



ELECTRONIC TUBE REFERENCE

7687

Voltage - Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Low-noise triode-pentode for high-fidelity voltage amplification, phase splitting, preamplification, and tone-control service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 500 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0025 S
AMPLIFICATION FACTOR	18
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.4 W
Published source values promoted where applicable; additional source values retained as parameters.	

SECTION2 Pentode	
PLATE RESISTANCE	500000 Ω
TRANSCONDUCTANCE	0.0058 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.6 W
<i>Published source values promoted where applicable; additional source values retained as parameters.</i>	

Improved low-noise triode-pentode for high-fidelity preamplifier and phase-splitter service.



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 · Pentode

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Primary application	High-fidelity audio preamplifier	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Triode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	500 mA	—
Heater current	500 mA	—
Triode transconductance	2500 μ S	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater-cathode voltage maximum heater negative	200 V	—
Heater-cathode voltage maximum heater positive DC	100 V	—
Heater voltage range	5.7 to 6.9 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical triode plate voltage	215 V	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	High-fidelity phase inverter / preamplifier	—
Application	Low-noise phase splitter	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode grid-to-plate capacitance	2.4 pF	—
Triode input capacitance	2.2 pF	—
Triode output capacitance	0.3 pF	—

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 2 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pentode grid1-to-plate capacitance maximum	0.15 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical pentode plate voltage	220 V	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pentode transconductance	5800 μ S	—
Plate resistance	0.5 Mohm	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Low-noise preamplifier pentode	—

TUBE TINKER

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

