



ELECTRONIC TUBE REFERENCE

8891

Power - Beam (NOT sweep) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

High-power beam tube designed for RF transmitter amplification, providing substantial output and rugged power handling in professional communications applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	9.5 V / 153 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
MAXIMUM PLATE VOLTAGE	10000 V
MAXIMUM SCREEN VOLTAGE	2000 V
MAXIMUM PLATE DISSIPATION	15000 W
MAXIMUM SCREEN DISSIPATION	450 W
MAXIMUM CATHODE CURRENT	6 A
<i>Published ratings, characteristics, and operating data promoted from supplied datasheet.</i>	

The 8891 is a high-power beam-power RF/television tube. The supplied datasheet provides heater or filament data, maximum ratings, operating conditions, RF output information, and interelectrode capacitances where applicable.

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	10000 V	Linear RF service up to 400 MHz
Maximum DC Screen Voltage	2000 V	—
Maximum DC Control-Grid Voltage	-600 V	Television service
Maximum DC Plate Current	6 A	—
Maximum Screen Input	450 W	—
Maximum Control-Grid Input	250 W	—
Maximum Plate Dissipation	15 kW	Linear RF service
TV Plate Voltage	6580 V	Cathode-drive circuit at 216 MHz
TV Screen Voltage	1000 V	Cathode-drive circuit at 216 MHz
TV Synchronizing-Level Plate Current	4.82 A	Cathode-drive circuit at 216 MHz
TV Blanking-Level Plate Current	3.68 A	Cathode-drive circuit at 216 MHz
TV Synchronizing-Level Driver Power	865 W	Cathode-drive circuit at 216 MHz
TV Synchronizing-Level Useful Power Output	18.8 kW	Cathode-drive circuit at 216 MHz
TV Blanking-Level Useful Power Output	10.6 kW	Cathode-drive circuit at 216 MHz
Typical Plate Voltage	8000 V	Cathode drive at 400 MHz
Typical Screen Voltage	1500 V	Cathode drive at 400 MHz
Typical Plate Current	2.47 A	Cathode drive at 400 MHz
Typical Driver Power	500 W	Cathode drive at 400 MHz
Typical Useful Power Output	5000 W	Cathode drive at 400 MHz

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mu Factor, Screen to Control Grid	12.5	—
Grid-No.1 to Plate Capacitance	0.4 pF	—
Grid-No.1 to Filament Capacitance	100 pF	—
Plate to Filament Capacitance	0.15 pF	—
Grid-No.1 to Screen Capacitance	85 pF	—
Screen to Plate Capacitance	20 pF	—
Screen to Filament Capacitance	4 pF	—
Minimum Heating Time	15 s	—

TUBE TINKER

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