

ELECTRONIC TUBE REFERENCE

7BP7A

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Seven-inch direct-view radar CRT with magnetic focusing and deflection, designed as a replacement for the 7BP7. Its P7-type long-persistence screen supports persistent radar indication.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 0 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	8000 V
CRT maximum accelerating/anode/ultor voltage is promoted to MaxPlateVoltage; additional electrode ratings, capacitances, operating conditions, deflection/focus and optical data are preserved as parameters.	

Seven-inch direct-view radar CRT with magnetic focus and magnetic deflection; replacement for 7BP7 with long-persistence P7-type display.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 1 of 7

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

1971 RCA HB3 BINDER 1 OF 7

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak heater-cathode voltage	125 V	HeaterNegative
Peak heater-cathode voltage	125 V	HeaterPositive
Typical anode voltage low	4000 V	TypicalOperationLow
Typical anode voltage high	7000 V	TypicalOperationHigh
Maximum accelerating/anode voltage	8000 V	—
ANODE VOLTAGE	8000 V	Maximum
GRID-No.2 VOLTAGE	700 V	Maximum
PEAK GRID-No.1 DRIVE FROM CUTOFF	65 V	Maximum
Anode Voltage' 4000	7000 V	—
Grid-No.2 Voltage 250	250 V	—
Grid-No.1 Voltage Range° -25 to -70	-25--70 V	—
Focusing-Coil Current• 75 to 102	99–135 mA	—
Grid-No.1-Circuit Resistance	1.5 MΩ	Maximum

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to all other electrodes capacitance	8.5 pF	Approximate
Grid 2 to all other electrodes capacitance	7 pF	Approximate
Cathode to all other electrodes capacitance	5 pF	Approximate

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflection angle	53 degrees	Approximate
Deflection angle	53 degrees	Approximate

TUBE TINKER

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