

ELECTRONIC TUBE REFERENCE

6AN5

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

High-efficiency wideband power pentode for RF, AF, and high-frequency output-amplifier applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7BD	BASE PINS	7
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7BD - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	12500 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	120 V
MAXIMUM SCREEN VOLTAGE	120 V
MAXIMUM PLATE DISSIPATION	1.7 W
MAXIMUM SCREEN DISSIPATION	0.56 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Promoted from published ratings/characteristics; identical repeated sections compressed where applicable.</i>	

High-efficiency miniature power pentode for high-frequency and wide-band output 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	120 V	Published handbook rating
Maximum screen voltage	120 V	Published handbook rating
Plate voltage	120 V	ClassA
Screen voltage	120 V	ClassA
Plate current	35 mA	ClassA
Screen current	12 mA	ClassA
Load resistance	2500 ohm	ClassA
Power output	1.3 W	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	12500 ohm	Published handbook characteristic
Transconductance	8000 μ S	Published handbook characteristic
Heater voltage	6.3 V	Published heater rating
Heater current	450 mA	Published heater rating

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	9 pF	Published capacitance column
Output capacitance	4.8 pF	Published capacitance column
Grid-to-plate capacitance	0.075 pF	Published capacitance column



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Raytheon Special Purpose Tubes

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

195X RAYTHEON SPECIAL PURPOSE TUBES

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode resistor	120 Ω	RFAFPowerAmplifier
Plate voltage	120 V	RFAFPowerAmplifier
Screen voltage	120 V	RFAFPowerAmplifier
Plate current	35 mA	RFAFPowerAmplifier
Screen current	12 mA	RFAFPowerAmplifier
Power output	1.3 W	RFAFPowerAmplifier
Load resistance	2500 Ω	RFAFPowerAmplifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	12500 Ω	Section1
Transconductance	8000 μS	Section1



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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
Power Output	4.5 W	ClassA

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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	120 V	ClassA
Screen voltage	120 V	ClassA
Cathode resistor	120 Ω	ClassA
Plate current	35 mA	ClassA
Screen current	22 mA	ClassA
Load resistance	2500 Ω	ClassA
Plate power output	2.3 W	ClassA
Application	High-efficiency high-frequency or wide-band power pentode Section1	

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	12500 Ω	Section1
Transconductance	8000 μS	Section1

TUBE TINKER

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

[Catalog](#)
[Tube types](#)
[Full books](#)
[Blog](#)
[Feedback & corrections](#)

© 2026 Tube Tinker