

ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

1U4

1 SECTION
CONSTRUCTION
PENTODE

Voltage - Pentode Sharp Cutoff (single) electronic tube

Directly heated miniature sharp-cutoff battery pentode designed for radio-frequency and intermediate-frequency amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6AR	BASE PINS	7
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6AR - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN1 – IS	A	IS – Internal Screen	CONNECTED
PIN1 – F	–	F – Filament	CONNECTED
PIN2 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – G2	A	G2 – Screen Grid	CONNECTED
PIN4 – IC	–	–	IC
PIN5 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN5 – IS	A	IS – Internal Screen	CONNECTED
PIN5 – F	–	F – Filament	CONNECTED
PIN6 – G1	A	G1 – Control Grid	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.0009 S
MAXIMUM PLATE VOLTAGE	110 V
MAXIMUM SCREEN VOLTAGE	110 V
MAXIMUM CATHODE CURRENT	6 mA
<i>Directly heated sharp-cutoff RF pentode for low-voltage battery receiver amplifier service.</i>	

Directly heated miniature battery pentode for RF and IF amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	3.6 pF	—
Output capacitance	7.5 pF	—
Grid-to-plate capacitance	0.01 pF	—
Plate resistance	1000000 ohm	ClassA; OperatingPoint1
Transconductance	900 uS	ClassA; OperatingPoint1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	90 V	ClassA; OperatingPoint1
Screen voltage	90 V	ClassA; OperatingPoint1
Control-grid bias	0 V	ClassA; OperatingPoint1
Plate current	1.6 mA	ClassA; OperatingPoint1
Screen current	0.5 mA	ClassA; OperatingPoint1
Maximum plate voltage	110 V	—
Maximum screen voltage	110 V	—

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	90 V	RFIFAmplifier
Screen voltage	67.5 V	RFIFAmplifier
Plate current	2.3 mA	RFIFAmplifier
Screen current	0.7 mA	RFIFAmplifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1 M Ω	Section1
Transconductance	900 μ S	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
Plate voltage	90 V	ClassA;OperatingPoint1
Screen voltage	90 V	ClassA;OperatingPoint1
Plate current	1.6 mA	ClassA;OperatingPoint1
Screen current	0.5 mA	ClassA;OperatingPoint1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1000000 ohm	ClassA;OperatingPoint1
Transconductance	900 uS	ClassA;OperatingPoint1

TUBE TINKER

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