

engineering TUBE DATA



Components Division

F-7656
High Vacuum
Power Diode

DESCRIPTION

The F-7656 is a high vacuum diode designed for rectifier service or in special applications in shunting or charging circuits wherever high peak inverse voltages, extreme environmental conditions or high operating frequencies and transients are present. The exceptionally rugged construction, free of internal insulators, spring tensioning devices and fragile elements, make this type adaptable to a wide range of uses. The anode is forced air cooled and is capable of dissipating 3.0 kilowatts. The exceptionally high thermal inertia of the heavy wall anode protects against tube damage during momentary overload conditions. The cathode is a thoriated tungsten bifilar helix.

ELECTRICAL

Filament Voltage 11 volts
Filament Current 28 amperes

Full rated filament voltage may be safely applied to the cold filament

Inter-electrode Capacitance 8.5 μ F

Maximum Ratings:	Shunt	Charging	Rectifier
Maximum Peak Inverse Voltage	40	40	40 kilovolts
Maximum Peak Plate Current *	100	4.0 rms	7.5 amperes
Maximum Average Plate Current	--	--	2.5 amperes

MECHANICAL

Mounting Position	Vertical, anode up or down			
Type of Cooling	Forced air			
Anode Air Flow Required				
Plate Dissipation	3.0	2.4	1.8	1.0 kilowatts
Air Flow	190	125	75	50 cfm
Pressure	1.21	.58	.26	.2 inches of water
Maximum Incoming Air Temperature				45 °C
Maximum Glass & Seal Temperature **				180 °C
Net Weight, approximate				6-1/4 pounds

* Maximum peak plate current of 100 amperes is rated under conditions of filament excitation voltage of 11.9 volts.

**A temperature sensitive lacquer manufactured by the Tempil Corporation, 132 West 22nd Street, New York 11, New York, is convenient for this measurement.

➤ This data sheet supersedes data of 11-60 in its entirety

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ELECTRON TUBE DEPARTMENT
COMPONENTS DIVISION

INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION

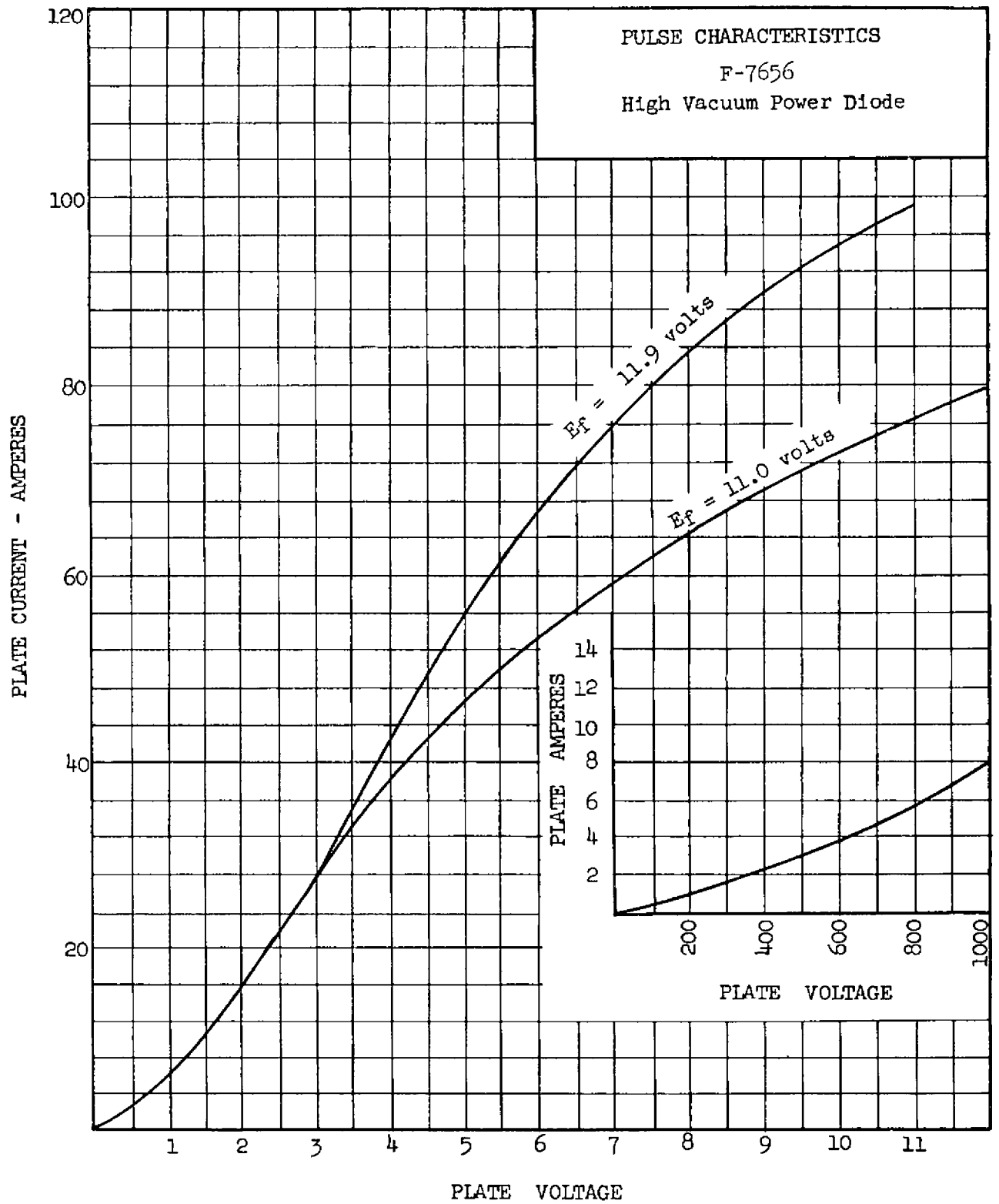
P. O. BOX 412 CLIFTON, NEW JERSEY

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Additional information for specific applications can be obtained from:

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

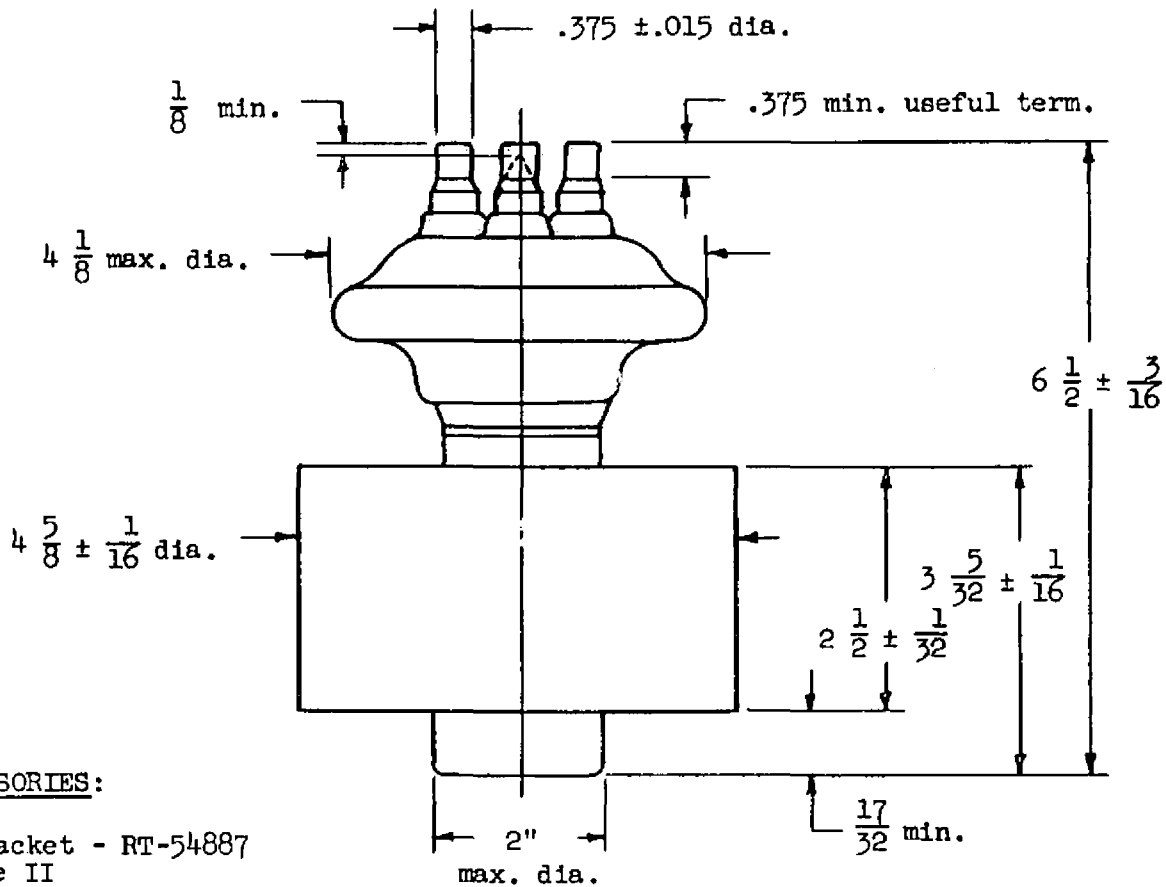
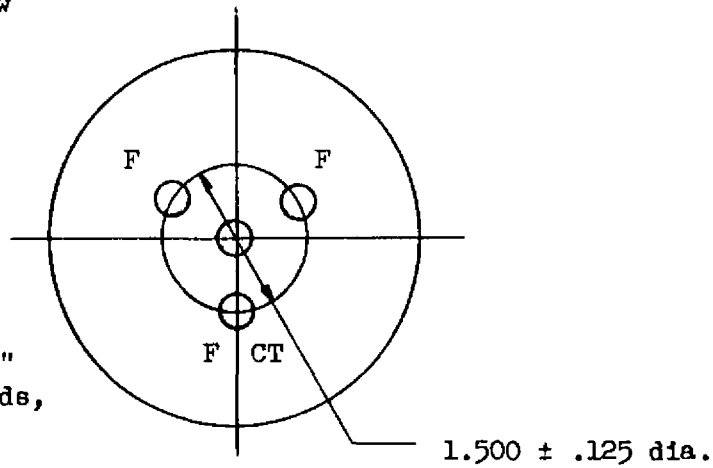


Terminal Color Code

Fil. Term. - Yellow
Fil. Cent. Tap - Red

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This tube type is available on request with 1/2" wide flexible copper leads, 6" long.



ACCESSORIES:

Air Jacket - RT-54887
Size II

OUTLINE
F-7656
High Vacuum Power Diode