ELECTRONIC TUBE REFERENCE

MW3117

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Philips/Mullard direct-view monochrome television picture tube with magnetic deflection and family-specific focusing and heater arrangements. Manufacturer documentation identifies receiver display service across the MW22 and MW31 picture-tube families.

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

SECTION1 Cathode Ray

MAXIMUM PLATE VOLTAGE	11000 V

Clear-face-plate television picture tube explicitly stated to be equivalent to MW31-74 but without ion trap and outer coating.

Direct-view television picture tube with magnetic deflection.

SOURCE OPERATING CONDITIONS

SOURCE PDF

1951 Mullard Valve and Service Manual

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

1951 MULLARD VALVE AND SERVICE MANUAL

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	**6.3 V**	—
HeaterOrFilamentCurrent	**300 mA**	—
DeflectionMethod	**Magnetic**	—
Heater Voltage	**6.3 V**	—
Heater Current	**300 mA**	—

SOURCE DATA APPENDIX

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**	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TypicalAcceleratingVoltage	7000 V	—
MaximumAcceleratingVoltage	11000 V	—

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Equivalent electrical type	MW31-74	Source-stated equivalence
Face plate	Clear	—

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	300 mA	—
Grid No.1 cutoff voltage	-20 to -50 V	—

CONSTRUCTION		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Useful screen diameter	**265 mm**	—
Deflection method	**Magnetic**	—
Focusing method	**Magnetic**	—
Screen construction	**Metal-backed**	—

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Operating anode voltage	**7000 V**	—
Maximum anode voltage	**9000 V**	—
Grid No.2 / auxiliary anode voltage	**200 V**	—