

ELECTRONIC TUBE REFERENCE

7K7

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS
CONSTRUCTION
DIODE-DIODE-TRIODE

Double-diode triode combining radio detector and AVC rectification with subsequent voltage amplification. The paired diodes handle signal and control-voltage functions while the triode provides receiver audio or voltage gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode	
MAXIMUM HEATER-CATHODE VOLTAGE	90 V
Published promoted fields populated by semantic section ownership; identical repeated sections compressed.	

SECTION2 Triode	
PLATE RESISTANCE	44000 Ω
TRANSCONDUCTANCE	0.0016 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM HEATER-CATHODE VOLTAGE	90 V
<i>Published promoted fields populated by semantic section ownership; identical repeated sections compressed.</i>	

SECTION3 Diode	
<i>No fixed ratings recorded.</i>	
<i>Physical diode section added during approved section-structure reconciliation.</i>	

A duodiode high-mu triode with separate diode and triode cathodes for greater circuit flexibility.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	TriodeSection
Plate Current	2.3 mA	TriodeSection
Control Grid Voltage	-2 V	TriodeSection
Cathode Bias Resistor	1000 ohm	TriodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	44000 ohm	TriodeSection
Transconductance	1600 μ S	TriodeSection
Amplification Factor	70	TriodeSection



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	7 V	Nominal
HeaterCurrentNominal	320 mA	Nominal
Plate Voltage	250 V	ClassA



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Grid Voltage	-2 V	ClassA
Plate Current	2.3 mA	ClassA

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1600 μ S	—
Plate Resistance	44000 ohm	—
Amplification Factor	70 ratio	—



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
Grid To Plate Capacitance	1.7 pF	Triode

1961 TUNG SOL

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TriodePlateResistance	44000 ohm	Section2
TriodeTransconductance	1600 uS	Section2

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