

Combined triode-pentode for television video, sync, burst, IF, AGC, or related signal-processing circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	5800 Ω
TRANSCONDUCTANCE	0.006 S
AMPLIFICATION FACTOR	35
MAXIMUM PLATE VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2.5 W
Published promoted values applied where applicable; additional ratings, characteristics, and operating data retained as parameters.	

SECTION2 Pentode	
PLATE RESISTANCE	165000 Ω
TRANSCONDUCTANCE	0.009 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	3.75 W
<i>Published promoted values applied where applicable; additional ratings, characteristics, and operating data retained as parameters.</i>	

Miniature type used in color and black-and-white tele- vision receiver applications. The pentode unit is used in burst-amplifier circuits, and the triode unit as a general amplifier tube. Outlines section, 6E; requires miniature 9-contact socket. 9AE

SOURCE OPERATING CONDITIONS

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Published test conditions and operating points. Values on this page are preserved as reported by this source.

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Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage, ac or dc	6.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater Current	600 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid to plate – published value 1	2.2 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid to plate – published value 2	2.2 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater to cathode – published value 1	4.4 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater to cathode – published value 2	4.8 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid No. 1 to plate – published value 1	1 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid No. 1 to plate – published value 2	0.05 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid No. 1 to plate – published value 3	0.05 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Amplification Factor	35 A	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.) – published value 1	5.8	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Resistance (Approx.) – published value 2	165	Published datasheet value; multiple values represent separate source-table limits or conditions.
Transconductance – published value 1	6000	Published datasheet value; multiple values represent separate source-table limits or conditions.
Transconductance – published value 2	9000	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate Current – published value 1	11.5 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate Current – published value 2	19 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Grid-No.2 Current	4.2 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater Voltage – published value 1	6.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater Voltage – published value 2	6.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate Voltage – published value 1	125 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate Voltage – published value 2	150 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Grid-No.2 voltage	150 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Grid-No.1 voltage . ~	-1 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Cathode Resistance	150	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC Plate Voltage – published value 1	330 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate Voltage – published value 2	330 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Voltage	330 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Positive-bias value – published value 1	0	Published datasheet value; multiple values represent separate source-table limits or conditions.
Positive-bias value – published value 2	0	Published datasheet value; multiple values represent separate source-table limits or conditions.
No.2 voltages up to 165	165 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Dissipation – published value 1	2.5	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Dissipation – published value 2	3.75	Published datasheet value; multiple values represent separate source-table limits or conditions.
For fixed-bias operation – published value 1	0.5	Published datasheet value; multiple values represent separate source-table limits or conditions.
For fixed-bias operation – published value 2	0.25	Published datasheet value; multiple values represent separate source-table limits or conditions.
For cathode-bias operation Rgl – published value 1	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
For cathode-bias operation Rgl – published value 2	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
e With external shield JEDEC No. 315 connected to cathode of	315	Published datasheet value; multiple values represent separate source-table limits or conditions.
• As defined in the current issue of EIA Standard RS-239	239	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pin 1 -Triode Plate	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 4 -Heater	4	Published datasheet value; multiple values represent separate source-table limits or conditions.
JEDEC9AE	9	Published datasheet value; multiple values represent separate source-table limits or conditions.
GRID-NO. 2 INPUT RATING CHART	2	Published datasheet value; multiple values represent separate source-table limits or conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
to triode plate – published value 1	0.17 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
to triode plate – published value 2	0.2 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
to triode plate – published value 1	0.09 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
to triode plate – published value 2	0.008 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.

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Section 2 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pentode grid No. 1	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 2 -Pentode Grid No.1	2	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 3 -Pentode Grid No.2	3	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pin 6 -Pentode Plate	6	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 7 -Pentode Cathode,	7	Published datasheet value; multiple values represent separate source-table limits or conditions.



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1975 RCA RC30

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1975 RCA RC30

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 volts	Published value from supplied target entry
Heater Current	0.6 ampere	Published value from supplied target entry
Heater Warm-up Time	11 seconds	Published value from supplied target entry
Heater to Triode Cathode	4.4	Published value from supplied target entry
Plate Voltage	330 volts	Published value from supplied target entry
Grid-No	330 volts	Published value from supplied target entry
Grid-No	300	Published value from supplied target entry
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	Published value from supplied target entry
Grid-No	3.75 watts	Published value from supplied target entry
Plate Dissipation –	1.1 watts	Published value from supplied target entry
Plate Voltage	150 volts	Published value from supplied target entry
Grid-No	150 volts	Published value from supplied target entry
Grid-No.1 Voltage –	1 volts	Published value from supplied target entry
Plate Current	19 mA	Published value from supplied target entry
Grid-No	4.2 mA	Published value from supplied target entry
Transconductance	9000	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor	35	Published value from supplied target entry
Plate Resistance (Approx.)	5800 ohms	Published value from supplied target entry
Grid-No	1	Published value from supplied target entry
Plate Dissipation	2.5 watts	Published value from supplied target entry
Grid-No	0.55 watts	Published value from supplied target entry
Plate Voltage	125 volts	Published value from supplied target entry
Grid-No	125 volts	Published value from supplied target entry
Grid-No	1 volts	Published value from supplied target entry
Plate Current	13 mA	Published value from supplied target entry
C.rid-No	4 mA	Published value from supplied target entry
Amplification Factor	100	Published value from supplied target entry
Plate Resistance (Approx.)	150000 ohms	Published value from supplied target entry
Grid-No	6 volts	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	2.2 pF	Published value from supplied target entry
Plate to Cathode, Heater, Grid No	2	Published value from supplied target entry
Heater to Pentode Cathode	5.5 pF	Published value from supplied target entry
Pentode Plate to Triode Plate	0.09 pF	Published value from supplied target entry