

FEDERAL POWER TRIODE

Type F-5669

10 Kilowatts Plate Dissipation



GENERAL DATA

DESCRIPTION:

The F-5669 is a 3-electrode tube designed specifically for radio frequency heating service. In industrial applications, it replaces the Type F-892R without equipment modifications. The heavy wall anode is forced air-cooled and capable of dissipating 10 kilowatts. The tube incorporates rugged kovar plate, grid, and filament seals. The cathode is a pure tungsten filament. Maximum ratings apply up to 5 megacycles with operation up to 20 megacycles permissible at reduced ratings.

Electrical:

► Filament Voltage	22 Volts
► Filament Current	60 Amperes
► Filament Starting Current	120 Amperes max.
► Filament Cold Resistance	.031 Ohms
► Peak Cathode Current	9.4 Amperes
► Amplification Factor, at $I_b = 0.42$ amps. $E_c = -50$ volts	50
► Interelectrode Capacitances	
Grid-Plate	31 $\mu\mu\text{f}$
Grid-Filament	20 $\mu\mu\text{f}$
Plate-Filament	2 $\mu\mu\text{f}$

Mechanical:

► Mounting Position— Vertical, Anode Down	
► Type of Cooling—Forced Air Maximum Incoming Air Temperature	45° C
► Required Air Flow on Anode Plate Dissipation (Kilowatts)	10 8 6
Air Flow—Cubic Feet Per Min.	700 500 350
Maximum Glass Temperature*	160° C
► Max. Anode Temp.	230° C
► Net Weight, Approximate	52 Pounds

*At frequencies above 3 MC/Sec air flow on the center of the dish by deflection of the anode cooling air or by a separate blower, which provides 35 CFM through a 3-inch diameter nozzle, may be required to keep the glass temperature below 160° C.

For Characteristic Curves see F-5668. Except for reduction of plate dissipation to 10 KW, Maximum Ratings and Typical Operation of F-5668 apply.

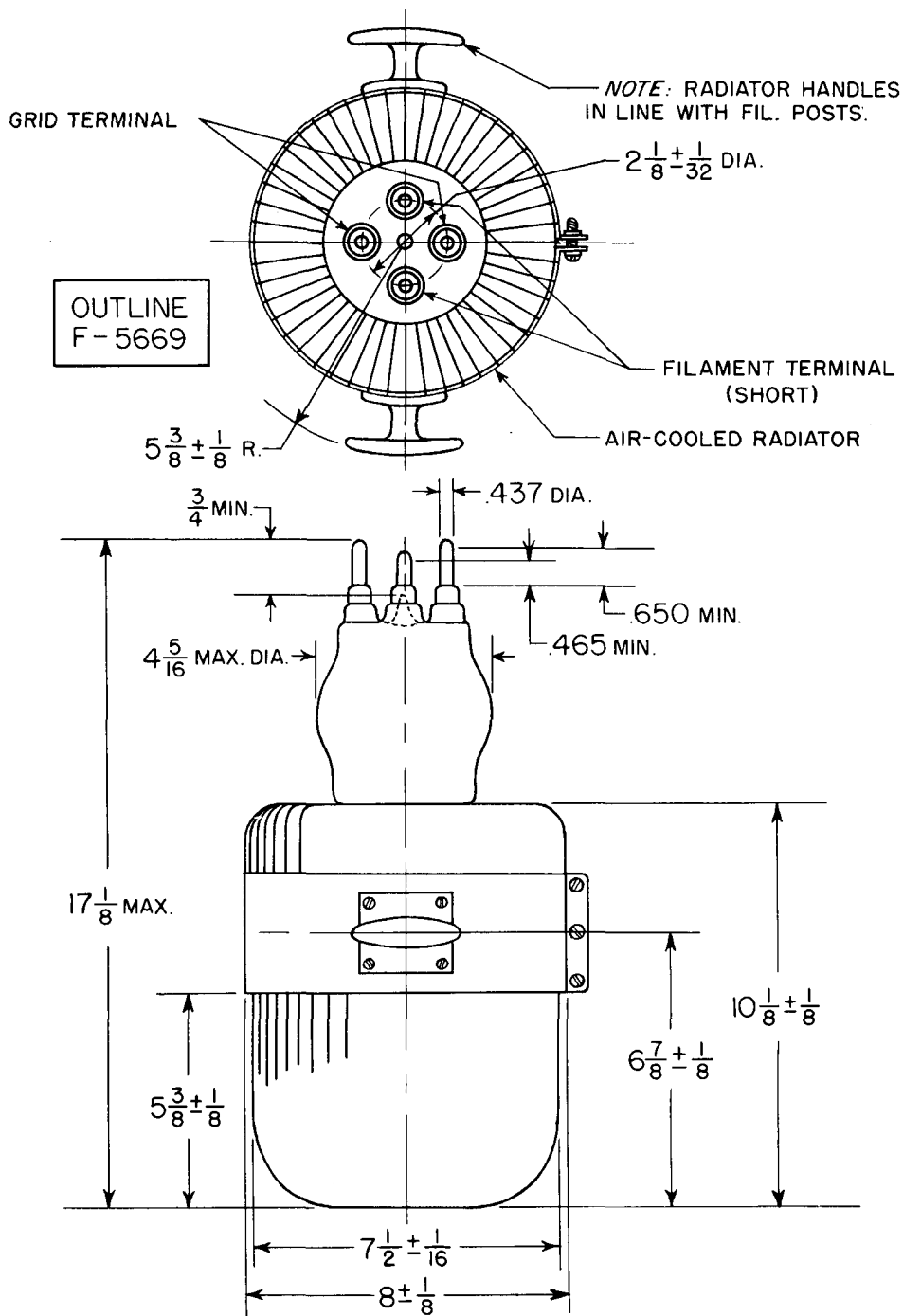


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Maximum Ratings vs. Operating Frequency

Frequency	5	12.5	20 Megacycles
Percentage of Maximum Rated Plate Voltage and Plate Input	100	75	50 Per Cent
Class C — Telegraphy	100	75	50 Per Cent



Federal Telephone and Radio Company

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