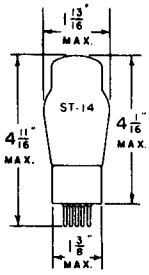
TUNG-SOL



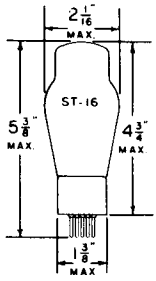
82

FULL WAVE
MERCURY VAPOR RECTIFIER

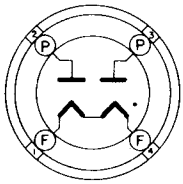
COATED FILAMENT

82 – 2.5 VOLTS 3.0 AMPERES
83 – 5.0 VOLTS 3.0 AMPERES
AC

GLASS BULB



83



4C

MEDIUM 4 PIN BASE BOTTOM VIEW
82 83

THE TUNG-SOL 82 AND 83 ARE DESIGNED FOR SERVICE AS POWER RECTIFIERS IN AC OPERATED RECEIVERS THAT REQUIRE A POWER SUPPLY WITH GOOD VOLTAGE REGULATION.

RATINGS

	82	83	
MAXIMUM PEAK INVERSE VOLTAGE	1550	1550	VOLTS
MAXIMUM STEADY-STATE PEAK PLATE CURRENT PER PLATE	345	675	MA.

OPERATING CONDITIONS AND CHARACTERISTICS

FULL WAVE RECTIFIER WITH CONDENSER INPUT TO FILTER

	82	83	
AC PLATE VOLTAGE PER PLATE (RMS) MAX.	450	450	VOLTS
DC OUTPUT CURRENT MAX.	115	225	MA.
TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE PER PLATE MIN. [A]	50	50	OHMS
CONDENSED MERCURY TEMPERATURE OPERATING RANGE	24°-60°	20°-60°	CENTIGRADE

FULL WAVE RECTIFIER WITH CHOKE INPUT TO FILTER

	82	83	
AC PLATE VOLTAGE PER PLATE (RMS) MAX.	550	550	VOLTS
DC OUTPUT CURRENT MAX.	115	225	MA.
VALUE OF INPUT CHOKE MIN.	6	3	HENRYS
CONDENSED MERCURY TEMPERATURE OPERATING RANGE	24°-60°	20°-60°	CENTIGRADE
APPROXIMATE TUBE VOLTAGE DROP	15	15	VOLTS

[A] WHEN FILTER CONDENSERS LARGER THAN 40 μFDS ARE USED, IT MAY BE NECESSARY TO ADD ADDITIONAL PLATE SUPPLY IMPEDANCE. THE 82 AND 83 MAY BE OPERATED WITH PLATES CONNECTED IN PARALLEL. TO EQUALIZE THE CURRENT DISTRIBUTION BETWEEN PLATES, WHEN SO CONNECTED, IT IS NECESSARY TO ADD RESISTANCE IN SERIES WITH EACH PLATE LEAD (TYPE 82: 100 OHMS, TYPE 83: 50 OHMS). FOR PARALLEL OPERATION IN A FULL-WAVE CIRCUIT, IT IS DESIRABLE THAT BOTH PLATES WITHIN THE SAME TUBE BE CONNECTED TO THE SAME TERMINAL OF THE PLATE TRANSFORMER.

FULL PLATE LOAD SHOULD NOT BE APPLIED TO THIS TUBE UNTIL THE FILAMENTS HAVE REACHED THEIR NORMAL OPERATING TEMPERATURE. UNDER NORMAL OPERATING CONDITIONS, THE FILAMENTS HEAT QUICKLY WHEN THE SET IS "TURNED ON" AND ARE READY TO SUPPLY FULL-LOAD CURRENT BEFORE THE TUBES IN THE RECEIVER REQUIRE IT.

FOR "INTERPRETATION OF RATINGS", REFER TO FRONT OF BOOK.

CONTINUED NEXT PAGE

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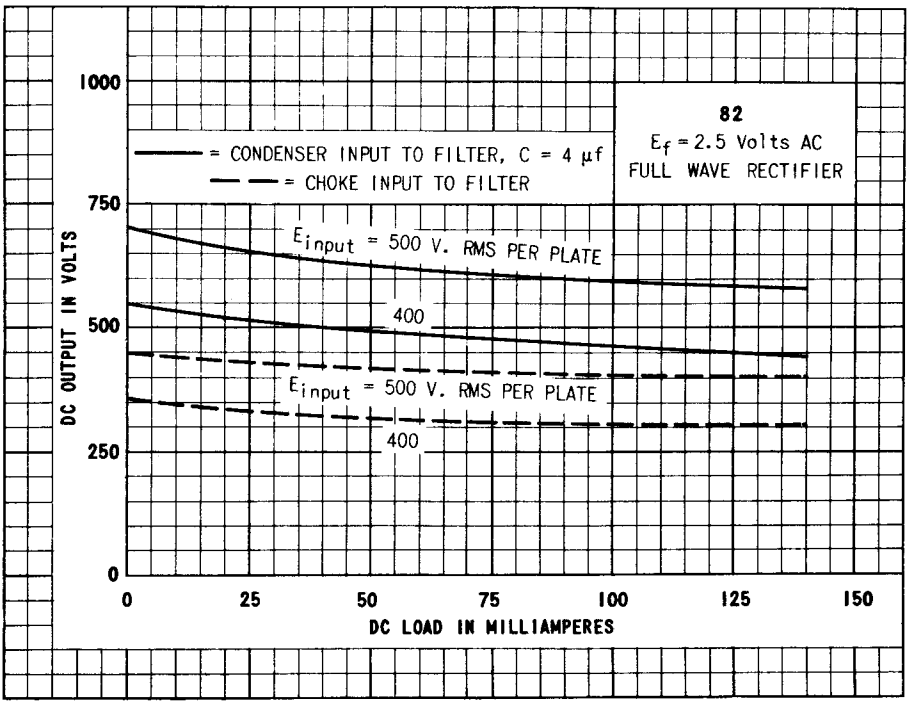
PLATE 713-1

FEB. 15 1940

82, 83



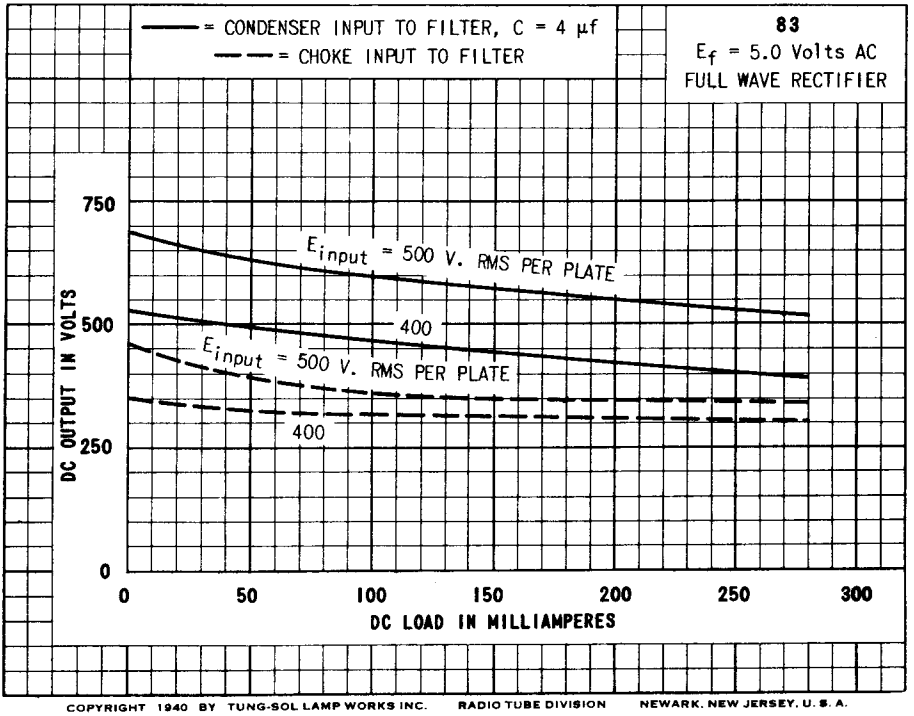


PLATE 714-1