

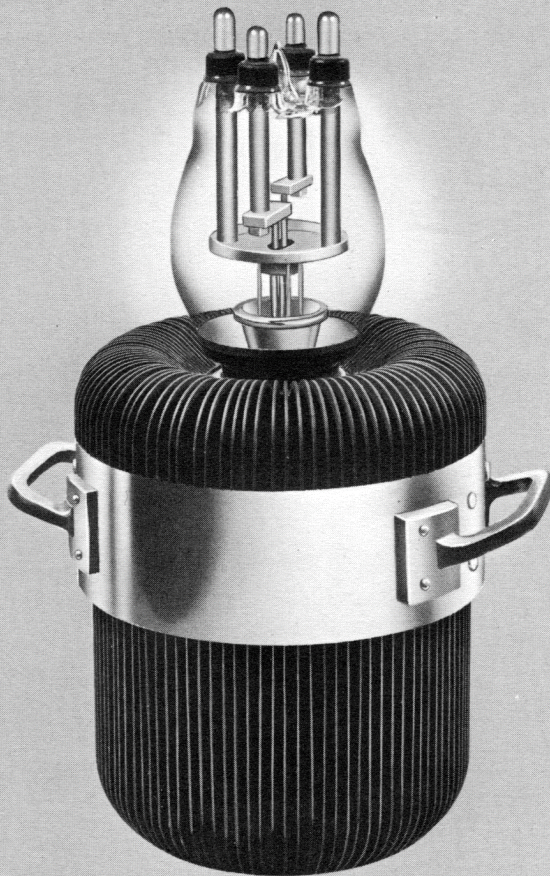
FEDERAL POWER TRIODE Type F-5669 10 Kilowatts Plate Dissipation



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 10³ 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			
Class C — Telegraphy	100	75	50 Per Cent

