



ELECTRONIC TUBE REFERENCE

MW3644

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Rectangular television picture tube with ion trap, filter glass, magnetic focusing, and magnetic deflection for direct-view monochrome receiver service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 300 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	14000 V
Rectangular television picture tube with filter glass, ion trap, magnetic focusing, and magnetic deflection.	

Rectangular television picture tube with ion trap and filter glass, magnetic focusing, and magnetic deflection.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1957 Philips Receiving and Amplifying Tubes

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
DeflectionMethod	Magnetic	—
FocusingMethod	Magnetic	—
UsefulScreenDiagonalMinimum	318 mm	—
IonTrapPresent	1 boolean	—
FilterGlassPresent	1 boolean	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TypicalAcceleratingVoltage	12000 V	—
MaximumAcceleratingVoltage	14000 V	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V2

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1963 PHILIPS ELECTRON TUBES HANDBOOK V2

Section 1 · Cathode Ray

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-1 capacitance	7 pF	—
Cathode-plus-grid-3 capacitance	8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen color	White	—
Color temperature	7500 K	—
Light transmission	66 %	—
Useful diagonal	318— mm	Minimum
Useful width	288— mm	Minimum
Useful height	217— mm	Minimum
Vertical deflection angle	—52 deg	—
Horizontal deflection angle	—65 deg	—
Grid-4 voltage	12000 V	—
Grid-2 voltage	250 V	—
Grid-3 voltage	0–250 V	—
Maximum grid-4 voltage	14000 V	—
Minimum grid-4 voltage	9000 V	—
Maximum grid-2 voltage	410 V	—
Minimum grid-2 voltage	200 V	—
Maximum grid-1 bias magnitude	150 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-1 cutoff-voltage magnitude	33–72 V	—
Focusing ampere-turns	960–1015 A-turns	—



1999 Philips E-Z

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1999 PHILIPS E-Z

Section 1 · Cathode Ray

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitance	8 pF	Capacitances Cgt = T pF Ck+gl = 8 pF
Capacitance	2	Capacités B 2\
Capacitance	8 pF	Capacitances Cg1 = 7T pF Cx+gl =_ 8 pF

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	9.5 V	heater voltage must not exceed 9.5 V when the supp-
Heater voltage	9.5 V	wird, darf die Heizspannung beim Einschalten 9,5 V
Deflection	2	2) The distance from deflection centre to reference
Deflection	1	3)Space for deflection and focu51ng coils
Deflection	2	2y The distance from deflection ceuntre to reference
Deflection	3	3) space for deflection and focusing coils