



ELECTRONIC TUBE REFERENCE

F3X2500F3

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Federal forced-air-cooled thoriated-tungsten power triode for industrial and communications RF amplification, oscillation, and modulation. Approximately 2.5 kW plate dissipation and multi-kilovolt operation provide substantial professional transmitter power.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	7.5 V / 51 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.02 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	6000 V
MAXIMUM PLATE DISSIPATION	2500 W
MAXIMUM GRID DISSIPATION	78 W
MAXIMUM CATHODE CURRENT	4 A
Applicable promoted fields mapped from printed headings; specialized microwave/imaging/electrode data retained densely in TUBE_SECTION_PARAMETER.	

Federal F-3X2500F3 forced-air-cooled industrial and communications power triode for RF amplifier, oscillator and modulator service; 2.5 kW dissipation.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

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

1962 ITT

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Starting Current	100 A	—
Grid-Plate Capacitance	20 pF	—
Grid-Filament Capacitance	36 pF	—
Plate-Filament Capacitance	1.2 pF	—
RF Frequency Full Rating Maximum	30 MHz	—
Anode Airflow Minimum	120 cfm	—
Maximum Glass Temperature	150 C	—
Class B Plate Voltage Maximum	6000 V	—
Class B Plate Current Maximum	2.5 A	—
Grid Dissipation Maximum	78 W	—
Typical Plate Input	7250 W	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT Industrial and Transmitting Tubes

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

1962 ITT INDUSTRIAL AND TRANSMITTING TUBES

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
FilamentStartingCurrent	100 A	—
AnodeCoolingMethod	Forced Air	—
MaximumOperatingFrequency	30 MHz	—
Maximum Anode Dissipation	2500 W	Absolute maximum / applicable service

TUBE TINKER

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and their source documents.

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