



ELECTRONIC TUBE REFERENCE

40KG6A

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Magnoval power pentode for color-television horizontal-deflection output, combining approximately 34 W plate dissipation with very high instantaneous plate current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	38A	BASE PINS	9
NOMINAL HEATER	40 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
MAXIMUM PLATE VOLTAGE	700 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	34 W
MAXIMUM SCREEN DISSIPATION	7 W
MAXIMUM CATHODE CURRENT	500 mA
<i>Horizontal-deflection power-pentode ratings; peak pulse values preserved as parameters.</i>	

Magnoval power pentode used as a horizontal-deflection amplifier in color television receivers.

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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For plate current of 60 /zA --	-3 V	Published in approved 6KG6A target datasheet entry; Section1
For fixed-bias operation 0.5	0.25 MΩ	Published in approved 6KG6A target datasheet entry; Section1
For cathode-bias operation 1	0.5 MΩ	Published in approved 6KG6A target datasheet entry; Section1
Heater Voltage (ac/dc) 6.3	40 V	Published in approved 6KG6A target datasheet entry; Section1
Heater Current 2	300 mA	Published in approved 6KG6A target datasheet entry; Section1
Plate to Grid-No.1	2.5 pF	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.1 to Heater	0.2 pF	Published in approved 6KG6A target datasheet entry; Section1
Plate Supply Voltage	700 V	Published in approved 6KG6A target datasheet entry; Section1
Peak Positive-Pulse Plate Voltage*	7000 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.2 Voltage (zero-current)	700 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.2 Voltage	250 V	Published in approved 6KG6A target datasheet entry; Section1
Plate Dissipation (Absolute-Maximum Value)	34 W	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.2 Input	7 W	Published in approved 6KG6A target datasheet entry; Section1
Cathode Current	500 mA	Published in approved 6KG6A target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For fixed-bias operation	0.25 MΩ	Published in approved 6KG6A target datasheet entry; Section1
For cathode-bias operation	2.2 MΩ	Published in approved 6KG6A target datasheet entry; Section1
(	10 microseconds	Published in approved 6KG6A target datasheet entry; Section1
Heater Voltage (ac/dc) 6.3	22 V	Published in approved 6KG6A target datasheet entry; Section1
Heater Current 1.6	450 mA	Published in approved 6KG6A target datasheet entry; Section1
Heater Warm-up Time	11 seconds	Published in approved 6KG6A target datasheet entry; Section1
Grid No.1 to Plate	1.2 pF	Published in approved 6KG6A target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 45	160 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.3 Voltage! 0	0 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.2 Voltage . 160	160 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.1 Voltage . 0	0 V	Published in approved 6KG6A target datasheet entry; Section1
Plate Current* 1000 (min.)	1400 mA	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.2 Current"	45 mA	Published in approved 6KG6A target datasheet entry; Section1
Plate Voltage 140 60	140 V	Published in approved 6KG6A target datasheet entry; Section1
Positive-Pulse	6500 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.3 (Suppressed-Grid) Voltage . 0 30 30	30 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Voltage . . . 140 140 140	140 V	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.1 (Control-Grid) Voltage -24.5 0	-24.5 V	Published in approved 6KG6A target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.)	6000 Ω	Published in approved 6KG6A target datasheet entry; Section1
Transconductance	9500 μS	Published in approved 6KG6A target datasheet entry; Section1
Plate Current 560tt	80 mA	Published in approved 6KG6A target datasheet entry; Section1
Grid-No.2 Current 31tt	2.4 mA	Published in approved 6KG6A target datasheet entry; Section1
of	1 mA	Published in approved 6KG6A target datasheet entry; Section1
of 1 mA -110	-42 V	Published in approved 6KG6A target datasheet entry; Section1