



ELECTRONIC TUBE REFERENCE

902A

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Early electrostatic cathode-ray oscillograph tube intended for observation or recording of electrical phenomena, with manufacturer-defined focusing, deflection, and fluorescent-screen characteristics for type 902A.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8CD	BASE PINS	8
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray

No fixed ratings recorded.

Cathode-ray section. CRT anode/ultor, grid, focus/deflection, heater-cathode, capacitance, and operating values are stored as section parameters.

High-vacuum green-screen cathode-ray tube with electrostatic focusing and electrostatic deflection, intended for oscilloscope and display service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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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 · Cathode Ray

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1 to All Other Electrodes Capacitance	7.5 pF	Approximate
Deflecting Electrode DJ1 to All Other Electrodes Capacitance	8.5 pF	Approximate
Deflecting Electrode DJ4 to All Other Electrodes Capacitance	6 pF	Approximate

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing Method	Electrostatic	—
Deflecting Method	Electrostatic	—
Deflection Sensitivity DJ1-DJ2 at 400 V	0.273 mm/V	—
Deflection Sensitivity DJ1-DJ2 at 600 V	0.183 mm/V	—
Deflection Sensitivity DJ3-DJ4 at 400 V	0.326 mm/V	—
Deflection Sensitivity DJ3-DJ4 at 600 V	0.217 mm/V	—
Deflection Factor DJ1-DJ2 at 400 V	93 V/in	—
Deflection Factor DJ1-DJ2 at 600 V	139 V/in	—
Deflection Factor DJ3-DJ4 at 400 V	78 V/in	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflection Factor DJ3-DJ4 at 600 V	117 V/in	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode #2 and Grid #2 Voltage	—660 V	Absolute maximum
Anode #1 Voltage	—330 V	Absolute maximum
Grid #1 Negative Voltage	—125 V	Absolute maximum
Grid #1 Positive Voltage	—0 V	Absolute maximum
Peak Voltage Between Anode #2 and Deflecting Electrode DJ1 or DJ4	—385 V	—
Anode #2 and Grid #2 Voltage - Operating Point 1	400 V	—
Anode #2 and Grid #2 Voltage - Operating Point 2	600 V	—
Anode #1 Voltage for Focus - Operating Point 1	100 V	75% of grid #1 cutoff voltage
Anode #1 Voltage for Focus - Operating Point 2	150 V	75% of grid #1 cutoff voltage
Grid #1 Voltage for Visual Cutoff - Operating Point 1	-40 V	—
Grid #1 Voltage for Visual Cutoff - Operating Point 2	-60 V	—
Grid #1 Circuit Resistance	—1.5 MΩ	Maximum circuit value
Deflecting Electrode Circuit Impedance at Heater Supply Frequency	—1 MΩ	Maximum circuit value
Resistance in Any Deflecting Electrode Circuit	—5 MΩ	Maximum circuit value