



ELECTRONIC TUBE REFERENCE

7843

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Conduction-cooled beam-power tetrode for UHF linear amplification, rated for full power input to about 1.215 GHz and approximately 115 W plate dissipation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	26.5 V / 530 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
AMPLIFICATION FACTOR	18
MAXIMUM PLATE VOLTAGE	1000 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	115 W
MAXIMUM SCREEN DISSIPATION	4.5 W
MAXIMUM GRID DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	180 mA
<i>Promoted fields populated from published ratings/characteristics; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

The 7843 is a beam-power transmitting tube. The supplied datasheet was processed for heater or filament data, maximum ratings, operating characteristics, capacitances where published, and service-specific power or frequency data.



SOURCE OPERATING CONDITIONS

1962 Eimac

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

1962 EIMAC

Section 1 · Beam Power

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Control Grid to Cathode Capacitance	13 pF	—
Control Grid to Screen Grid Capacitance	17.5 pF	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode Warmup Time Minimum	60 s	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency Full-Rated Power Input	1215 MHz	—
Maximum DC Plate Current	180 mA	—
Typical Useful Power Output	80 W	Frequency=400MHz
Typical Useful Power Output	40 W	Frequency=1200MHz



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 6 of 7

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

1971 RCA HB3 BINDER 6 OF 7

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC Plate Voltage	1000 V	Conduction-cooled linear RF power amplifier
Maximum DC Screen Voltage	300 V	Conduction-cooled linear RF power amplifier
Maximum DC Plate Current	180 mA	Conduction-cooled linear RF power amplifier
Plate Dissipation	115 W	Conduction-cooled linear RF power amplifier
CW Power Output at 400 MHz	80 W	Conduction-cooled linear RF power amplifier
CW Power Output at 1215 MHz	40 W	Conduction-cooled linear RF power amplifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mu Factor, Screen to Control Grid	18	Conduction-cooled linear RF power amplifier
Minimum Heating Time	60 s	Conduction-cooled linear RF power amplifier

TUBE TINKER

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

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