

engineering TUBE DATA

F-8109 *
F-8110
POWER
DIODES



from JEDEC release #4005,
Dec. 3, 1962



Components Division

DESCRIPTION

The F-8109 and F-8110 are diodes designed for rectifier service or in special applications in shunting or charging circuits. The exceptionally rugged construction, free of spring tensioning devices and fragile elements, make these types adaptable to a wide range of uses. The cathode is a thoriated tungsten filament of mesh construction.

The F-8109 has a water-cooled, heavy-wall anode capable of 20 kw dissipation. The F-8110 has a forced air-cooled, heavy-wall anode capable of 10 kw dissipation.

ELECTRICAL

Filament Voltage			7.5 volts
Filament Current			210 amperes
Filament Starting Current			
Full rated filament voltage may be safely applied to the cold filament			
Filament Heating Time, minimum			15 seconds
Maximum Ratings	<u>Shunt</u>	<u>Charging</u>	<u>Rectifier</u>
Max. Peak Inverse Voltage	60	60	60 kv
Max. Peak Plate Current	150	16 rms	36 amperes
Max. Average Plate Current	--	--	12 amperes
Inter-Electrode Capacitance			21 μ f

* Formerly our D-1033A and B.

8-62



ELECTRON TUBE DEPARTMENT
COMPONENTS DIVISION

INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION

P. O. BOX 412 CLIFTON, NEW JERSEY

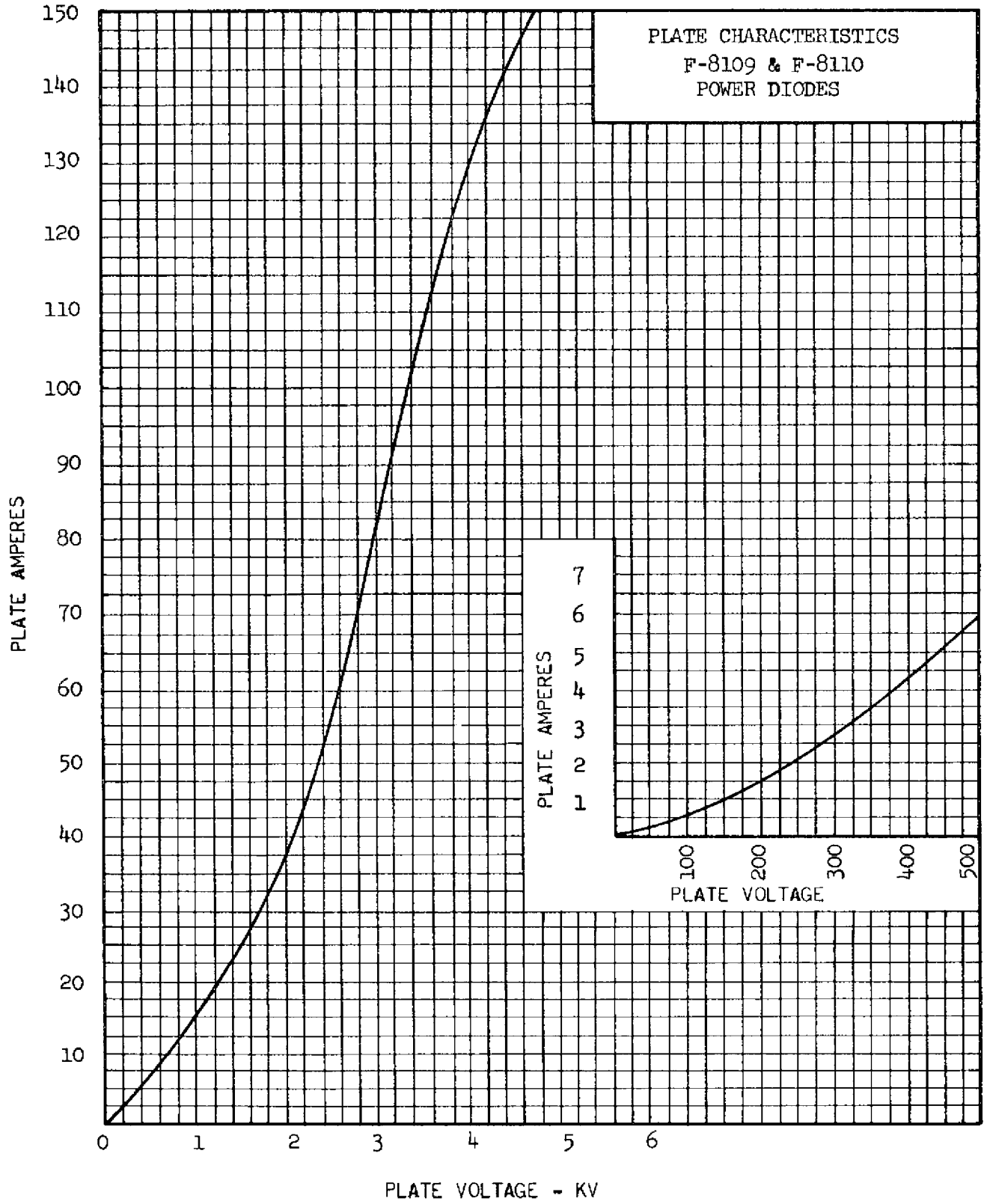
F-8109
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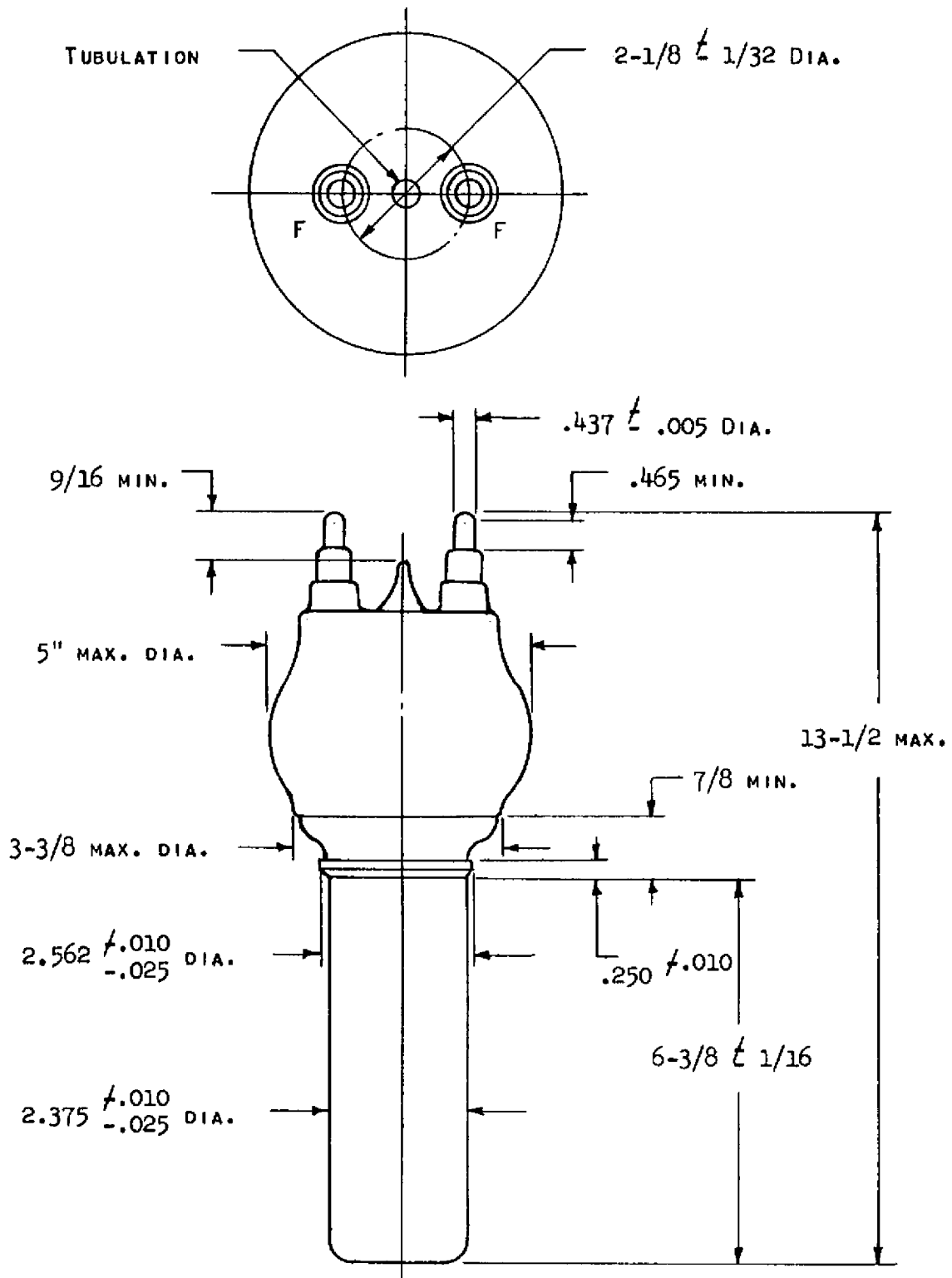
MECHANICAL

Mounting Position				Vertical, anode up or down			
Maximum Glass & Seal Temperature				180° C.			
Type of Cooling		<u>F-8109</u>		<u>F-8110</u>			
Plate Dissipation	20	16	12	10.0	8.0	6.0	kw
Water Flow	7.2	4.6	3.3	---	---	---	
Max. Outgoing Water Temperature		70°			---		C.
Air Flow	---	---	---	750	525	350	cfm
Static Air Pressure	---	---	---	2.0	1.0	.45	in. of water
Max. Incoming Air Temperature		---			45°		C.
Net Weight, approx.		8			45		lbs.

Additional information for specific applications can be obtained from:

Electron Tube Applications Section
 ITT Components Division
 P.O. Box 412
 Clifton, New Jersey

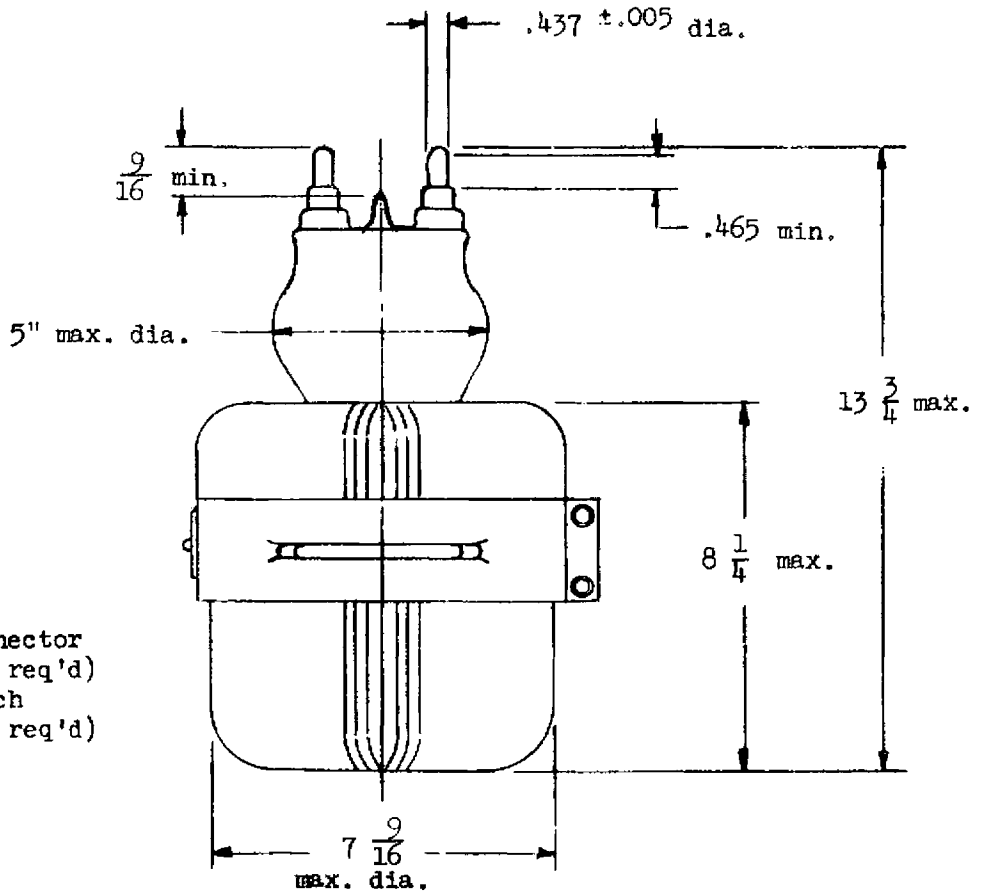
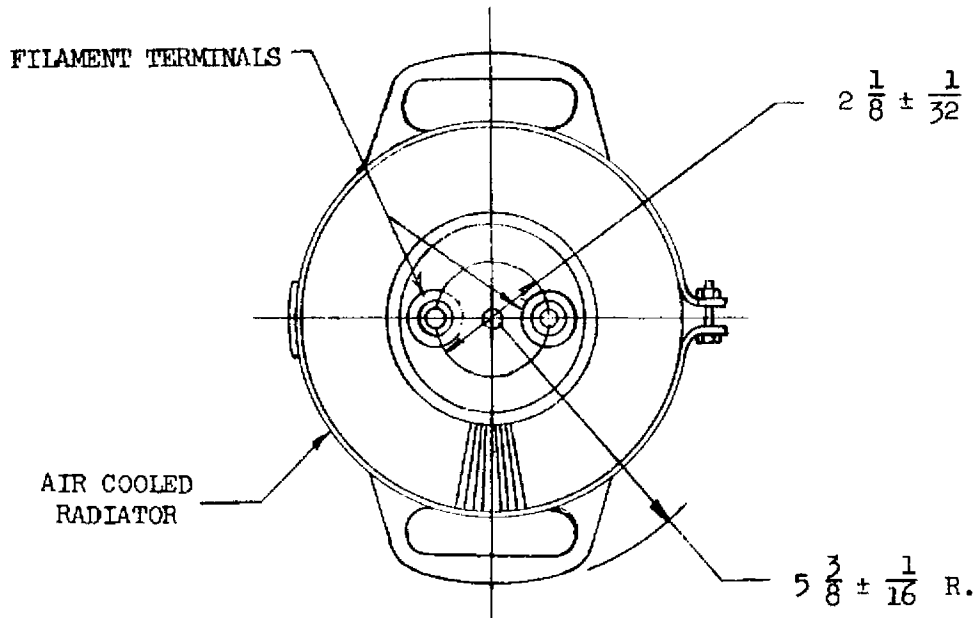




ACCESSORIES:

- TERMINAL CONNECTOR - RT-52578, 2 REQUIRED
- SPANNER WRENCH - RT-52843, 2 REQUIRED
- WATER JACKET - RT-53221 SIZE C
- O-RING - RT-53836 SIZE B-B

OUTLINE
F-8109 POWER DIODE



ACCESSORIES

- Air Jacket
RT-55240
- Terminal Connector
RT-52578 (2 req'd)
- Spanner Wrench
RT-52843 (2 req'd)

OUTLINE

F-810 POWER DIODE