



ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

5CEP11

1 SECTION
CONSTRUCTION
CATHODERAY

Specialized - Cathode Ray electronic tube

Five-inch flat optical-glass CRT for high-resolution photographic and oscillographic recording, with electrostatic focusing, magnetic deflection, and P11 screen. Published anode capability reaches approximately 22 kV.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12Q	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	22000 V
Cathode-ray display/scanning system; published focusing, deflection and high-voltage data retained as parameters.	

Five-inch flat optical-glass CRT for high-resolution photographic/oscillographic recording, with electrostatic focus and magnetic deflection.



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

[SOURCE PDF](#)

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

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	Nominal
Heater Current	600 mA	Nominal



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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 to all other electrodes capacitance	9 pF	—
Grid No. 2 to all other electrodes capacitance	7 pF	—
Cathode to all other electrodes capacitance	7 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum anode voltage	22000 V	—
Maximum grid No. 3 focus voltage	5000 V	—
Maximum grid No. 2 voltage	600 V	—
Maximum negative grid No. 1 bias magnitude	180 V	—
Peak heater-cathode voltage during warm-up	450 V	—
Peak heater-cathode voltage after warm-up	180 V	—
Typical anode voltage low-voltage condition	10000 V	—
Typical anode voltage high-voltage condition	20000 V	—
Typical focus voltage range at 10 kV	2070–2370 V	—
Typical focus voltage range at 20 kV	4140–4740 V	—
Typical grid No. 2 voltage	300 V	—
Grid No. 1 cutoff voltage range	-65--40 V	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical line width	0.0015 in	—

CIRCUITVALUE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 circuit resistance maximum	1.5 MOhm	—