

ELECTRONIC TUBE REFERENCE

SC4009

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Four-and-one-half by five-and-one-half inch direct-view oscilloscope CRT with electrostatic focusing and electrostatic deflection, designed for precision waveform display.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B12-37	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	4400 V
Ratings and characteristics promoted from the supplied Sylvania source where explicitly published.	

Four-and-one-half by five-and-one-half inch direct-view oscilloscope CRT with electrostatic focus and electrostatic deflection.



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	6.3 V	—
HeaterOrFilamentCurrent	600 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	540 mA–660 mA	—
Anode No. 2 voltage maximum	4400 V	—
Anode No. 1 voltage maximum	1650 V	—
Grid No. 1 negative bias maximum	-220 V	—
Grid No. 1 positive bias maximum	0 V	—
Grid No. 1 positive peak maximum	2 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak heater-cathode voltage maximum	200 V	—
Peak Anode No. 2 to deflecting-plate voltage maximum	1200 V	—
Anode No. 2 voltage	2500 V	—
Anode No. 1 focus voltage	0–300 V	—
Grid No. 1 cutoff voltage	-56--34 V	—
Anode No. 2 current maximum	400 uA	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to all other electrodes capacitance	5 pF	—
Grid No. 1 to all other electrodes capacitance	6.9 pF	—
Between deflecting plates 1-2 capacitance	4.5 pF	—
Between deflecting plates 3-4 capacitance	1.6 pF	—
Deflecting plate 1 to all other electrodes capacitance	9.3 pF	—
Deflecting plate 2 to all other electrodes capacitance	9.3 pF	—
Deflecting plate 3 to all other electrodes capacitance	6.3 pF	—
Deflecting plate 4 to all other electrodes capacitance	6.3 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflection factor plates 1-2	40–50 V/in	—
Deflection factor plates 3-4	31.5–38.5 V/in	—
P1 light output minimum	15 ft-L	—
Modulation maximum	40 V	—
Line width maximum	0.03 in	—
Deflection factor uniformity maximum	1 %	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pattern distortion at 100 percent useful scan maximum	1 %	—

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