ELECTRONIC TUBE REFERENCE

SC3802

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Special-purpose electrostatically focused and deflected instrument CRT offered with P1, P2, P7, or P11 screens, supporting precision oscillographic display across differing persistence requirements.

General characteristics

BASE DESIGNATION	—	**BASE PINS**	—
NOMINAL HEATER	1.5 V / 140 mA	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Cathode Ray

MAXIMUM PLATE VOLTAGE	6600 V

Special-purpose cathode-ray tube; published ratings and construction data captured.

Sylvania SC3802 special-purpose CRT with electrostatic focus and electrostatic deflection; P1/P2/P7/P11 available. Published high-voltage ratings, focus/deflection data, capacitances, circuit limits, and typical operating conditions were extracted from the supplied datasheet.

SOURCE OPERATING CONDITIONS

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

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	**Electrostatic**	—
Deflection method	**Electrostatic**	—

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	**Electrostatic charge printing**	—

SOURCE DATA APPENDIX

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	**1.5 V**	—
Heater Current	**140 mA**	—
FocusingMethod	**Electrostatic**	—
DeflectionMethod	**Electrostatic**	—
PhosphorOrScreen	**P1/P2/P7/P11 available**	—
UsefulScreenOrScan	**2.625 inch**	—
ModulationMaximum	**30 V**	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
LineWidthMaximum	**0.45 mm**	—
DeflectionFactorUniformityMaximum	**2 %**	—
Grid1 To All Capacitance	**8 pF**	—
Cathode To All Capacitance	**6 pF**	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AnodeVoltageMaximum	**6600 V**	—
Grid1NegativeBiasMagnitudeMaximum	**220 V**	—
Grid1PositiveBiasMaximum	**0 V**	—
Grid1PositivePeakVoltageMaximum	**2 V**	—
Grid1CircuitResistanceMaximum	**1.5 Mohm**	—
HeaterCathodeVoltageMaximum	**200 V**	AfterWarmup
PeakVoltageAnodeToDeflectionPlate	**550 V**	—
Anode3VoltageMaximum	**6600 V**	—
Anode2VoltageMaximum	**2200 V**	—
PostAcceleratorHelixResistanceMinimum	**200 Mohm**	—
PostAcceleratorHelixResistanceMaximum	**600 Mohm**	—
Anode Voltage	**3000 V**	—
FocusElectrodeVoltage	**0 to 300 V**	—
Grid1VoltageForCutoff	**-30 to -50 V**	—
DeflectionFactorD1D2	**27 to 33 V/in**	—
DeflectionFactorD3D4	**23 to 29 V/in**	—