



ELECTRONIC TUBE REFERENCE

3CX400A7

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Compact ceramic/metal power triode designed principally for communications and commercial RF amplification in Class A, B, or C service. It also supports pulse-modulator operation and full-rating frequencies reaching approximately 500 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E11-81	BASE PINS	11
NOMINAL HEATER	6.3 V / 3 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
MAXIMUM PLATE VOLTAGE	2200 V
MAXIMUM PLATE DISSIPATION	400 W
MAXIMUM GRID DISSIPATION	48 W
MAXIMUM CATHODE CURRENT	350 mA
<i>Promoted maximum ratings and characteristics from source; additional published values retained as parameters.</i>	

The Svetlana™ 3CX400A7/8874 is a high performance ceramic/metal power triode designed for use in communications, paging and commercial service. The principal use is as an RF amplifier, in Class A, B or C service. The Svetlana 3CX400A7/8874 may also be operated as a pulse modulator with an increase in maximum plate voltage up to 3500 volts. Maximum plate current is 6 amps at a pulse duration of 100 microseconds. The Svetlana 3CX400A7/8874 is a direct replacement for the model 3CX400A7/8874 manufactured in the United States. Characteristics Svetlana Outline drawing Electrical B Cathode: Oxide-coated unipotential J Heater voltage (AC or DC) 6.3 ± 0.3 V K Heater current @ 6.3V 3.0 A Transconductance (average) 29,000 μ mhos Maximum frequency at full ratings 500 MHz Anode A

Interelectrode capacitances, with cathode grounded: Input 20.5 pF C Output 0.03 pF Grid (Contact F Outer Cylindrical Grid-Plate 6.0 pF Surface Only) G Interelectrode capacitances, with grid grounded: Input 20.5 pF Output 6.0 pF M Plate-Cathode .03 pF

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 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage (AC or DC) 6.3 ±	0.3 V	service. The principal use is as an RF amplifier, in Class A, B or C
Heater current @	6.3 V	service. The principal use is as an RF amplifier, in Class A, B or C
Maximum frequency at full ratings	500 MHz	service. The principal use is as an RF amplifier, in Class A, B or C
Input	20.5 pF	service. The principal use is as an RF amplifier, in Class A, B or C
Output	0.03 pF	service. The principal use is as an RF amplifier, in Class A, B or C
Grid-Plate	6 pF	service. The principal use is as an RF amplifier, in Class A, B or C
Input	20.5 pF	service. The principal use is as an RF amplifier, in Class A, B or C
Output	6 pF	service. The principal use is as an RF amplifier, in Class A, B or C

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum-signal DC plate current	350 mA	Maximum ratings Dimensional Data
Plate Dissipation	400 W	Maximum ratings Dimensional Data
Grid Dissipation	5 W	Maximum ratings Dimensional Data
Peak RF grid-cathode voltage 67 50	67 V	Typical Operation, Class AB2 Cathode Driven
Two tone plate current 312 245	300 mA	Typical Operation, Class AB2 Cathode Driven

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Zero signal plate current 22 10	22 mA	Typical Operation, Class AB2 Cathode Driven
Two tone grid current 12 10	39 mA	Typical Operation, Class AB2 Cathode Driven
Peak RF drivng power 26 18	27 W	Typical Operation, Class AB2 Cathode Driven
Power output (approx.) 587 526	505 W	Typical Operation, Class AB2 Cathode Driven

TUBE TINKER

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