

ELECTRONIC TUBE REFERENCE

1DN5

Voltage - Pentode or Tetrode (under 100V) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

DIODE-PENTODE

Battery diode-pentode combining radio detection with remote-cutoff amplification. The diode provides signal or AVC rectification while the controlled-cutoff pentode supports gain-controlled receiver amplification in portable equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6BW	BASE PINS	7
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

6BW - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 1G3	A	G3 – Suppressor Grid	CONNECTED
PIN1 – F	–	F – Filament	CONNECTED
PIN2 – 1P	A	P – Plate (Anode)	CONNECTED
PIN3 – 1G2	A	G2 – Screen Grid	CONNECTED
PIN4 – 2P	B	P – Plate (Anode)	CONNECTED
PIN6 – 1G1	A	G1 – Control Grid	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Diode	
MAXIMUM CATHODE CURRENT	0.25 mA
Detector diode; cross-section diode-plate-to-pentode-grid capacitance is published.	

SECTION2 Pentode	
PLATE RESISTANCE	600000 Ω
TRANSCONDUCTANCE	0.00063 S
MAXIMUM PLATE VOLTAGE	90 V
MAXIMUM SCREEN VOLTAGE	90 V
MAXIMUM CATHODE CURRENT	3 mA
<i>Remote-cutoff pentode section; typical condition at 67.5 V plate.</i>	

1DN5 is a DiodePentode device. Combined detector diode and remote-cutoff pentode with common directly heated filament for portable audio/AVC service.

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 · Diode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DiodePlateToControlGridCapacitance	0.04 pF	CrossSection;Maximum

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumDiodeCurrentContinuous	0.25 mA	ContinuousOperation

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average Diode Current	1 mA	DcApplied=40V

1961 TUNG SOL

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	1.4 V	Nominal
Filament Current	50 mA	Nominal
Plate Voltage	67.5 V	Typical
Screen Voltage	67.5 V	Typical
Grid1 Voltage	0 V	Typical
Plate Current	2.1 mA	Typical
Screen Current	0.55 mA	Typical
MaximumNegativeGrid4Voltage	-50 V	—
MaximumPositiveGrid4Voltage	0 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	630 uS	Typical
Grid4VoltageForTransconductance40uS	-11.5 V	Typical
Plate Resistance	600000 ohm	Typical


SOURCE DATA APPENDIX

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 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum continuous diode current	—0.25 mA	—

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	1.4 V	—
Filament current	50 mA	—
Plate voltage	45 V	AudioAmplifier
Screen voltage	45 V	AudioAmplifier


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average diode current at 10 V DC	1 mA	—

1968 GENERAL ELECTRIC CO

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	67.5 V	ClassA
Screen voltage	67.5 V	ClassA
Plate current	2.1 mA	ClassA
Screen current	0.55 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	600000 ohm	ClassA
Transconductance	630 uS	ClassA

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