



ELECTRONIC TUBE REFERENCE

F110X

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Industrial transmitting power triode intended for RF amplification, oscillation, or modulation. Manufacturer data emphasize substantial RF output, professional transmitter operation, and power-handling construction rather than receiving-tube service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	28 V / 51 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	40
MAXIMUM PLATE VOLTAGE	15000 V
MAXIMUM PLATE DISSIPATION	25000 W
MAXIMUM GRID DISSIPATION	5000 W
MAXIMUM CATHODE CURRENT	2.5 A
Highest applicable published maximum ratings promoted; service-specific operating points preserved as parameters.	

Federal F-110-X water-cooled power triode for radio-frequency power-amplifier and oscillator service, with a 25 kW dissipation anode.

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	40	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	15000 V	—
Maximum plate dissipation	25000 W	—
Maximum cathode/plate current	2.5 A	—
Maximum frequency for full ratings	20 MHz	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	30 pF	—
Grid-filament capacitance	20 pF	—
Plate-filament capacitance	2.7 pF	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling method	Water	—

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

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
FilamentStartingCurrent	102 A	—
Peak Cathode Current	12.5 A	—
AnodeCoolingMethod	Water	—
MaximumOperatingFrequency	3 MHz full rating; 20 MHz reduced rating	—
Maximum Anode Dissipation	25000 W	Absolute maximum / applicable service

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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