



ELECTRONIC TUBE REFERENCE

279A

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Large directly heated Western Electric transmitting power triode for high-power audio and RF service. With roughly 1.2 kW plate dissipation and 3 kV plate capability, it was intended for major power-amplifier and transmitter installations.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	5
NOMINAL HEATER	10 V / 21 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	2000 Ω
TRANSCONDUCTANCE	0.005 S
AMPLIFICATION FACTOR	10
MAXIMUM PLATE VOLTAGE	3000 V
MAXIMUM PLATE DISSIPATION	1200 W
MAXIMUM CATHODE CURRENT	800 mA
<i>Promoted fields populated from explicitly published ratings/characteristics; service-specific data retained as parameters.</i>	

RF/AF power amplifier, oscillator and modulator triode. The datasheet publishes maximum ratings, typical operating conditions and electrical characteristics.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 Machlette Laboratories

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

1971 MACHLETTE LABORATORIES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
and [1]	800 A	and 800 milliamperes apply at frequencies up to 20 Mc; oper- hausted by 2 straight-line, high-voltage process assuring the
and [2]	20 A	and 800 milliamperes apply at frequencies up to 20 Mc; oper- hausted by 2 straight-line, high-voltage process assuring the
and [3]	2 A	and 800 milliamperes apply at frequencies up to 20 Mc; oper- hausted by 2 straight-line, high-voltage process assuring the
ation at	40 mA	ation at 40 Mc is permissible with plate voltage reduced to same high standards as characterize the Machlett line of high.
Published value	1.5	1.5 kVdec. and super-voltage x-ray tubes.
Filament Current at [1]	10 V	Filament Current at 10 Volts 21.0 ampceres
Filament Current at [2]	21 V	Filament Current at 10 Volts 21.0 ampceres
Amplification Factor	10	Amplification Factor 10
Grid-Plate Transconductance	5000 uS	Grid-Plate Transconductance 5000 uMhos
Direct Plate CUrrent cvoiceoieiecrieieeseeeeevnaesssee	800 A	Direct Plate CUrrent cvoiceoieiecrieieeseeeeevnaesssee 800 milliamperes
Direct Plate Voltage oo [1]	2500 V	Direct Plate Voltage oo 2500 2000 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Direct Plate Voltage oo [2]	2000 V	Direct Plate Voltage oo 2500 2000 volts
Direct Plate Current [1]	300 A	Direct Plate Current 300 375 milliamperes
Direct Plate Current [2]	375 A	Direct Plate Current 300 375 milliamperes
Plate Dissipation [1]	750 W	Plate Dissipation ... 750 750 watts
Plate Dissipation [2]	750 W	Plate Dissipation ... 750 750 watts
Undistorted Output [1]	155	Undistorted Output 155 85 watls
Undistorted Output [2]	85	Undistorted Output 155 85 watls
Dircet Plate Voltage [1]	2500 V	Dircet Plate Voltage 2500 2000 volts
Dircet Plate Voltage [2]	2000 V	Dircet Plate Voltage 2500 2000 volts
Plate Dissipation [1]	9200 W	Plate Dissipation 9200 720 watts
Plate Dissipation [2]	720 W	Plate Dissipation 9200 720 watts
Load Resistance, plate-to-plate [1]	2800	Load Resistance, plate-to-plate ... 2800 2240 oluns
Load Resistance, plate-to-plate [2]	2240	Load Resistance, plate-to-plate ... 2800 2240 oluns
Load Resistance, per tube [1]	700 ohm	Load Resistance, per tube 700 560 ohms
Load Resistance, per tube [2]	560 ohm	Load Resistance, per tube 700 560 ohms
Recommended Power for Driving Stage [1]	100 W	Recommended Power for Driving Stage ... 100 100 watts
Recommended Power for Driving Stage [2]	100 W	Recommended Power for Driving Stage ... 100 100 watts
Dircat Plate Current G00	720 A	Dircat Plate Current G00 720 milliamperes
Dircct Plate Current .o [1]	800 A	Dircct Plate Current .o 800 800 milliamperes
Dircct Plate Current .o [2]	800 A	Dircct Plate Current .o 800 800 milliamperes
Dircet Grid Current [1]	150 A	Dircet Grid Current 150 100 milliamperes
Dircet Grid Current [2]	100 A	Dircet Grid Current 150 100 milliamperes
Nominal Power Output [1]	1600 W	Nominal Power Output ... 1600 1300 watts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Nominal Power Output [2]	1300 W	Nominal Power Output ... 1600 1300 watts
Direct Plate Voltage [1]	2250 V	Direct Plate Voltage 2250 1750 volts
Direct Plate Voltage [2]	1750 V	Direct Plate Voltage 2250 1750 volts
Direct Plate Current [1]	600 A	Direct Plate Current . 600 700 miliamperes
Direct Plate Current [2]	700 A	Direct Plate Current . 600 700 miliamperes
Direct Grid Current [1]	100 A	Direct Grid Current 100 100 milliamperes
Direct Grid Current [2]	100 A	Direct Grid Current 100 100 milliamperes
Nominal Carrier Power Output for use with [1]	1099 W	Nominal Carrier Power Output for use with 1099 modulation Y00 830 watts
Nominal Carrier Power Output for use with [2]	0 W	Nominal Carrier Power Output for use with 1099 modulation Y00 830 watts
Nominal Carrier Power Output for use with [3]	830 W	Nominal Carrier Power Output for use with 1099 modulation Y00 830 watts
voltage for frequencics between [1]	20 MHz	voltage for frequencics between 20 and 10 megacycles should cooling of the glass during operation.
voltage for frequencics between [2]	10 MHz	voltage for frequencics between 20 and 10 megacycles should cooling of the glass during operation.



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

2026 Western Electric 200s

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

2026 WESTERN ELECTRIC 200S

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate To Grid Capacitance	18 pF	—
Grid To Filament Capacitance	15 pF	—
Plate To Filament Capacitance	7 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumDirectGridCurrent	100 mA	—
MaximumFrequencyAtFullRatings	20 MHz	—

TUBE TINKER

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