN2	–	G1 – Control Grid	CONNECTED
PIN3	–	K – Cathode	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	–	G3 – Suppressor Grid	CONNECTED
PIN7	–	G2 – Screen Grid	CONNECTED
PIN8	–	–	IC
PIN9	–	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	10000 Ω
TRANSCONDUCTANCE	0.006 S
MAXIMUM PLATE VOLTAGE	900 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	28 W
MAXIMUM SCREEN DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	950 mA
<i>Representative electrical section from supplied RCA data sheet.</i>	

Beam power tube for high-voltage pulse or shunt-regulator applications in color television receivers. It is an explicit heater variant/co-designation in 22KV6A.pdf.

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	6.3 V	—
Heater current	1.6 A	—
Peak Positive-Pulse Plate Voltage e	6500 V	Published source row
Peak Negative-pulse Plate Voltage -e	1500 V	Published source row
DC Grid-No	3 V	Published source row
DC Grid-No (value 2)	75 V	Published source row
DC Grid-No	2 V	Published source row
DC Grid-No (value 2)	220 V	Published source row
Peak Positive-pulse Grid-No	2 V	Published source row
Peak Positive-pulse Grid-No (value 2)	600 V	Published source row
Heater Voltage Eh	5.7 V	Published source row
Heater Voltage Eh (value 2)	6.9 V	Published source row
Grid-No	2 W	Published source row
Grid-No (value 2)	2 W	Published source row
Plate Dissipationh Pb	28 W	Published source row
bWith grid No	3	Published source row
bWith grid No (value 2)	2	Published source row
° As defined in the current issue of EIA Standard RS	239	Published source row
k Plate dissipations up to	32	Published source row

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage, ac or dc Eh	6.3 V	Published source row
Heater Current Ih	1.6 A	Published source row
Plate Resistance (Approx.) rp	10000	Published source row
Transconductance gm	6000 μ S	Published source row
DC Plate Current Ib	440 mA	Published source row
DC Plate Current Ib (value 2)	40 mA	Published source row
DC Grid-No	2 mA	Published source row
DC Grid-No (value 2)	30 mA	Published source row
DC Grid-No (value 3)	2.4 mA	Published source row
Voltage for Ib =	1 mA	Published source row
Voltage for Ib = (value 2)	-42 mA	Published source row
DC Plate Voltage Eb	100 V	Published source row
DC Plate Voltage Eb (value 2)	140 V	Published source row
DC Plate Voltage Eb (value 3)	140 V	Published source row
DC Grid-No	3 V	Published source row
DC Grid-No (value 2)	0 V	Published source row
DC Grid-No (value 3)	0 V	Published source row
DC Grid-No	2 V	Published source row
DC Grid-No (value 2)	140 V	Published source row
DC Grid-No (value 3)	140 V	Published source row
DC Grid-No.1 Voltage Ec1	0 V	Published source row
DC Grid-No.1 Voltage Ec1 (value 2)	-24.5 V	Published source row
DC Grid-No.1 Voltage Ec1 (value 3)	-24.5 V	Published source row



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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
regulator applications in color television receivers.	11 s	Other;PublishedValue1
regulator applications in color television receivers.	11 s	Other;PublishedValue2
Average value	160 V	Other;PublishedValue1
Average value	100 V	Other;PublishedValue2
Average value	100 V	Other;PublishedValue3
DC Plate Supply Voltage (lb =	0 mA	MaximumRating;PublishedValue1
DC Plate Supply Voltage (lb =	900 mA	MaximumRating;PublishedValue2
Peak Negative-Pulse Plate Voltage	1500 V	MaximumRating
Peak Positive-Pulse Grid-No	2 V	MaximumRating;PublishedValue1
Peak Positive-Pulse Grid-No	600 V	MaximumRating;PublishedValue2
DC Grid-No	2 V	MaximumRating;PublishedValue1
DC Grid-No	220 V	MaximumRating;PublishedValue2
DC Grid-No.1 Voltage, Negative-bias value	250 V	MaximumRating
Peak Negative-Pulse Grid-No.1 Voltage	330 V	MaximumRating
Peak Cathode Current	950 mA	MaximumRating
Average Cathode Current	275 mA	MaximumRating
Plate Dissipation]	28 W	MaximumRating
For grid-No.1-resistor-bias operation	1 megohm	MaximumCircuitValue
Maximum Plate Voltage	900 V	Section1;Promoted
Maximum Screen Voltage	140 V	Section1;Promoted

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Dissipation	28 W	Section1;Promoted
Maximum Screen Dissipation	2 W	Section1;Promoted
Maximum Cathode Current	275 mA	Section1;Promoted

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	0.1 pF	Capacitance
and Grid No	3 pF	Capacitance;PublishedValue1
and Grid No	2 pF	Capacitance;PublishedValue2
and Grid No	3 pF	Capacitance;PublishedValue1
and Grid No	1 pF	Capacitance;PublishedValue2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	100 V	Characteristic;PublishedValue1
Plate Voltage	140 V	Characteristic;PublishedValue2
Grid-No	3 V	Characteristic;PublishedValue1
Grid-No	0 V	Characteristic;PublishedValue2
Grid-No	0 V	Characteristic;PublishedValue3
Grid-No	2 V	Characteristic;PublishedValue1
Grid-No	140 V	Characteristic;PublishedValue2
Grid-No	140 V	Characteristic;PublishedValue3
Grid-No.1 (Control-Grid) Voltage	0 V	Characteristic;PublishedValue1
Grid-No.1 (Control-Grid) Voltage	-24.5 V	Characteristic;PublishedValue2
–	10000 ohm	Characteristic
Transconductance –	6000 uS	Characteristic
Plate Current ««	40 mA	Characteristic
Grid-No.1 Voltage for plate current of	1 mA	Characteristic;PublishedValue1
Grid-No.1 Voltage for plate current of	-42 mA	Characteristic;PublishedValue2
Transconductance	6000 uS	Section1;Promoted