



ELECTRONIC TUBE REFERENCE

F212E

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Federal radiation-cooled power triode for modulator, RF amplifier, and oscillator service. Approximately 275 W plate dissipation and multi-kilovolt operation provide moderate transmitter power from a directly heated pure-tungsten filament.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	14 V / 6 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	16
MAXIMUM PLATE VOLTAGE	5000 V
MAXIMUM PLATE DISSIPATION	275 W
MAXIMUM CATHODE CURRENT	350 mA

Federal F-212-E radiation-cooled power triode for modulator, RF amplifier and oscillator service; 275 W 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
Filament Voltage	14 V	—
Filament Current	6 A	—
Amplification Factor	16	—
Typical RF Power Output	500 W	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Plate Capacitance	19 pF	—
Grid-Filament Capacitance	14.5 pF	—
Plate-Filament Capacitance	5 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	5000 V	—
Maximum Plate Dissipation	275 W	—
Maximum Signal DC Plate Current	350 mA	—
Maximum Signal Plate Input	700 W	—
Maximum Frequency for Ratings	1.6 MHz	—



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
AnodeCoolingMethod	Radiation	—
MaximumOperatingFrequency	1.6 MHz	—
Maximum Anode Dissipation	275 W	Absolute maximum / applicable service

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridPlateCapacitance	19 pF	—
GridFilamentCapacitance	14.5 pF	—
PlateFilamentCapacitance	8 pF	—

TUBE TINKER

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

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