

ELECTRONIC TUBE REFERENCE

8CY7

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Dissimilar dual triode with controlled heater warm-up for television vertical-deflection service. A high-mu oscillator section generates the sweep while the low-mu high-current output section handles deflection power and substantial pulse voltage.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9EF	BASE PINS	9
NOMINAL HEATER	7.9 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

9EF - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	B	P – Plate (Anode)	CONNECTED
PIN3	B	G1 – Control Grid	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	A	P – Plate (Anode)	CONNECTED
PIN7	A	G1 – Control Grid	CONNECTED
PIN8	A	K – Cathode	CONNECTED
PIN9	B	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	52000 Ω
TRANSCONDUCTANCE	0.0013 S
AMPLIFICATION FACTOR	68
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
WARM-UP TIME	11 s
<i>Published promoted fields populated semantically; identical repeated sections compressed.</i>	

SECTION2 Triode	
PLATE RESISTANCE	920 Ω
TRANSCONDUCTANCE	0.0054 S
AMPLIFICATION FACTOR	5
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM PLATE DISSIPATION	5.5 W
MAXIMUM CATHODE CURRENT	35 mA
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
WARM-UP TIME	11 s
<i>Section 2 vertical-deflection amplifier; 1800 V pulse limit retained as parameter.</i>	

The 8CY7 is a dissimilar double triode intended for combined vertical-deflection oscillator and amplifier service in television receivers, with controlled heater warm-up.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate_voltage	250 V	TVVerticalDeflection,Oscillator
Grid_voltage	-3 V	TVVerticalDeflection,Oscillator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification_factor	68	TVVerticalDeflection,Oscillator
Plate_resistance	52000 ohm	TVVerticalDeflection,Oscillator
Transconductance	1300 uS	TVVerticalDeflection,Oscillator
Plate_current	1.2 mA	TVVerticalDeflection,Oscillator

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.8 pF	—
Input capacitance	1.5 pF	—
Output capacitance	0.3 pF	—

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum_peak_positive_plate_voltage	1800 V	—
Maximum_peak_cathode_current	120 mA	—
Plate_voltage	150 V	TVVerticalDeflection
Cathode_bias_resistor	620 ohm	TVVerticalDeflection
Heater_warmup_time	11 s	TVVerticalDeflection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification_factor	5	TVVerticalDeflection
Plate_resistance	920 ohm	TVVerticalDeflection
Transconductance	5400 uS	TVVerticalDeflection
Plate_current	30 mA	TVVerticalDeflection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	4.4 pF	—
Input capacitance	5 pF	—
Output capacitance	1 pF	—



SOURCE OPERATING CONDITIONS

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	7.9 V	—
HeaterCurrentNominal	600 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	52000 Ohm	—
Transconductance	1300 uS	—
Amplification Factor	68	—

1968 GENERAL ELECTRIC CO

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	920 0hm	—
Transconductance	5400 uS	—
Amplification Factor	5	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive Pulse Plate Voltage	1800 V	VerticalDeflection
Peak Cathode Current	120 mA	VerticalDeflection

TUBE TINKER

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