

Remote- or semi-remote-cutoff pentode designed for RF, IF, variable-mu, or controlled-gain amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7CC	BASE PINS	7
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.0044 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.6 W
MAXIMUM CATHODE CURRENT	25 mA
Published ratings and characteristics promoted from approved datasheet.	

Indirectly heated variable-slope pentode intended for RF or IF amplification.



SOURCE OPERATING CONDITIONS

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	1000000 ohm	—
Transconductance	4400 μ S	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Screen Voltage	330 V	—
Maximum Plate Dissipation	3.3 W	—
Maximum Screen Dissipation	0.65 W	—



SOURCE OPERATING CONDITIONS

1955 Marconi

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

1955 MARCONI

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	6.3 V	—
Heater/Filament Current	300 mA	—
Transconductance	4400 μ S	—
Plate Resistance	1500000 ohm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum/Published Anode Voltage	300 V	—
Maximum/Published Screen Voltage	125 V	—
Maximum Anode Dissipation	3 W	—
Maximum Screen Dissipation	0.6 W	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Anode Capacitance	0.0035 pF	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen-grid voltage	100 V	ClassA
Cathode resistor	68 ohm	ClassA
Plate current	11 mA	ClassA
Screen-grid current	4.2 mA	ClassA
Plate voltage	100 V	ClassA
Screen-grid voltage	100 V	ClassA
Cathode resistor	68 ohm	ClassA
Plate current	10.8 mA	ClassA



SOURCE OPERATING CONDITIONS

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1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

Section 1 · Pentode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—



SOURCE OPERATING CONDITIONS

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1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Pentode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	300 mA	—
Plate current	10.8 mA	Typical operating conditions



1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	Published table
Screen voltage	100 V	Published table
Control-grid bias	-1 V	Published table
Plate current	11 mA	Published table
Screen current	4.2 mA	Published table

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	4400 μ S	Published table
Plate resistance	1000000 ohm	Published table
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	300 mA	—
Plate resistance	1 M0hm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	330 V	—
Maximum screen supply voltage	330 V	—
Maximum plate dissipation	3.4 W	—
Maximum screen dissipation	0.6 W	—
Typical plate voltage	250 V	—
Typical screen voltage	100 V	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	RFIFAmplifier
Screen voltage	100 V	RFIFAmplifier
Plate current	10 mA	RFIFAmplifier
Screen current	4 mA	RFIFAmplifier
Application	Remote-cutoff RF/IF amplifier	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1000000 Ω	Section1
Transconductance	4400 μS	Section1



SOURCE DATA APPENDIX

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen Supply Voltage	300 V	—
Plate Voltage	100 V	ClassA; PlateVoltage=100V; ScreenVoltage=100V
Screen Voltage	100 V	ClassA; PlateVoltage=100V; ScreenVoltage=100V
Cathode Bias Resistance	68 ohm	ClassA; PlateVoltage=100V; ScreenVoltage=100V
Plate Voltage	250 V	ClassA; PlateVoltage=250V; ScreenVoltage=100V
Screen Voltage	100 V	ClassA; PlateVoltage=250V; ScreenVoltage=100V

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	250000 ohm	ClassA; PlateVoltage=100V; ScreenVoltage=100V
Transconductance	4300 uS	ClassA; PlateVoltage=100V; ScreenVoltage=100V
Plate Current	10.8 mA	ClassA; PlateVoltage=100V; ScreenVoltage=100V
Screen Current	4.4 mA	ClassA; PlateVoltage=100V; ScreenVoltage=100V



SOURCE DATA APPENDIX

1968 Mazda Belvu

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

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension filAMent cceucrearssoceresnancomssncacececececess VÉ	6.3 V	—
Heater current ...s seessencensereneseress IÉ	300 mA	—
TenSion d'AN0ËE.....rrevereesereirr vovrorcamreranséssencececsce0ees VE	300 V	—
sésmsoce sucocacsensssa 00000s VB	125 V	—
Screen-grid voltage à courant nul asssssos0c0s000u VGa DI	300 V	—
Dissipation d'Anod@ vsesereersocserensencrmcecesescuess PA	3 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitance d'entrée Ce	5.5 pF	InterelectrodeCapacitance
Capacitance de sortie ... avssesnensesscamsencasasasecermaenceusss OS	5 pF	InterelectrodeCapacitance
Capacitance grille n° 1/anode vouene cacvse vocacarassensvench es CE1/@	3.5 pF	InterelectrodeCapacitance



TUBE TINKER
ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1969 Tesla Manual of Electronic Tubes

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

1969 TESLA MANUAL OF ELECTRONIC TUBES

Section 1 · Pentode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	RF_IF_Amplifier text	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater current	300 mA	Nominal
Maximum plate voltage	330 V	Promoted published value
Maximum screen voltage	330 V	Promoted published value
Maximum plate dissipation	3.3 W	Promoted published value
Maximum screen dissipation	0.65 W	Promoted published value

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1000000 ohm	Promoted published value
Transconductance	4400 uS	Promoted published value
Voltage	20 V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Yo}tage (AC or DC) ± %	3 V	PublishedColumn1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Yo}tage (AC or DC) $\pm$ %	10 V	PublishedColumn2
Current at	6.3 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to plate. max. max	0.0035 pF	PublishedColumn1
and heater	5.5 pF	PublishedColumn1
grid No. , and heater	5 pF	PublishedColumn1
grid No. , and heater	5.5 pF	PublishedColumn2

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	100 V	PublishedColumn1
Plate Supply Voltage	250 V	PublishedColumn2



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1975 RCA RC30

SOURCE PDF

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

1975 RCA RC30

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For fixed-bias operation	0.25 MΩ	Published in approved EF93 target datasheet entry; Section1
For cathode-bias operation	1 MΩ	Published in approved EF93 target datasheet entry; Section1
Plate Current	5 mA	Published in approved EF93 target datasheet entry; Section1
Plate Voltage	330 V	Published in approved EF93 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube Voltage Drop for plate current of	20 mA	Published in approved EF93 target datasheet entry; Section1
Tube Voltage Drop for plate current of 20 mA	5 V	Published in approved EF93 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 6.3	12.6 V	Published in approved EF93 target datasheet entry; Section1
Heater Current 0.3	150 mA	Published in approved EF93 target datasheet entry; Section1
" This value is	5.5 pF	Published in approved EF93 target datasheet entry; Section1