



ELECTRONIC TUBE REFERENCE

F320B

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Federal water-cooled power triode for RF amplification, oscillation, and Class B modulation. Approximately 10 kW plate dissipation and 15 kV capability support substantial communications, broadcast, and transmitter-modulator service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	21.5 V / 41 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
AMPLIFICATION FACTOR	40
MAXIMUM PLATE VOLTAGE	15000 V
MAXIMUM PLATE DISSIPATION	10000 W
MAXIMUM CATHODE CURRENT	2.5 A
Applicable promoted fields mapped from printed headings; specialized microwave/imaging/electrode data retained densely in TUBE_SECTION_PARAMETER.	

Federal F-320-B water-cooled power triode for RF amplifier, oscillator and Class B modulator service; 10 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Starting Current	82 A	—
Filament Cold Resistance	0.08 ohm	—
Grid-Plate Capacitance	23.5 pF	—
Grid-Filament Capacitance	16.5 pF	—
Plate-Filament Capacitance	2 pF	—
RF Frequency Full Rating Maximum	4 MHz	—
Typical AF Plate Voltage	13500 V	—
RF Class B Plate Voltage Maximum	15000 V	—
RF Class B Plate Current Maximum	1.2 A	—
RF Class C Plate Voltage Maximum	15000 V	—
RF Class C Plate Current Maximum	1.5 A	—



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	82 A	—
AnodeCoolingMethod	Water	—
MaximumOperatingFrequency	4 MHz	—
Maximum Anode Dissipation	10000 W	Absolute maximum / applicable service

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridPlateCapacitance	23.5 pF	—
GridFilamentCapacitance	16.5 pF	—
PlateFilamentCapacitance	2 pF	—

TUBE TINKER

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

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