



83

Description and Rating

FULL-WAVE MERCURY-VAPOR RECTIFIER

GENERAL DESCRIPTION

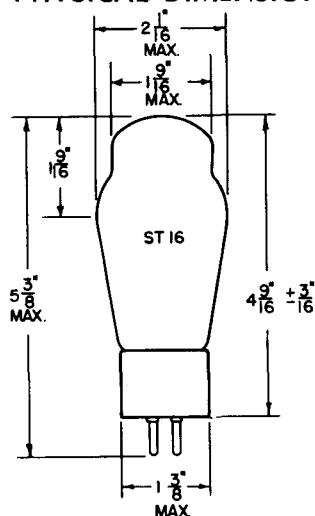
Principal Application: The 83 is a glass type full-wave mercury-vapor rectifier. The tube is designed to supply d-c current at essentially constant volt-

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

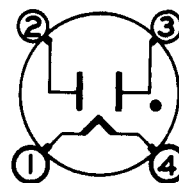


RMA 16-1

TERMINAL CONNECTIONS

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

BASING DIAGRAM



RMA 4C

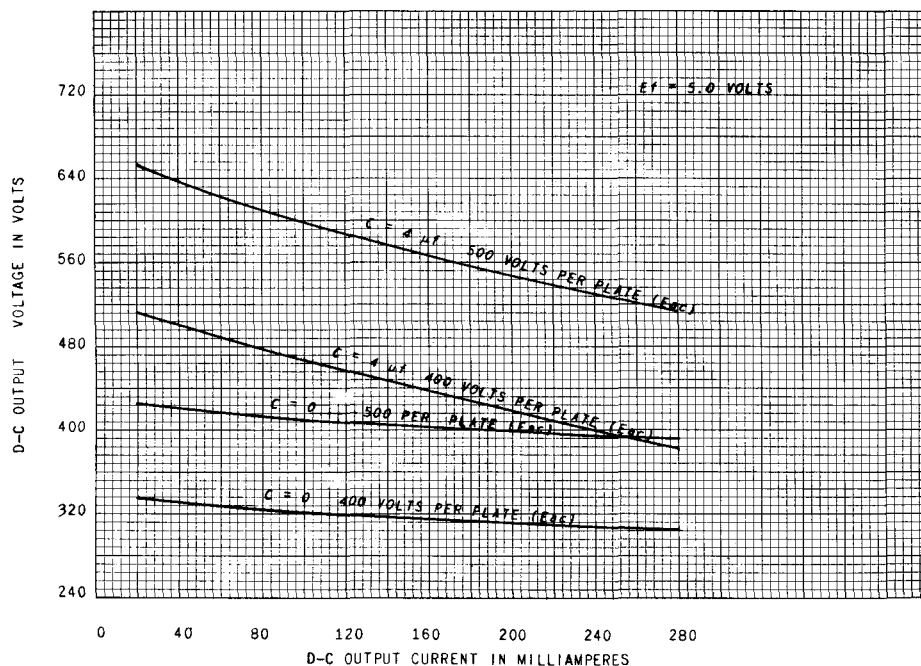
BOTTOM VIEW

RATINGS AND CHARACTERISTICS

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

* 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
GENERAL ELECTRIC
 Schenectady, N. Y.