

ELECTRONIC TUBE REFERENCE

DF92

Voltage Pentode - Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Mullard miniature short-grid-base RF pentode for battery-operated equipment. Manufacturer documentation identifies RF/IF amplifier service, combining compact construction, low-power filament operation, and fixed-gain high-frequency performance.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	1.4 V / 50 mA
HEATING	Direct	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	600000 Ω
TRANSCONDUCTANCE	0.001025 S
MAXIMUM PLATE VOLTAGE	110 V
MAXIMUM SCREEN VOLTAGE	90 V
MAXIMUM CATHODE CURRENT	6.5 mA
RF/IF pentode for battery sets.	

The Mullard DF92 is a miniature short-grid-base RF pentode for battery-operated equipment.



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	90 V	—
Screen Voltage	67.5 V	—
Plate Current	3.7 mA	—
Screen Current	1.4 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1000 μ S	—
Plate Resistance	500000 ohm	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 1 · Pentode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	RF amplifier	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	1.4 V	DCOnly
Filament Current	50 mA	DCOnly
Plate Voltage	90 V	—
Screen Voltage	67.5 V	—
Plate Current	3.7 mA	—
Screen Current	1.4 mA	—
Transconductance	1000 μ S	—
Plate Resistance	500000 ohm	—
Input Capacitance	3.6 pF	—
Output Capacitance	7.5 pF	—
Plate-Grid Capacitance	0.01 pF	Maximum

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	90 V	—
Maximum Screen Voltage	70 V	—
Maximum Cathode Current	6 mA	—

1963 Philips Electron Tubes Handbook V1

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 1 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	7.5 pF	—
Grid-to-plate capacitance	—0.008 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	90 V	RF/IF amplifier
Screen voltage	67.5 V	RF/IF amplifier
Plate current	2.9 mA	RF/IF amplifier
Screen current	1.2 mA	RF/IF amplifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	925 uS	RF/IF amplifier
Plate resistance	0.6 Mohm	—



SOURCE DATA APPENDIX

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Parallel heater voltage	1.4 V	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Series heater voltage	1.35 V	Published datasheet value
Anode voltage	90 V	Published datasheet value
Screen-grid voltage	67.5 V	Published datasheet value
Anode current	2.9 mA	Published datasheet value
Screen-grid current	1.2 mA	Published datasheet value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	925 μS	Published datasheet value
Internal resistance	0.6 MΩ	Published datasheet value
Alternative transconductance	1025 μS	V _a =90V; V _{g2} =90V
Alternative internal resistance	0.35 MΩ	V _a =90V; V _{g2} =90V
Anode capacitance	1.5 pF	Published datasheet value
Grid capacitance	3.6 pF	Published datasheet value
Anode-control-grid capacitance	—0.008 pF	Published datasheet value