



ELECTRONIC TUBE REFERENCE

SC3875

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Character-writing CRT using electrostatic focusing with combined magnetic and electrostatic character-writing deflection. Its P14 blue/yellow-orange screen supports electronically generated alphanumeric and vector information.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
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	
MAXIMUM PLATE VOLTAGE	18000 V
Ratings and characteristics promoted from the supplied Sylvania source where explicitly published.	

Sylvania SC3875 special-purpose CRT with electrostatic focus and magnetic + electrostatic character writing deflection; P14 blue/yellow-orange. Published high-voltage ratings, focus/deflection data, capacitances, circuit limits, and typical operating conditions were extracted from the supplied datasheet.



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	—
MinimumUsefulScreenDiameter	17 in	—



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	600 mA	—
FocusingMethod	Electrostatic	—
DeflectionMethod	Magnetic + electrostatic character writing	—
PhosphorOrScreen	P14 blue/yellow-orange	—
UsefulScreenOrScan	17 inch	—
SpotPositionMaximum	Within 30 mm diameter	—
Grid1 To All Capacitance	8 pF	—
Cathode To All Capacitance	6 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AnodeVoltageMaximum	18000 V	—
Grid1NegativeBiasMagnitudeMaximum	220 V	—
Grid1PositiveBiasMaximum	0 V	—
Grid1PositivePeakVoltageMaximum	2 V	—
Grid1CircuitResistanceMaximum	1.5 Mohm	—
HeaterCathodeVoltageMaximum	200 V	AfterWarmup
Grid2VoltageTypical	500 V	—
PeakVoltageAnodeToDeflectionPlate	550 V	—
FocusElectrodeVoltageMinimum	-500 V	—
FocusElectrodeVoltageMaximum	1100 V	—
Grid2VoltageMaximum	700 V	—
Anode Voltage	15000 V	—
FocusElectrodeVoltage	0 to +400 V	—
Grid1VoltageForCutoff	-35 to -72 V	—
DeflectionFactorD1D2	170 V/in	—
DeflectionFactorD3D4	185 V/in	—
LineWidth	0.025 in	GridDriveService
DeflectionCircuitResistanceMaximum	5 Mohm	—