

83

Description and Rating

FULL-WAVE MERCURY-VAPOR RECTIFIER

GENERAL DESCRIPTION

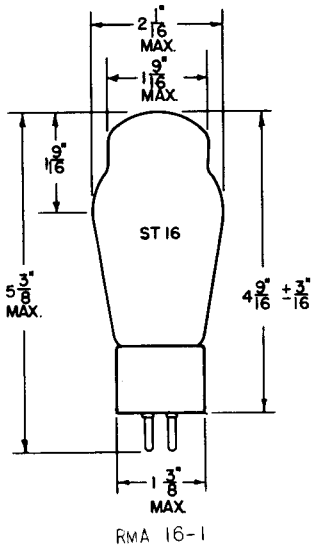
Principal Application: The 83 is a glass type full-wave mercury-vapor rectifier. The tube is designed to supply d-c current at essentially constant volt-

age in spite of rather wide variations in output current.

Cathode: Coated Filament
 Heater Voltage (A-C) 5.0 Volts
 Heater Current 3.0 Ampere

Envelope: ST-16 Glass
 Base: A4-9 Medium 4-Pin, Phenolic
 Mounting Position: Vertical, Ease Down

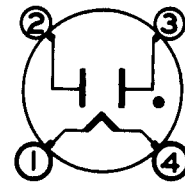
PHYSICAL DIMENSIONS



BASING DIAGRAM

TERMINAL CONNECTIONS

- Pin 1 - Filament
- Pin 2 - Plate Number 2
- Pin 3 - Plate Number 1
- Pin 4 - Filament

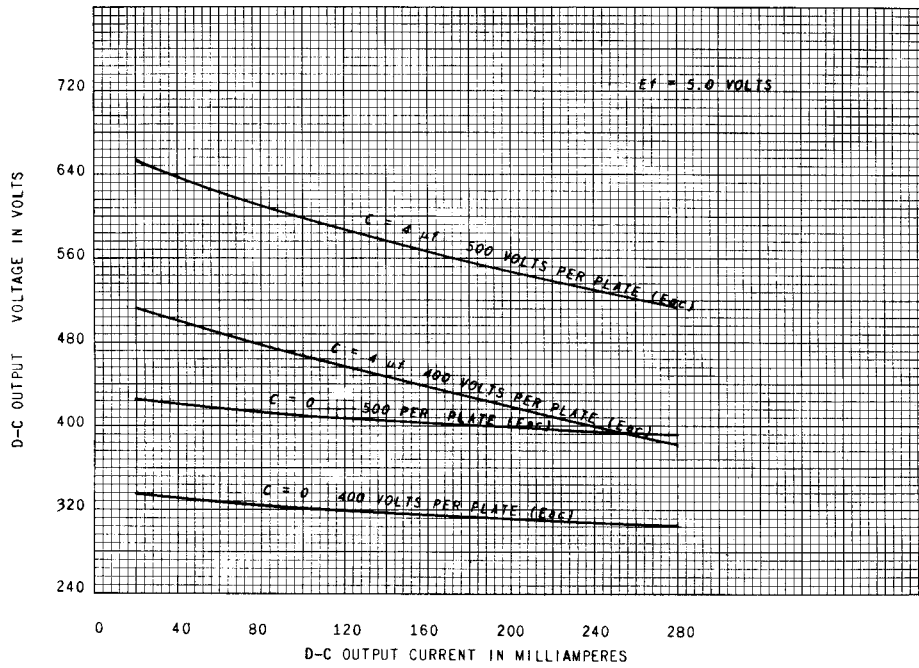


RATINGS AND CHARACTERISTICS

	Capacitor-Input Filter		Choke-Input Filter	
	Design	Absolute	Design	Absolute
Maximum Peak Inverse Plate Voltage	1550	1705	1550	1705
Maximum Plate Current per Plate	1.0	1.1	1.0	1.1
Minimum Condensed-Mercury Temperature	-	20	-	20
Maximum Condensed-Mercury Temperature	-	60	-	60
Maximum A-C Plate Voltage Per Plate (RMS)	450	495	550	595
Minimum Total Effective Plate-Supply Impedance*	50	55	-	-
Minimum Input-Choke Inductance	-	-	3	3.3
Maximum D-C Output Current	225	248	225	248
Tube Voltage Drop (Approximate).	-	-	15	17

* When a filter-input capacitor larger than 40 microfarads is used, it may be necessary to use more plate-supply impedance than the minimum value shown to limit the peak plate current to the rated value.

OPERATION CHARACTERISTICS



Electronics Department



Schenectady, N. Y.