



ELECTRONIC TUBE REFERENCE

F124R

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	27.2 V / 205.5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
AMPLIFICATION FACTOR	40.5
MAXIMUM PLATE VOLTAGE	20000 V
MAXIMUM PLATE DISSIPATION	20000 W
MAXIMUM GRID DISSIPATION	3000 W
MAXIMUM CATHODE CURRENT	7 A
Highest applicable published maximum ratings promoted; service-specific operating points preserved as parameters.	

Federal F-124-R forced-air-cooled power triode for RF amplifier, oscillator and Class B modulator service; 20 kW anode 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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	40.5	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	20000 V	—
Maximum plate dissipation	20000 W	—
Maximum cathode/plate current	7 A	—
Maximum frequency for full ratings	20 MHz	—
Typical RF plate voltage	18000 V	—
Typical RF output power	55 kW	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	40 pF	—
Grid-filament capacitance	46 pF	—
Plate-filament capacitance	5.6 pF	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling method	Forced air	—

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	308 A	—
Peak Cathode Current	35 A	—
AnodeCoolingMethod	Forced Air	—
MaximumOperatingFrequency	20 MHz	—
Maximum Anode Dissipation	20000 W	Absolute maximum / applicable service

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridPlateCapacitance	40 pF	—
GridFilamentCapacitance	46 pF	—
PlateFilamentCapacitance	5.6 pF	—

TUBE TINKER

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and their source documents.

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