



ELECTRONIC TUBE REFERENCE

6KM6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Beam-power tube designed for color-television horizontal-deflection amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9QL	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

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	6000 Ω
TRANSCONDUCTANCE	0.0095 S
MAXIMUM PLATE VOLTAGE	770 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	20 W
MAXIMUM SCREEN DISSIPATION	3.5 W
MAXIMUM CATHODE CURRENT	950 mA
<i>Representative electrical section from supplied RCA data sheet.</i>	

Beam power tube for horizontal-deflection amplifier service in television receivers. It is an explicit heater variant/co-designation in 22KM6.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	—
DC Plate Supply Voltage	770 V	Published source row
Peak Positive-Pulse Plate Voltage	6500 V	Published source row
Peak Negative-Pulse Plate Voltage	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
Voltage	330 V	Published source row
Grid-No	2 W	Published source row
Grid-No (value 2)	3.5 W	Published source row
Plate Dissipation ⁹	20 W	Published source row
a N end grid No	2	Published source row

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC)	6.3 V	Published source row
Voltage (AC or DC) (value 2)	0.6 V	Published source row
Current at	6.3 V	Published source row
Current at (value 2)	1.6 V	Published source row
Plate Resistance	6000	Published source row

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	9500	Published source row
DC Ptate Current	5604 mA	Published source row
DC Ptate Current (value 2)	80 mA	Published source row
DC Grid-No	2 mA	Published source row
DC Grid-No (value 2)	31 mA	Published source row
DC Grid-No (value 3)	2.4 mA	Published source row
Cutoff DC Grid-No. l Voltage -I	10 V	Published source row
Cutoff DC Grid-No. l Voltage -I (value 2)	-42 V	Published source row
Heater Voltage	6.3 V	Published source row
Heater Voltage (value 2)	6.3 V	Published source row
Heater Voltage (value 3)	6.3 V	Published source row
Voltagee	6500 V	Published source row
DC Plate Voltage	60 V	Published source row
DC Plate Voltage (value 2)	140 V	Published source row
DC Plate Voltage (value 3)	140 V	Published source row
DC Grid-No	3 V	Published source row
DC Grid-No (value 2)	30 V	Published source row
DC Grid-No (value 3)	30 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. l Voltage	0 V	Published source row
DC Grid-No. l Voltage (value 2)	-24.5 V	Published source row
DC Grid-No. l Voltage (value 3)	-24.5 V	Published source row

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No	1 pF	Published source row
Grid No (value 2)	1 pF	Published source row
Grid No (value 3)	2 pF	Published source row



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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warm-up Time	11 s	Other
Peak value	200 V	Other;PublishedValue1
Peak value	200 V	Other;PublishedValue2
Average value	100 V	Other;PublishedValue1
Average value	100 V	Other;PublishedValue2
DC Plate Supply Voltage	770 V	MaximumRating
Peak Positive-Pulse Plate Voltage*	6500 V	MaximumRating
Peak Negative-Pulse Plate Voltage	1500 V	MaximumRating
DC Grid-No	3 V	MaximumRating;PublishedValue1
DC Grid-No	75 V	MaximumRating;PublishedValue2
DC Grid-No	2 V	MaximumRating;PublishedValue1
DC Grid-No	220 V	MaximumRating;PublishedValue2
Peak Negative-Pulse Grid-No.1 Voltage	330 V	MaximumRating
Peak Cathode Current	950 mA	MaximumRating
Average Cathode Current	275 mA	MaximumRating
Grid-No	2 W	MaximumRating;PublishedValue1
Grid-No	3.5 W	MaximumRating;PublishedValue2
Plate Dissipation"	20 W	MaximumRating
For grid-resistor-bias operation	0.47 megohm	MaximumCircuitValue
For plate-pulsed operation	10 megohm	MaximumCircuitValue

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
ference a typical value for this voltage is	30 V	MaximumRating
Maximum Plate Voltage	770 V	Section1;Promoted
Maximum Screen Voltage	140 V	Section1;Promoted
Maximum Plate Dissipation	20 W	Section1;Promoted

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	1.2 pF	Capacitance
Plate to Cathode, Heater, Grid No	2 pF	Capacitance;PublishedValue1
Plate to Cathode, Heater, Grid No	3 pF	Capacitance;PublishedValue2
Plate to Cathode, Heater, Grid No	9 pF	Capacitance;PublishedValue3

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	140 V	Characteristic;PublishedValue1
Plate Voltage	60 V	Characteristic;PublishedValue2
Plate Voltage	140 V	Characteristic;PublishedValue3
Positive-Pulse	6500 V	Characteristic
Grid-No	3 V	Characteristic;PublishedValue1
Grid-No	0 V	Characteristic;PublishedValue2
Grid-No	30 V	Characteristic;PublishedValue3
Grid-No	30 V	Characteristic;PublishedValue4
Grid-No	2 V	Characteristic;PublishedValue1
Grid-No	140 V	Characteristic;PublishedValue2
Grid-No	140 V	Characteristic;PublishedValue3
Grid-No	140 V	Characteristic;PublishedValue4
Grid-No.1 (Control-Grid) Voltage	-24.5 V	Characteristic;PublishedValue1
Grid-No.1 (Control-Grid) Voltage	0 V	Characteristic;PublishedValue2
Grid-No.1 (Control-Grid) Voltage	-24.5 V	Characteristic;PublishedValue3

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.)	6000 ohm	Characteristic
Transconductance	9500 uS	Characteristic
Plate Current	560 mA	Characteristic;PublishedValue1
Plate Current	80 mA	Characteristic;PublishedValue2
Grid-No	2 mA	Characteristic;PublishedValue1
Grid-No	31 mA	Characteristic;PublishedValue2
Grid-No	2.4 mA	Characteristic;PublishedValue3
Grid-No.1 Voltage for plate current	1 mA	Characteristic;PublishedValue1
Grid-No.1 Voltage for plate current	-110 mA	Characteristic;PublishedValue2
Grid-No.1 Voltage for plate current	-42 mA	Characteristic;PublishedValue3
PLATE	3 V	Characteristic