



ELECTRONIC TUBE REFERENCE

DF70

Voltage Pentode or Tetrode (under 100V) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Directly heated Mullard subminiature AF voltage-amplifying pentode for hearing aids. Its 0.625 V, 25 mA filament is specifically suited to extremely low-power battery-operated audio equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	0.625 V / 25 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	500000 Ω
TRANSCONDUCTANCE	0.00022 S
MAXIMUM PLATE VOLTAGE	30 V
MAXIMUM SCREEN VOLTAGE	30 V
<i>Subminiature AF pentode.</i>	

The Mullard DF70 is a directly heated subminiature AF voltage-amplifying pentode for hearing aids, using a 0.625 V, 25 mA filament.



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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	30 V	—
Screen Voltage	30 V	—
Anode Current	0.375 mA	—
Screen Current	0.125 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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
Typical anode voltage	30 V	Published datasheet value
Typical screen-grid voltage	30 V	Published datasheet value
Control-grid voltage	-1.85 V	Published datasheet value
Anode current	50 μ A	Published datasheet value
Screen-grid current	18 μ A	Published datasheet value
Maximum no-load anode voltage	—45 V	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum no-load screen-grid voltage	—45 V	Published datasheet value
Maximum grid circuit resistance	—10 MΩ	Published datasheet value
Filament voltage range	0.55–0.75 V	Published datasheet value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	100 μS	Published datasheet value
Screen-grid amplification factor	12.5	Published datasheet value
Internal resistance	2.5 MΩ	Published datasheet value