



ELECTRONIC TUBE REFERENCE

809

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Transmitting power triode intended for RF amplifier and oscillator service, with manufacturer ratings emphasizing radio-frequency output, substantial plate loading, and professional transmitter operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	6.3 V / 2.5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	50
MAXIMUM PLATE VOLTAGE	750 V
MAXIMUM PLATE DISSIPATION	25 W
MAXIMUM CATHODE CURRENT	100 mA
<i>Published ratings and characteristics from source sheet.</i>	

Thoriated-tungsten RF power triode for amplifier and oscillator service, with full-input operation to 60 MHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 RCA Transmitting Tubes

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

1938 RCA TRANSMITTING TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
as 60 megacycles. The maximum plate dissipation is	27 W	as 60 megacycles. The maximum plate dissipation is 27 watts for class C telegraph
D-C Plate Voltage	750 V	D-C Plate Voltage 750 max. Volts
D-C Plate Voltage.. 500	750 V	D-C Plate Voltage.. 500 750 Volts
Zero-Sig. D-C Plate Current- 40	35 mA	Zero-Sig. D-C Plate Current- 40 35 Milliamperes
Max.-Sig. Driving Power (Approx.)--- 2.4	2.4 W	Max.-Sig. Driving Power (Approx.)--- 2.4 2.4 Watts
Max.-Sig. Power Output (Approx.) - 60	100 W	Max.-Sig. Power Output (Approx.) - 60 100 Watts
D-C Plate Voltage	750 V	D-C Plate Voltage 750 max. Volts
Plate Dissipation	25 W	Plate Dissipation .. 25 max. Watts
Peak R-F Grid Voltage 35	40 V	Peak R-F Grid Voltage 35 40 Volts
D-C Plate Current.-..... 50	50 mA	D-C Plate Current.-..... 50 50 Milliamperes
D-C Grid Current (Approx.) - 6	5 mA	D-C Grid Current (Approx.) - 6 5 Milliamperes
Power Output (Approx.) -- 7.5	12.5 W	Power Output (Approx.) -- 7.5 12.5 Watts
D-C Plate Voltage	600 V	D-C Plate Voltage . 600 max. Volts
D-C Grid Voltage	-200 V	D-C Grid Voltage ... -200 max. Volts
D-C Plate Current	83 mA	D-C Plate Current. 83 max. Milliamperes
D-C Grid Current	35 mA	D-C Grid Current . 35 max. Milliamperes
Plate Dissipation	17.5 W	Plate Dissipation .. 17.5 max. Watts
D-C Plate Voltage 500	600 V	D-C Plate Voltage 500 600 Volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C Grid Voltage . . . -160	-160 V	D-C Grid Voltage . . . -160 -160 Volts
D-C Grid Current (Approx.) . . 32	32 mA	D-C Grid Current (Approx.) . . 32 32 Milliamperes
Grid Resistor 5000	5000 Ω	Grid Resistor 5000 5000 Ohms
Driving Power (Approx.) . . 7.2	7.2 W	Driving Power (Approx.) . . 7.2 7.2 Watts
Power Output (Approx.) . . . 30	38 W	Power Output (Approx.) . . . 30 38 Watts
D-C Plate Voltage	750 V	D-C Plate Voltage . 750 max. Volts
D-C Grid Voltage	-200 V	D-C Grid Voltage. -200 max. Volts
D-C Plate Current	100 mA	D-C Plate Current. . 100 max. Milliamperes
D-C Grid Current	35 mA	D-C Grid Current . 35 max. Milliamperes
Plate Input	75 W	Plate Input ... 75 max. Watts
Plate Dissipation	25 W	Plate Dissipation 25 max. Watts
D-C Plate Voltage.-.. 500	750 V	D-C Plate Voltage.-.. 500 750 Volts
D-C Grid Voltage ... -50	-60 V	D-C Grid Voltage ... -50 -60 Volts
Peak R-F Grid Voltage .. . 135	140 V	Peak R-F Grid Voltage .. . 135 140 Volts
D-C Plate Current..... 100	100 mA	D-C Plate Current..... 100 100 Milliamperes
D-C Grid Current (Approx.) . . 20	20 mA	D-C Grid Current (Approx.) . . 20 20 Milliamperes
each stated value of grid voltage should be decreased by	4.5 V	each stated value of grid voltage should be decreased by 4.5 volts and the circuit returns made to the
For high-frequency operation above	60 MHz	For high-frequency operation above 60 megacycles, see page 144.



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1950 General Electric Transmitting Types

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

1950 GENERAL ELECTRIC TRANSMITTING TYPES

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	6.3 V	—
HeaterOrFilamentCurrent	2.5 A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
FrequencyForMaximumRatings	60 MHz	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1956 RCA Transmitting Tubes

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

1956 RCA TRANSMITTING TUBES

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor	50	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	1000 V	—
Maximum Plate Dissipation	30 W	—
Maximum Cathode Current	100 mA	—
Full-Input Operating Frequency Maximum	60 MHz	—
Power Output	75 W	ClassC,RF
Typical Plate Voltage	1000 V	Representative published point
Typical Plate Current	100 mA	Representative published point

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