



ELECTRONIC TUBE REFERENCE

7801

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

High-frequency beam-power transmitting tube producing useful output into the microwave region, including about 27 W at 400 MHz and 15 W at 1.2 GHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	12.6 V / 500 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
TRANSCONDUCTANCE	0.0075 S
MAXIMUM PLATE VOLTAGE	750 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM CATHODE CURRENT	70 mA
<i>Published ratings/characteristics promoted from supplied datasheet.</i>	

The 7801 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

[SOURCE PDF](#)

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

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Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC Plate Voltage	750 V	7801 electrical data
Maximum DC Screen Voltage	250 V	7801 electrical data
Maximum DC Plate Current	70 mA	7801 electrical data
Maximum Plate Input	52.5 W	7801 electrical data
Maximum Screen Input	2 W	7801 electrical data
Typical DC Plate Voltage	650 V	7801 electrical data
Typical DC Screen Voltage	225 V	7801 electrical data
Power Output at 400 MHz	27 W	7801 electrical data
Power Output at 1200 MHz	15 W	7801 electrical data
Power Output at 3000 MHz	3.2 W	7801 electrical data

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	7500 μ S	7801 electrical data
Mu Factor, Screen to Control Grid	30	7801 electrical data
Grid-No.1 to Plate Capacitance	0.025 pF	7801 electrical data

TUBE TINKER

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