



ELECTRONIC TUBE REFERENCE

6KG6A

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Magnoval horizontal-deflection output pentode for color television receivers, electrically related to EL509 and PL509 heater variants.

GENERAL CHARACTERISTICS

BASE DESIGNATION	38A	BASE PINS	9
NOMINAL HEATER	6.3 V / 2 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
AMPLIFICATION FACTOR	4
MAXIMUM PLATE VOLTAGE	900 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	34 W
MAXIMUM SCREEN DISSIPATION	7 W
MAXIMUM CATHODE CURRENT	500 mA
<i>Promoted from published ratings/characteristics where directly applicable; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

Magnoval type used as a horizontal-deflection ampli- Outlines section, 38 A; fier in color television receivers. requires 9-contact magnoval socket. Type 40KG6A/ PL509 is identical with type 6KG6A/EL509

except for heater ratings. 6KG6A/ 40KG6A/ EL509 PL509

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	10 mA	Published value from supplied target entry
Grid-No	2.8 mA	Published value from supplied target entry
For plate current of	5 volts	Published value from supplied target entry
For plate current of	-3 volts	Published value from supplied target entry
Heater Voltage (ac/dc)	40 volts	Published value from supplied target entry
Heater Current	0.3 amperes	Published value from supplied target entry
Plate Voltage	160 volts	Published value from supplied target entry
Grid-No	0 volts	Published value from supplied target entry
Grid-No	160 volts	Published value from supplied target entry
Grid-No.1 Voltage	0 volts	Published value from supplied target entry
Plate Current*	1400 mA	Published value from supplied target entry
Grid-No	45 mA	Published value from supplied target entry
Plate Supply Voltage	700 volts	Published value from supplied target entry
Peak Positive-Pulse Plate Voltage*	7000 volts	Published value from supplied target entry
Grid-No	700 volts	Published value from supplied target entry
Grid-No	250 volts	Published value from supplied target entry
Grid-No	7 watts	Published value from supplied target entry
Cathode Current	500 mA	Published value from supplied target entry
Grid-No	1	Published value from supplied target entry
t In horizontal-deflection service,	3	Published value from supplied target entry
Heater Voltage (ac/dc)	22 volts	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current	0.45 amperes	Published value from supplied target entry
Heater Warm-up Time	11 seconds	Published value from supplied target entry
Plate Voltage	140 volts	Published value from supplied target entry
Grid-No	30 volts	Published value from supplied target entry
Grid-No	140 volts	Published value from supplied target entry
Grid-No.1 (Control-Grid) Voltage	-24.5 volts	Published value from supplied target entry
Amplification Factor μ	4	Published value from supplied target entry
Plate Resistance (Approx.)	6000 ohms	Published value from supplied target entry
Transconductance	9500	Published value from supplied target entry
Plate Current	80 mA	Published value from supplied target entry
Grid-No	2.4 mA	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to Grid-No.1	2.5 pF	Published value from supplied target entry
Grid-No.1 to Heater	0.2 pF	Published value from supplied target entry
Plate to Cathode, Heater, Grid No	9 PF	Published value from supplied target entry

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Dissipation (Absolute-Maximum Value)	34 watts	Published value from supplied target entry