

ELECTRONIC TUBE REFERENCE

MF4115

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Philips/Mullard radar cathode-ray display tube with magnetic focusing and deflection, long-persistence screen characteristics, and high-voltage operation tailored to radar presentation for type MF4115.

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	12000 V
CRT-specific optical, focusing, deflection, accelerating-voltage, scan, capacitance, and safety data are retained in TUBE_SECTION_PARAMETER because the locked promoted fields primarily target conventional electrode sections.	

Large metal-cone radar CRT with metal-backed orange screen, 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	12000 V	—
Typical Anode Voltage	12000 V	—
Maximum Anode Voltage	12000 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing Method	Magnetic	—
Deflection Method	Magnetic	—
Screen	Orange	—



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	CathodeRay

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	300 mA	CathodeRay
Accelerator/anode voltage	12 kV	RadarCRT
Grid No.2 voltage	300 V	RadarCRT
Grid No.1 cutoff voltage minimum	30 V	RadarCRT
Grid No.1 cutoff voltage maximum	70 V	RadarCRT
Anode voltage maximum	16 kV	RadarCRT
Anode voltage minimum	8 kV	RadarCRT

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing	Magnetic	CathodeRay
Deflection	Double magnetic	CathodeRay
Screen color	Orange	CathodeRay
Screen persistence	Long	CathodeRay
Screen construction	Metal-backed	RadarCRT



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V3

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V3

Section 1 · Cathode Ray

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen color	Orange	RadarCRT
Focusing	Magnetic	RadarCRT
Deflection	Magnetic	RadarCRT

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Useful screen diameter	360 mm	RadarCRT
Final accelerator voltage	12 kV	RadarCRT
Grid No.2 voltage	300 V	RadarCRT
Grid No.1 extinction voltage minimum	-70 V	RadarCRT
Grid No.1 extinction voltage maximum	-30 V	RadarCRT
Final accelerator voltage maximum	16 kV	RadarCRT

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid capacitance maximum	8 pF	Section1
Cathode capacitance maximum	8 pF	Section1



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	-30 to -70 V	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Useful screen diameter	368 mm	—
Deflection method	Magnetic	—
Focusing method	Magnetic	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen construction	Metal-backed	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Operating anode voltage	12000 V	—
Maximum anode voltage	16000 V	—
Grid No.2 / auxiliary anode voltage	300 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid capacitance maximum	8 pF	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker