

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 MF3155.

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	15500 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.	

Twelve-inch round radar CRT with metal-backed long-persistence screen, magnetic focusing, and double magnetic deflection.



SOURCE OPERATING CONDITIONS

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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	15500 V	—
Typical Anode Voltage	15000 V	—
Maximum Anode Voltage	15500 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing Method	Magnetic	—
Deflection Method	Double magnetic	—
Screen	Long persistence	—



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
Heater voltage	6.3 V	CathodeRay

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	300 mA	CathodeRay
Accelerator/anode voltage	15 kV	RadarCRT
Grid No.2 voltage	300 V	RadarCRT
Grid No.1 cutoff voltage minimum	30 V	RadarCRT
Grid No.1 cutoff voltage maximum	90 V	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 DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1963 Philips Electron Tubes Handbook V3

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1963 PHILIPS ELECTRON TUBES HANDBOOK V3

Section 1 · Cathode Ray

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen fluorescence	Orange	RadarCRT
Screen persistence	Long	RadarCRT
Focusing	Magnetic	RadarCRT
Deflection	Double magnetic	RadarCRT

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Useful screen diameter	265 mm	RadarCRT
Final accelerator voltage	15 kV	RadarCRT
Grid No.2 voltage	300 V	RadarCRT
Grid No.1 extinction voltage minimum	-90 V	RadarCRT
Grid No.1 extinction voltage maximum	-30 V	RadarCRT

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



SOURCE OPERATING CONDITIONS

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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 -90 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	15000 V	—
Grid No.2 / auxiliary anode voltage	300 V	—

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

TUBE TINKER

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