

ELECTRONIC TUBE REFERENCE

5AMP1

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Five-inch P1 electrostatic cathode-ray tube for oscillograph and precision-instrument display, with manufacturer-defined accelerating, focusing, and deflection characteristics.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	12
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	6600 V
Cathode-ray display/scanning system; published focusing, deflection and high-voltage data retained as parameters.	

5-inch electrostatic-focus and electrostatic-deflection cathode-ray tube designed for high deflection sensitivity and oscillographic display.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Raytheon

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

1938 RAYTHEON

Section 1 · Cathode Ray

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Oscilloscope_Display text	—



SOURCE OPERATING CONDITIONS

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1950 Sylvania

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

1950 SYLVANIA

Section 1 · Cathode Ray

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage 6.3 Volts	6.3 V	Heater Voltage 6.3 Volts
Anode No. 2 Voltage! 6600 Volts dc	6600 V	Anode No. 2 Voltage! 6600 Volts dc
Anode No. 1 Voltage (Focusmg Electrode) 1650 Volts dc	1650 V	Anode No. 1 Voltage (Focusmg Electrode) 1650 Volts dc
Grid No. 1 Voltage	1 V	Grid No. 1 Voltage
Any Deflection Plate 1320 Volts	1320 V	Any Deflection Plate 1320 Volts
Anode No. 2 Voltage . 2500 Volts dc	2500 V	Anode No. 2 Voltage . 2500 Volts dc
Anode No. 1 Voltage for Focus . 0to 300 Volts dc	300 V	Anode No. 1 Voltage for Focus . 0to 300 Volts dc

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 Voltage Required for Cutoff2 —34t0-56 Volts dc	-56 V	Grid No. 1 Voltage Required for Cutoff2 —34t0-56 Volts dc
1. The product of the Anode No. 2 Voltage and Average Anode No. 2 Current should be limited to 6 wat	6 W	1. The product of the Anode No. 2 Voltage and Average Anode No. 2 Current should be limited to 6 watts.



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1960 Du Mont

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1960 DU MONT

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	1 code	Electrostatic
Deflection method	1 code	Electrostatic
Deflection factor D1-D2	—	Published range 40 to 50 V/in
Deflection factor D3-D4	—	Published range 20 to 25 V/in
Minimum useful screen	41 in	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Accelerator voltage maximum	6000 V	—
Accelerator voltage	2500 V	—
Grid No. 1 voltage	—	Published range -56 to -34 V
Grid No. 1 negative bias maximum	200 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to all other electrodes	2.7 pF	Approximate or first published bound

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 to all other electrodes	2.9 pF	Approximate or first published bound



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Electrostatic	—
Heater voltage	6.3 V	—
Heater current	600 mA	—
Fluorescence	Green	—
Persistence	Medium	—
Deflection-factor uniformity maximum	1 %	—
Line width maximum	0.032 in	—
Useful scan minimum	4 x 2.5 in	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Phosphor	P1	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Oscilloscope / instrument / special-purpose display	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-2 voltage maximum	6600 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-1 focus voltage maximum	1650 V	—
Typical anode-2 voltage	2500 V	—
Typical focus voltage range	0 to 300 V	—
Grid-1 circuit resistance maximum	1.5 Mohm	—
Deflection-circuit resistance maximum	1 Mohm	—
Anode-2 input maximum	6 W	—