



ELECTRONIC TUBE REFERENCE

EF22

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Variable-mu RF pentode for RF or IF voltage amplification in AC or AC/DC mains equipment. Its extended-control characteristic supports automatic gain regulation in transformerless receiver circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 200 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	1200000 Ω
TRANSCONDUCTANCE	0.0022 S
AMPLIFICATION FACTOR	17
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.3 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Published maximum ratings/characteristics promoted from source.</i>	

Variable-mu RF pentode for RF or IF voltage amplification in AC or AC/DC mains 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

CHARACTERISTICS

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



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Tesla

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

195X TESLA

Section 1 · Pentode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	200 mA	Nominal
Maximum Plate Voltage	250 V	—
Maximum Screen Voltage	100 V	—
Maximum Plate Dissipation	3 W	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2200 μ S	Typical

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1967 Mullard Receiving Tubes for Maintenance

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

1967 MULLARD RECEIVING TUBES FOR MAINTENANCE

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	RFOrIFAmplifier
Screen-grid voltage	100 V	RFOrIFAmplifier
Control-grid voltage	-2.5 V	RFOrIFAmplifier
Plate current	6 mA	RFOrIFAmplifier
Screen-grid current	1.7 mA	RFOrIFAmplifier
Transconductance	2.2 mA/V	RFOrIFAmplifier
Plate resistance	1.2 MOhm	RFOrIFAmplifier
Maximum plate voltage	300 V	—
Maximum plate dissipation	2 W	—
Maximum screen-grid voltage	125 V	Ia=6mA
Maximum screen-grid dissipation	0.3 W	—
Maximum cathode current	10 mA	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	5.5 pF	—
Output capacitance	6.4 pF	—

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 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	200 mA	—
Typical plate voltage	250 V	Uncontrolled
Typical screen voltage	100 V	Uncontrolled
Typical plate current	6 mA	Uncontrolled
Transconductance	2200 uS	Uncontrolled
Plate resistance	1.2 Mohm	Uncontrolled
Screen-grid amplification factor	17	—
Equivalent noise resistance	6200 ohm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum no-current plate voltage	550 V	—
Maximum plate voltage	300 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	6.1 pF	—
Grid input capacitance	5.5 pF	—
Plate-grid capacitance maximum	0.002 pF	—
Grid-heater capacitance maximum	0.004 pF	—

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

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