



ELECTRONIC TUBE REFERENCE

DF33

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Mullard variable-mu RF pentode designed for controlled RF or IF amplifier service. Its gradual cutoff characteristic supports automatic gain regulation in receiver signal stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1500000 Ω
TRANSCONDUCTANCE	0.00075 S
MAXIMUM PLATE VOLTAGE	110 V
MAXIMUM SCREEN VOLTAGE	110 V
<i>Published Mullard/Philips ratings and characteristics promoted where applicable; additional values retained as parameters.</i>	

The Mullard DF33 is a variable-mu RF pentode for controlled RF or IF amplifier service.



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	90 V	—
Screen Voltage	90 V	—
Anode Current	1.2 mA	—
Screen Current	0.3 mA	—
Control Grid Voltage for Low Transconductance	-4 V	Transconductance=5uA/V



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Mullard Receiving Tubes

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

1958 MULLARD RECEIVING TUBES

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cutoff characteristic	Variable-mu	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	RF / IF 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	90 V	—
Plate Current	1.2 mA	—
Screen Current	0.3 mA	—
Plate Resistance	1500000 ohm	—
Transconductance	750 uS	—
Grid Voltage for 150:1 Transconductance Reduction	-4 V	—
Plate-Grid Capacitance	0.007 pF	Maximum
Output Capacitance	9.5 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	110 V	—
Maximum Screen Voltage	110 V	—