

FEDERAL POWER TRIODE Type F-631-A

25 Kilowatts Plate Dissipation



GENERAL DATA

DESCRIPTION:

Federal's F-631-A is a three-electrode tube designed for use as a radio-frequency power amplifier and Oscillator. The anode is water-cooled, capable of dissipating 25 kilowatts. The cathode is a pure tungsten filament. Maximum ratings apply up to 3 megacycles, with operation permissible up to 20 megacycles at reduced rating.

Electrical:

Filament Voltage	28	Volts
Filament Current	51	Amperes
Filament Starting Current	102	Amperes
▶ Peak Cathode Current	12.5	Amperes
• Amplification Factor, at I_b =0.75 amp.		
E _c =-300 volts	40	
Interelectrode Capacitances		
Grid-Plate	30	$\mu\mu$ f
Grid-Filament	20	$\mu \mu$ f
Plate-Filament	2.7	$\mu\mu$ f

Mechanical:

▶ Mounting Position—	
Vertical, Anode Down	
▶ Type of Cooling—Water	
Water Flow on Anode	IO GPM
Maximum Outgoing Water	
Temperature	70° C
Maximum Glass Temperature	150° C
Net Weight, approximate	4 Lbs.

For Maximum Ratings, Typical Operating Conditions and Characteristic Curves, see Type F-110-X.

Copyright 1953, Federal Telephone and Radio Company

Page 1 of 2

FEDERAL POWER TRIODE Type F-631-A

25 Kilowatts Plate Dissipation



That Federal tubes, by their performance, largely sell themselves, is a tribute to the product and to the manufacturer.



