



ELECTRONIC TUBE REFERENCE

EF83

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Remote-cutoff audio-frequency pentode designed for electrically controlled variable-gain amplification and compression circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	NOVAL	BASE PINS	9
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	1250000 Ω
TRANSCONDUCTANCE	0.0016 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM SCREEN DISSIPATION	0.2 W
MAXIMUM CATHODE CURRENT	6 mA
<i>Published ratings, characteristics and operating conditions reviewed.</i>	

Remote-cutoff AF pentode.



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
Plate voltage	250 V	—
Screen-grid voltage	50 V	—
Plate current	4 mA	—
Screen-grid current	1.15 mA	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	4 pF	—
Output capacitance	5 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Telefunken

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

1959 TELEFUNKEN

Section 1 · Pentode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cutoff characteristic	Remote cutoff	—



1963 Philips Electron Tubes Handbook V1a

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	200 mA	Published heater rating
Transconductance	1600 μ S	AFAmplifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	AFAmplifier
Screen voltage	50 V	AFAmplifier
Grid bias	-1.6 V	AFAmplifier
Plate current	4 mA	AFAmplifier
Screen current	1.15 mA	AFAmplifier



SOURCE DATA APPENDIX

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Heating
Heater current	200 mA	Heating
Maximum plate voltage	300 V	Promoted published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum screen voltage	300 V	Promoted published datasheet value
Maximum plate dissipation	1 W	Promoted published datasheet value
Vg'] (I _{g1} = 40,3 (JA) = max.,	1.3 V	Limiting values

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1250000 Ω	Promoted published datasheet value
Transconductance	1600 μS	Promoted published datasheet value
Chauffage: indirect par C.A. ou C.C. V _e =	6.3 V	Published datasheet value
V _a =	250 V	Published datasheet value
V _{g2} =	50 V	Published datasheet value
V _{g1} =	-1.6 V	Published datasheet value
I _a =	4 mA	Published datasheet value
I _{g2} =	1.15 mA	Published datasheet value
s =	1.6 ma/V	Published datasheet value
V _o =	250 v	Published datasheet value
V _{g3} =	0 v	Published datasheet value
I, = 1,80	1.65 ma	Published datasheet value
I _{go} = 0,55	0.25 mA	Published datasheet value
V _p =	250 V	Published datasheet value
V _o = "3 3 8	15 V	Published datasheet value
dtot (-V _R =1	-3 V	Published datasheet value
dtot (-V _R =3	-20 V	Published datasheet value

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitances C _{g1} =	4 pF	Capacitances