



ELECTRONIC TUBE REFERENCE

4CX1600B

Power - Tetrode (NOT beam) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
TETRODE

High-power ceramic/metal transmitting tetrode designed for RF power amplification, linear amplification, oscillation, modulation, broadcast, or related high-power service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	12.6 V / 4.4 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Tetrode	
MAXIMUM PLATE VOLTAGE	3300 V
MAXIMUM SCREEN VOLTAGE	350 V
MAXIMUM PLATE DISSIPATION	1600 W
MAXIMUM SCREEN DISSIPATION	20 W
<i>Maximum ratings promoted from source.</i>	

The Svetlana™ 4CX1600B is a high-performance ceramic/metal tetrode with a plate dissipation rating of 1600 Watts with forced air cooling. The performance characteristics and internal configuration of the 4CX1600B allow its use as a high gain grid-driven RF amplifier or a grounded grid amplifier. A recommended mode of operation is in grid-driven service with a passive (resistive) 50-Ohm untuned input circuit. This eliminates the need for multiple input tuned circuits and neutralization. In this mode, a simple, stable, low-cost amplifier design with good intermodulation performance can be achieved. As a linear power amplifier, the 4CX1600B will conservatively produce 1500 Watts PEP SSB, and 1500 Watts Key Down CW in any of the three modes: grid-driven, grid-driven passive input, and cathode-driven.

Because of the unique internal geometry of the Svetlana 4CX1600B, the tube will operate efficiently at low plate voltage. Improved electron ballistics using a double-focused electron trap configuration contribute to the superior performance.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

199X Svetlana

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

199X SVETLANA

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	12.6 V	Nominal
HeaterCurrentNominal	4.4 A	Nominal
Maximum Plate Voltage	3300 V	—
Maximum Screen Voltage	350 V	—
Maximum Plate Dissipation	1600 W	—
Maximum Screen Dissipation	20 W	—