



ELECTRONIC TUBE REFERENCE

3BGP7

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Three-inch direct-view oscilloscope CRT with electrostatic focusing and deflection. Its P7 blue-white/yellow, long persistence screen and published deflection characteristics support compact precision oscillographic instrumentation.

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	2750 V
<i>Published source values promoted where applicable; additional values retained as parameters.</i>	

Sylvania 3BGP7 direct-view oscilloscope CRT with electrostatic focus/deflection; P7 blue-white/yellow, long persistence. Published maximum ratings, capacitances, 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	—
Phosphor	P7	—



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	—
Phosphor	P7 blue-white/yellow, long persistence	—
MinimumUsefulScreen	2.25 x 1.125 in	—
GridToAllCapacitance	4.5 pF	—
BetweenDeflectionPlates1_2Capacitance	2 pF	—
BetweenDeflectionPlates3_4Capacitance	2.5 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PlLightOutputMinimum	20 ft-L	P1 variant/reference condition
LineWidthMaximum	0.65 mm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode2VoltageMaximum	2750 V	—
Anode1FocusVoltageMaximum	1100 V	—
GridNegativeBiasMagnitudeMaximum	200 V	—
GridPositivePeakVoltageMaximum	2 V	—
PeakHeaterCathodeVoltageNegative	140 V	—
PeakVoltageAnode2ToDeflectionPlate	550 V	—
Anode2Voltage	2000 V	—
Anode1VoltageForFocus	400-700 V	—
GridVoltageForCutoff	-38 to -67.5 V	—
DeflectionFactorPlates1_2	68-92 V/in	—
DeflectionFactorPlates3_4	28-38 V/in	—
GridCircuitResistanceMaximum	1.5 Mohm	—
DeflectionCircuitResistanceMaximum	1 Mohm	—
Anode2PowerInputMaximum	6 W	—
AltitudeMaximum	35000 ft	—