



ELECTRONIC TUBE REFERENCE

3CX100F5

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Ceramic-metal industrial power triode designed for high-power RF amplifier, oscillator, or modulator service. Manufacturer data emphasize transmitting duty, substantial plate dissipation, and the cooling provisions required for continuous professional operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	26.5 V / 240 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.025 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	3500 V
MAXIMUM PLATE DISSIPATION	100 W
MAXIMUM GRID DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	4.8 A
<i>Promoted fields populated from published ratings/characteristics; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

8250/3CX100F5 26.5-V-heater planar UHF triode.

SOURCE OPERATING CONDITIONS

1962 Eimac

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

1962 EIMAC

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current	200 mA–240 mA	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Cathode Capacitance	5.6–7 pF	—
Grid-Plate Capacitance	1.95–2.15 pF	—
Plate-Cathode Capacitance Maximum	0.035 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency for Maximum Ratings	2.5 GHz	—
Maximum DC Plate Current	125 mA	—
Typical Useful Output	9.5 W	Frequency=2900MHz

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Eimac Tube Manual

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

1965 EIMAC TUBE MANUAL

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	26.5 V	—
Heater/filament current	240 mA	—
Amplification factor	100	—
Transconductance	25000 μ S	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input/grid-cathode capacitance	5.6 pF	—
Output/plate-cathode capacitance	7 pF	—
Feedback/grid-plate capacitance	0.35 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	3500 V	—
Maximum plate dissipation	100 W	—
Maximum grid dissipation	2 W	—
Maximum plate/cathode current	4.8 A	—
Frequency for maximum ratings	2500 MHz	—
CW plate voltage	1000 V	CW
Pulse peak plate voltage	3500 V	Pulse
Pulse cathode current	4.8 A	Pulse
Useful output at 500 MHz	27 W	500MHz
Useful output at 2900 MHz	9.5 W	2900MHz