

ELECTRONIC TUBE REFERENCE

6LN8

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
PENTODE-TRIODE

Combined triode-pentode for oscillator, mixer, frequency-converter, RF, or IF service in television, communications, or mobile receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9DC	BASE PINS	9
NOMINAL HEATER	6 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	8500 Ω
TRANSCONDUCTANCE	0.0045 S
AMPLIFICATION FACTOR	38
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	14 mA
<i>Published ratings/characteristics promoted from supplied source; additional conditions retained in parameter table.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	300000 Ω
TRANSCONDUCTANCE	0.0075 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	14 mA
<i>Published ratings/characteristics promoted from supplied source; additional conditions retained in parameter table.</i>	

Miniature type used in frequency-changer service in television receivers. Outlines section, 6B; requires 9DC miniature 9-contact socket. : : 362 RCA Receiving Tube Manual



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

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

1964 RMA EIA

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6 V	—
Heater Current	450 mA	—
EquivalentElectricalType	6BL8	ExceptHeater
ControlledWarmupHeater	1 boolean	—

1964 RMA EIA

Section 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
EquivalentElectricalType	6BL8	ExceptHeater
ControlledWarmupHeater	1 boolean	—



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc)	6 volts	Published value from supplied target entry
Heater Current	0.45 ampere	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	550 volts	Published value from supplied target entry
Plate Voltage	250 volts	Published value from supplied target entry
Grid-No	550 volts	Published value from supplied target entry
Grid-No	2	Published value from supplied target entry
With cathode current of	175 mA	Published value from supplied target entry
With cathode current less than	200 mA	Published value from supplied target entry
Cathode Current	14 mA	Published value from supplied target entry
Plate Dissipation	1.7 watts	Published value from supplied target entry
With plate dissipation greater than	0.5 watts	Published value from supplied target entry
With plate dissipation less than	0.75 watts	Published value from supplied target entry
Plate Voltage	170 volts	Published value from supplied target entry
Grid-No	170	Published value from supplied target entry
Grid-No	-2 volts	Published value from supplied target entry
Amplification Factor	20	Published value from supplied target entry
Plate Resistance (Approx.)	0.4 megohm	Published value from supplied target entry
Transconductance	6200	Published value from supplied target entry
Plate Current	10 mA	Published value from supplied target entry
Grid-No	2.8 mA	Published value from supplied target entry
Input Resistance at frequency of	0.01 megohm	Published value from supplied target entry
Grid-No	1	Published value from supplied target entry
Heater Warm-up Time	11 seconds	Published value from supplied target entry

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Heater-Cathode Voltage $\pm$	100 volts	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	2.8 pF	Published value from supplied target entry
Plate to Cathode, Heater, Grid No	3	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode Grid to Pentode Plate	0.015 pF	Published value from supplied target entry
Pentode Plate to Triode Plate	0.17 pF	Published value from supplied target entry

TUBE TINKER

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