

ELECTRONIC TUBE REFERENCE

6MG8

Voltage - Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Triode-pentode for television horizontal-deflection, AGC-amplifier, and sync-separator applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9DC	BASE PINS	9
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

9DC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2P	B	P – Plate (Anode)	CONNECTED
PIN2 – 1G1	A	G1 – Control Grid	CONNECTED
PIN3 – 1G2	A	G2 – Screen Grid	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – 1G3	A	G3 – Suppressor Grid	CONNECTED
PIN7 – IS	A	IS – Internal Screen	CONNECTED
PIN7 – 1K	A	K – Cathode	CONNECTED
PIN8 – 2K	B	K – Cathode	CONNECTED
PIN9 – 2G1	B	G1 – Control Grid	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	7000 Ω
TRANSCONDUCTANCE	0.0075 S
AMPLIFICATION FACTOR	47
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2 W
<i>Full supplied entry reviewed for ratings, characteristics, operating data, and capacitances.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	400000 Ω
TRANSCONDUCTANCE	0.0062 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2 W
<i>Full supplied entry reviewed for ratings, characteristics, operating data, and capacitances.</i>	

Miniature type used in horizontal-deflection circuits and for age-amplifier or sync-separator applications in television receivers. Outlines section, 6B; requires miniature 9-contact socket. Heater: volts, 6.3; ampere, 0.45; maximum heater-cathode volts, ± 200 peak, 100 9DC average. Class A, Amplifier

CHARACTERISTICS Triode Unit Pentode Unit 150 170 volts Plate Voltage Grid-No.2 (Screen-Grid) Voltage — — 170 volts Grid-No.1 (Control-Grid) Voltage —2 volts Cathode-Bias Resistor jo ohms 18 10 mA Plate Current Grid-No.2 Current — 2.8 mA Transconductance ooQO 6200 /tmhos Plate Resistance (Approx.) j> 400 kohms 47 Amplification Factor Grid-No.1 Voltage for plate current of 10 ^A —40 12 volts Horizontal-Deflection Amplifier

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No	2	Published value from supplied target entry
Grid-No.1 (Control-Grid) Voltage –	2 volts	Published value from supplied target entry
Transconductance ooQ0	6200	Published value from supplied target entry
Grid-No.1 Voltage for plate current of	40	Published value from supplied target entry
Plate Voltage	330 volts	Published value from supplied target entry
Grid-No	300 volts	Published value from supplied target entry
Plate Dissipation	2 watts	Published value from supplied target entry
Cathode Current	14 mA	Published value from supplied target entry
For plate dissipation more than	0.5 watts	Published value from supplied target entry
For plate dissipation less than	0.75 watt	Published value from supplied target entry
Heater Voltage (ac/dc)	31	Published value from supplied target entry
Heater Current	31 volts	Published value from supplied target entry
Heater Warm-up Time	0.45 amperes	Published value from supplied target entry
Heater-Cathode Voltage	11 seconds	Published value from supplied target entry
Plate Voltage	176 volts	Published value from supplied target entry
Voltage	30 volts	Published value from supplied target entry
Grid-No	145 volts	Published value from supplied target entry
Grid-No.1 (Control-Grid) Voltage	35 volts	Published value from supplied target entry
Plate Resistance (Approx.)	7000 ohms	Published value from supplied target entry
Transconductance	7500	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	95 mA	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to Cathode, Heater, Grid No	2	Published value from supplied target entry

TUBE TINKER

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