

ELECTRONIC TUBE REFERENCE

36MC6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Novar beam-power tube for color-television horizontal-deflection output, combining high transconductance, approximately 20 W plate dissipation, and multi-kilovolt pulse capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9QL	BASE PINS	9
NOMINAL HEATER	36 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9QL - 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	–	G1 – Control Grid	CONNECTED
PIN7	–	G2 – Screen Grid	CONNECTED
PIN8	–	G3 – Suppressor Grid	CONNECTED
PIN9	–	–	IC
CAP1	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	6000 Ω
TRANSCONDUCTANCE	0.01 S
AMPLIFICATION FACTOR	4
MAXIMUM PLATE VOLTAGE	990 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	20 W
MAXIMUM SCREEN DISSIPATION	4 W
MAXIMUM CATHODE CURRENT	400 mA
<i>beam power</i>	

Novar beam-power tube used as a horizontal-deflection amplifier in color television receivers.



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
Maximum Plate Voltage	700 V	—
Maximum Screen Voltage	220 V	—
Plate Dissipation	20 W	—
Screen Dissipation	4 W	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	10000 μ S	—



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 Voltage (ac/dc)	36 V	Published in approved 36MC6 target datasheet entry; Section1
Heater Current	450 mA	Published in approved 36MC6 target datasheet entry; Section1
Grid No.1 to Plate	1 pF	Published in approved 36MC6 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Cathode. Heater, Grid No.2 and Grid No.3	40 pF	Published in approved 36MC6 target datasheet entry; Section1
Plate to Cathode, Heater, Grid No.2, and Grid No.3	16 pF	Published in approved 36MC6 target datasheet entry; Section1
DC Plate Supply Voltage	990 V	Published in approved 36MC6 target datasheet entry; Section1
Peak Positive-Pulse Plate Voltage#	7500 V	Published in approved 36MC6 target datasheet entry; Section1
Peak Negative-Pulse Plate Voltage	1100 V	Published in approved 36MC6 target datasheet entry; Section1
DC Grid-No.3 Voltage"	75 V	Published in approved 36MC6 target datasheet entry; Section1
DC Grid-No.2 Voltage	250 V	Published in approved 36MC6 target datasheet entry; Section1
Peak Negative-Pulse Grid- No.1 Voltage	330 V	Published in approved 36MC6 target datasheet entry; Section1
Peak Cathode Current	1400 mA	Published in approved 36MC6 target datasheet entry; Section1
Average Cathode Current	400 mA	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.2 Input	6 W	Published in approved 36MC6 target datasheet entry; Section1
For cathode-bias operation	1 MΩ	Published in approved 36MC6 target datasheet entry; Section1
For grid-leak-bias operation	10 MΩ	Published in approved 36MC6 target datasheet entry; Section1
For fixed-bias operation	0.47 MΩ	Published in approved 36MC6 target datasheet entry; Section1
# Pulse duration must not exceed 15% of one horizontal scanning cycle (	10 microseconds	Published in approved 36MC6 target datasheet entry; Section1
ference a typical value for this voltage is	30 V	Published in approved 36MC6 target datasheet entry; Section1
0.45; warm-up time,	11 seconds	Published in approved 36MC6 target datasheet entry; Section1
Plate Voltage 5000 50 130	130 V	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Voltage 130 130 130	130 V	Published in approved 36MC6 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.1 (Control-Grid) Voltage 0 -22	-22 V	Published in approved 36MC6 target datasheet entry; Section1
Plate Resistance (Approx.)	6200 Ω	Published in approved 36MC6 target datasheet entry; Section1
Transconductance	8800 μS	Published in approved 36MC6 target datasheet entry; Section1
Plate Current 450	60 mA	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.2 Current 40	2.8 mA	Published in approved 36MC6 target datasheet entry; Section1
Plate Voltage	500 V	Published in approved 36MC6 target datasheet entry; Section1
Peak Positive-Pulse Plate Voltage*	5000 V	Published in approved 36MC6 target datasheet entry; Section1
Peak Negative-Pulse Plate Voltage	0 V	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.2 Voltage	150 V	Published in approved 36MC6 target datasheet entry; Section1
DC Grid-No.1 Voltage, Negative-bias value	55 V	Published in approved 36MC6 target datasheet entry; Section1
Average Cathode Current	230 mA	Published in approved 36MC6 target datasheet entry; Section1
Peak Cathode Current	800 mA	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.1-Circuit Resistance	1 MΩ	Published in approved 36MC6 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 176 45 60	175 V	Published in approved 36MC6 target datasheet entry; Section1
Peak Positive-Pulse Plate Voltage#	5000 V	Published in approved 36MC6 target datasheet entry; Section1
Grid No.3 (Suppressor Grid) 30 30 30	30 V	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Voltage 175 110 110 110	110 V	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.1 (Control-Grid) Voltage -21 0 0	-21 V	Published in approved 36MC6 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.)	6000 Ω	Published in approved 36MC6 target datasheet entry; Section1
Plate Current nootf 750ft	125 mA	Published in approved 36MC6 target datasheet entry; Section1
Grid-No.2 Current notf 42ff	3.3 mA	Published in approved 36MC6 target datasheet entry; Section1
of	1 mA	Published in approved 36MC6 target datasheet entry; Section1
of 1 mA -125	-40 V	Published in approved 36MC6 target datasheet entry; Section1
current of	1 mA	Published in approved 36MC6 target datasheet entry; Section1
current of 1 mA -80	-39 V	Published in approved 36MC6 target datasheet entry; Section1