



ELECTRONIC TUBE REFERENCE

7851

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TETRODE

Screen-grid electrometer tetrode with extremely low grid current and very high effective gain, designed for precision instrumentation involving minute input currents.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	2.5 V / 200 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Tetrode	
PLATE RESISTANCE	1700000 Ω
TRANSCONDUCTANCE	0.00004 S
AMPLIFICATION FACTOR	5
MAXIMUM PLATE VOLTAGE	12 V
MAXIMUM SCREEN VOLTAGE	12 V
<i>Electrometer tetrode.</i>	

The 7851 is a screen-grid electrometer tetrode with very high effective gain and extremely low grid current, intended for instrumentation involving minute input currents.

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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	2.5 V	Nominal
Plate voltage	12 V	Typical operating conditions
Screen voltage	11 V	Typical operating conditions

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 4 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · Tetrode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.19 pF	WholeTube
Input capacitance	2.6 pF	WholeTube
Output capacitance	1.8 pF	WholeTube
Grid To Plate: G1 To P	0.19 pf	PublishedTable
Heater	2.5 VOLTS	PublishedTable
Plate Supply Voltage	11 VOLTS	PublishedTable
Grid #2 Voltage	11 VOLTS	PublishedTable
Grid #1 Voltage Applied	2.2 VOLTS	PublishedTable
Transconductance	40 uMHOS	PublishedTable

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	1.7 MEGOHMS	PublishedTable

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	11 V	WholeTube
Grid 2 voltage	11 V	WholeTube
Grid 1 voltage	-2.2 V	WholeTube
Plate current	16 uA	WholeTube
Grid current maximum	0.000000001 mA	WholeTube
Maximum Plate Voltage	2 VOLTS	PublishedTable
Maximum Grid #2 Voltage	12 VOLTS	PublishedTable
Maximum	12 VOLTS	PublishedTable
Maximum	1 VOLTS	PublishedTable
Maximum	16 VOLTS	PublishedTable
Grid Current - Maximum	13 AMPS	PublishedTable

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