



ELECTRONIC TUBE REFERENCE

5992

Power - Beam Single (NOT sweep) (under 10W) electronic tube

CONSOLIDATED TECHNICAL
DATA1 SECTION
CONSTRUCTION
BEAMPOWER

Bendix Red Bank beam-power amplifier engineered for aircraft and industrial service, with long-life construction and extensive run-in against shock, vibration, and early failure.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AC	BASE PINS	7
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7AC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	–	–	NC · verified
PIN2 – Pin 2	–	H – Heater	CONNECTED · verified
PIN3 – Pin 3	A	P – Plate (Anode)	CONNECTED · verified
PIN4 – Pin 4	A	G2 – Screen Grid	CONNECTED · verified
PIN5 – Pin 5	A	G1 – Control Grid	CONNECTED · verified
PIN7 – Pin 7	–	H – Heater	CONNECTED · verified
PIN8 – Pin 8	A	BP – Beam-Forming Plate	CONNECTED · verified
PIN8 – Pin 8	A	K – Cathode	CONNECTED · verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	45000 Ω
TRANSCONDUCTANCE	0.0035 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	275 V
MAXIMUM PLATE DISSIPATION	2.82 W
MAXIMUM SCREEN DISSIPATION	1.32 W
MAXIMUM CATHODE CURRENT	100 mA
<i>Published characteristics and ratings promoted where clearly recoverable from source.</i>	

This beam power amplifier is from the Bendix Red Bank line of reliable vacuum tubes. It is specifically designed to replace the 6Vé for aircraft and industrial applications where freedom from early failure, long average service life, and uniform operating characteristics are extremely important. Each tube is given a 45-hour run-in under various overload, vibration, and shock conditions likely to be encountered in service. This run-in serves to reduce early failures by eliminating tubes with any minor defects that might lead to failure under actual operating conditions. The use of a coil type heater inside an extruded alumina insulator gives a long life heater structure which stands up well under high heater to cathode voltage. The short mount, the heavy side rods on the grids, and the multiple supports on the cage give an improved structure which maintains rigidity under shock and vibration. The tube requires an 8-pin octal socket and can be mounted in any position.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Screen Voltage	250 V	ClassA
Grid Voltage	-12.5 V	ClassA
Plate Current	45 mA	ClassA
Screen Current	4.5 mA	ClassA
Load Resistance	5000 ohm	ClassA
Power Output	4 W	ClassA

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

196X Bendix

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

196X BENDIX

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current	600 mA	Published datasheet value; see source context.
Plate Current	70 mA	Published datasheet value; see source context.
Transconductance	3500 μ S	Published datasheet value; see source context.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	300 V	Published datasheet value; see source context.
Cathode Current	100 mA	Published datasheet value; see source context.