



ELECTRONIC TUBE REFERENCE

19EW7

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Dissimilar dual triode for television vertical oscillator and deflection amplifier.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	18.9 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION 0 Triode	
PLATE RESISTANCE	8750 Ω
TRANSCONDUCTANCE	0.002 S
AMPLIFICATION FACTOR	17.5
MAXIMUM PLATE VOLTAGE	330 V
Oscillator triode; typical V_a 250 V, V_g -11 V, I_a 5.5 mA.	

SECTION1 Triode	
PLATE RESISTANCE	800 Ω
TRANSCONDUCTANCE	0.0075 S
AMPLIFICATION FACTOR	6
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM CATHODE CURRENT	50 mA
<i>Vertical output triode; typical V_a 150 V, V_g -17.5 V, I_a 45 mA; 1500 V peak positive plate pulse, 175 mA peak cathode current.</i>	

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1970 Sylvania Technical Manual

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

1970 SYLVANIA TECHNICAL MANUAL

Section 0 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 250	250 V	Oscillator triode typical plate voltage
-11	-11 V	Oscillator triode typical grid voltage
5.5	5.5 mA	Oscillator triode typical plate current

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	18.9 V	19EW7 heater nominal voltage
Heater/filament current	300 mA	Heater current

1970 SYLVANIA TECHNICAL MANUAL

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 250	150 V	Vertical amplifier triode typical plate voltage
-11	-17.5 V	Vertical amplifier triode typical grid voltage
5.5	45 mA	Vertical amplifier triode typical plate current

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