



ELECTRONIC TUBE REFERENCE

254B

Power - Tetrode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TETRODE

Western Electric thoriated-tungsten transmitting tetrode rated for Class-B RF service with approximately 12.5 W catalog output. Designed for radio-frequency power amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	7.5 V / 3.25 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Tetrode	
PLATE RESISTANCE	86000 Ω
TRANSCONDUCTANCE	0.00116 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	750 V
MAXIMUM PLATE DISSIPATION	25 W
MAXIMUM SCREEN DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	75 mA
Average characteristics at $E_b=750$ V, $I_b=33$ mA, screen=150 V. Screen voltage is operating data, not a promoted maximum.	

Western Electric transmitting tetrode with a thoriated-tungsten filament, rated for B-RF service and a catalog power output of 12.5 W.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1933 Western Electric Tubes

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

1933 WESTERN ELECTRIC TUBES

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-filament capacitance	5.4 pF	Published direct interelectrode capacitance
Grid-filament capacitance	11.2 pF	Published direct interelectrode capacitance



SOURCE OPERATING CONDITIONS

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1956 Western Electric Tubes

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

1956 WESTERN ELECTRIC TUBES

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	7.5 V	—
Filament Current	3.25 A	—
Maximum Plate Voltage	750 V	—
Maximum Plate Current	75 mA	—
Maximum Plate Dissipation	25 W	—
Maximum Frequency	15 MHz	—
Plate Voltage	750 V	B-RF
Plate Current	33 mA	B-RF
Power Output	12.5 W	B-RF

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor	100	B-RF
Transconductance	1160 μ S	B-RF



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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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

Section 1 · Tetrode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PlateToControlGridCapacitance	0.085 pF	—
PlateToFilamentAndScreenCapacitance	5.4 pF	—
ControlGridToFilamentAndScreenCapacitance	11.2 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen Grid Voltage	150 V	—
Maximum Frequency	15 MHz	FullRatings
NominalPowerOutput	37.5 W	ClassC;PlateVoltage=750V

TUBE TINKER

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